Learn what you need to know to make streaming work—from content capture and creation to distribution and management.

Get in-depth training on online video technology and applications in intensive preconference seminars.

Learn about the new business and distribution models for online video.

Gain access to the Exhibit Hall featuring major streaming and online video vendors.

Network with your colleagues, peers, and experts in streaming media.

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HUNTINGTON BEACH
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A FEATURED EVENT

See page 20-21 for details

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#SMWest
Welcome to Streaming Media West! We’re looking forward to spending the next couple of days with you and sharing an in-depth look at the streaming video industry.

This week, you’ll hear first-hand how companies are making streaming work for them. Learn tips and tricks from industry veterans that you can put into action as soon as you get back to the office. Visit with leading companies in the Exhibit Hall to learn about the latest software, hardware, and network solutions and services being offered.

All pass types have free access to our popular Discovery Track, so be sure to check the schedule. This is a great opportunity to discover the latest technology innovations, and participate in discussions about the latest trends and hot-button topics with top names in the industry.

Consider upgrading your pass to include Live Streaming Summit. This event is focused exclusively on the challenges and opportunities inherent in delivering large-scale live events and live linear channels to multiple screens. Visit the registration desk now to add this event to your pass. Find out more on pages 21–22.

Again, we welcome you and look forward to hearing about your experience.

Dan Rayburn
Conference Chairman & Executive Vice President
StreamingMedia.com

GENERAL INFORMATION

Location Key
Keynotes & Track A ▪ Huntington Ballroom
Track B ▪ Grand Ballroom, Salon E
Track C ▪ Grand Ballroom, Salon F
Track D ▪ Grand Ballroom, Salon G
Discovery Track ▪ Grand Ballroom, Salon A
Live Streaming Summit ▪ Fountain Room (Tuesday)
Grand Ballroom, Salon G (Wednesday)

Focus Areas
Each of Streaming Media’s over 30 panel discussions, how-to sessions, case studies and presentations is labeled with the business and technology categories or ‘Focus Areas’ it represents, offering you a clear sense of which sessions match your areas of expertise or interest. And, while a few of the sessions are specialized to cater to one of these Focus Areas, most of the sessions are applicable to several, so there’s no shortage of highly relevant content to help you take your streaming activities to the next level, and connect you with leading practitioners in the space.

LOOK FOR THESE ICONS:
- Encoding & Transcoding
- Enterprise & Education
- Monetizing Content
- Formats, Protocols & Standards
- OTT & TV Everywhere
- Content Management & Workflows
- Media, Entertainment & Broadcast
- Live Webcasting
- Devices & Platforms

Live Streaming Summit, a featured event at Streaming Media West
Sponsored by

Access to Live Streaming Summit requires separate registration or is included for registered Streaming Media West Platinum and Combo Pass attendees. (See pages 20–21 for full program details.)

Discovery Track
Open to all conference attendees and Discovery Pass holders, Discovery Track sessions are moderated by Streaming Media magazine editors, and presented by conference sponsors. Sessions are educational and the presentations which typically focus on products and customer case-studies provide a good opportunity to learn more about specific technologies or vendors. BONUS — many Discovery Track sponsors will be raffling off prizes at the end of the session!

Sunset Welcome Reception
Monday, October 31 ..........................5:00 p.m. – 6:30 p.m.
Lighthouse Courtyard
Sit back and relax as we kick-off the start of this year’s event with drinks and a beautiful sunset! Open to all full-conference attendees, speakers, and exhibitors. (Note: This event is not open to Discovery Pass holders.)

Continental Breakfast & Breaks
A continental breakfast will be provided for conference attendees Tuesday morning before the keynote session from 8:00 a.m. – 9:00 a.m. Check your program for additional morning and afternoon breaks located in the Exhibit Hall.

Exhibit Hall Hours
Tuesday, November 1 ..........................10:00 a.m. – 6:00 p.m.
Exhibit Hall Reception ..........................5:00 p.m. – 6:00 p.m.
Wednesday, November 2 .....................10:00 a.m. – 3:15 p.m.

Exhibit Hall Reception
Tuesday, November 1 ..........................5:00 p.m. – 6:00 p.m.
Enjoy drinks while getting a firsthand look at the leading software, hardware, and network solutions and services in the streaming media industry. Open to all attendees, speakers and exhibitors.

3rd Annual Streaming Media
Beer Garden & Networking Event
Tuesday, November 1 ..........................6:00 p.m. – 7:30 p.m.
Lighthouse Courtyard
Sponsored by
Join us for a fun night on the lawn as you network with industry peers while enjoying a selection of good brews and eats. Open to all attendees, speakers, and vendors.

Streaming Media Magazine’s
Readers’ Choice Awards Breakfast
Wednesday, November 2 ..........................8:30 a.m.
Huntington Ballroom
Join Streaming Media Magazine as they announce the winners of the 9th annual Readers’ Choice Awards.

Online Video & Streaming
Provided by Mobile TV & Streaming
Sessions will be archived and available in video on-demand after the conference at www.streamingmedia.com/videos. Have a colleague that couldn’t attend this year’s event? Tell them to check out our live stream of the keynotes and Track A on Tuesday and Wednesday.

Red Carpet Interviews
Streaming Media Magazine will be interviewing key speakers, attendees, and vendors. Have an announcement or a specific topic you’d like to discuss on Streaming Media TV during the show? Email the editor, erics@streamingmedia.com, with your request. After the show, watch all the video interviews at streamingmedia.com/ConferenceVideos.
Monday October 31: Preconference Workshops (priced separately)

**Grand Ballroom, Salon E**

- **W1** Creating an Open-Source Encoding Pipeline

- **W3** Wowza Ninja Training Workshop: Building End-to-End Streaming Workflows With Wowza

**Grand Ballroom, Salon F**

- **W2** Encoding 2016: Codecs and Packaging for PCs, Mobile and OTT/STB/Smart TVs

- **W4** Making the Transition From Flash to HTML5

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Tuesday November 1

**Welcome & Opening Keynote**

- Huntington Ballroom
- **Steve Shannon**, GM of Content & Services, Roku

**Coffee Break** in the Exhibit Hall

**Track A**

- **A101** Codec Battles Revisited: HEVC vs. AVC in 2016
- **A102** Using Analytics to Create Better Content & Personalize the End-User Experience

**Track B**

- **B101** Advances in Open Source Compression Technology
- **B102** Best Practices for Building an Internal Streaming Solution

**Track C**

- **C101** What Viewers Want: Current & Future Trends in the Video Revolution
- **C102(a)** Best Practices in Implementing Live and Synchronized OTT Services

**Track D**

- **D101** HOW TO: Fine-Tuning Your Adaptive Encoding Groups With Objective Quality Metrics

**Attendee Lunch & Chance to Visit the Exhibits**

- **A103** Delivering Content in a Multi-Device World: Technical Challenges & Solutions
- **A104** How Periscope Migrated to HTML5 and Low Latency HLS

**Coffee Break** in the Exhibit Hall

- **B103** Business and Technical Challenges of Forensic Watermarking for 4K/UHD
- **B104** How to Succeed With OTT: Tackling Business Strategy and Unlocking Revenues

- **C103** Case Study: Live Streaming at The Humane Society of the United States
- **C104** Emerging Streaming Technologies: Picking the Winners

- **D103** HOW TO: Performing Subjective Evaluation of Encoding Technologies
- **D104** HOW TO: Improving the Quality of Experience By Iterating Your ABR Logic

**Exhibit Hall Reception**

**3rd Annual Streaming Media Beer Garden & Networking Event**

- Lighthouse Courtyard
- Supported by:

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Wednesday November 2

**Keynote**

- Huntington Ballroom
- **Jeff Tapper**, SVP, Engineering, Viacom

**Coffee Break** in the Exhibit Hall

**Track A**

- **A201** Best Practices for Captioning Live Video on the Web
- **A202** How the Industry Can Address the Challenges Around Virtual Reality

**Track B**

- **B201** How Telus is Deploying a Personalized Cloud TV Service
- **B202** Building Streaming Workflows for K-12 and Higher Education

**Track C**

- **C201** HOW TO: Deploying Server Side Ad Insertion
- **C202** HOW TO: Build Your Own Cloud Encoder With FFmpeg

**Discovery Track**

- **DT201** The Two Most Important Things about Streaming to Facebook Live
- **DT202** Why Operational Analytics Are Vital to Support Live Streaming QoE

**Lunch Break**

- **A203** Using QoE Data to Ensure a High-Quality Viewing Experience

**Coffee Break** in the Exhibit Hall

- **B203** The Latest With DASH, HLS, & MPEG-CMAF
- **C203** HOW TO: Choosing & Benchmarking HTML5 Players

- **DT203** Best Practices in Implementing Live and Synchronized OTT Services

- **DT204** Object Storage: An Efficient Data Management Solution for Streaming Media
W1 • Creating An Open-Source Encoding Pipeline
9:00 a.m. – 12:00 p.m. • Grand Ballroom, Salon E

Encoding workflows for both SMB and enterprises can utilize powerful and free open source options, such as FFmpeg, which appeal to startups and established businesses for the flexibility in customization that they offer. In this workshop, learn the pros and cons of utilizing open source software in your encoding workflow. You also learn how to implement an encoding workflow by deconstructing a sample PHP and FFmpeg architecture. The presentation also explores extended encoding options for FFmpeg including HEVC/H.265, to maximize compatibility with a wide range of mobile and desktop browsers, as well as streaming media servers.

PRESENTER: Robert Reinhardt, CTO, videoRx.com

W2 • Encoding 2016: Codecs and Packaging for PCs, Mobile and OTT/STB/Smart TVs
9:00 a.m. – 12:00 p.m. • Grand Ballroom, Salon F

As video resolutions increase and target playback platforms multiply, video producers must leave their H.264/HLS/HDS comfort zone and expand into HEVC, VP9, and MPEG-DASH. This workshop is divided into multiple segments by target platform to teach you the applicable standards and best strategies for delivering live and VOD adaptive video to viewers on that platform, both with and without DRM. Along the way, attendees learn options for producing H.264, HEVC, and VP9; the status of standards such as the Media Source Extensions (MSE) and Encrypted Media Extensions (EME); and how and when to use them. Attendees walk away knowing the technical requirements for delivering to all key platforms and the best practices for making it happen.

PRESENTER: Jan Ozer, Principal, Doceo Publishing

W3 • Wowza Ninja Training Workshop: Building End-to-End Streaming Workflows With Wowza
1:30 p.m. – 4:30 p.m. • Grand Ballroom, Salon E

Although the technology keeps getting easier to use, building end-to-end streaming workflows can still be challenging. In this hands-on workshop we walk you through installing software and building numerous on-demand and live streaming workflows. Along the way, we cover options and best practices for each step. Applicable scenarios include enterprise video, mobile journalism, sporting events, concerts, education use cases, and many more. You learn about streaming formats and architectures (including on-premises vs. cloud vs. hybrid), plus technologies and solutions for specific needs. To gain practical experience, we use Wowza products and third-party encoding, cloud, content management, and player technologies.

*Attendees are responsible for providing a laptop. Additional technical details will be provided to attendees prior to the event.

PRESENTER: Robert Reinhardt, CTO, videoRx.com

W4 • Making the Transition From Flash to HTML5
1:30 p.m. – 4:30 p.m. • Grand Ballroom, Salon F

As Flash continues to decline, HTML5 video technologies increasingly bring the promise of heightened performance and better QOE. This workshop provides an in-depth look at HTML5 players, their features and strengths, as well as the open-source media engine frameworks available on the market today. We begin by examining the main components in a video player, then discuss how to choose a player adapted to one’s use case, examining how several open-source solutions compare. Finally, we use an interactive example to build features and demonstrate several optimizations, offering tips and best practices and pointing out potential production issues as we go along.

PRESENTERS: Erica Beavers, Head of Marketing & Partnerships
Nikolay Rodionov, Co-Founder, CPO, Streamroot

SUNSET WELCOME RECEPTION
MONDAY, OCTOBER 31 • Lighthouse Courtyard
5:00 p.m. – 6:30 p.m.
Grab a drink, sit back, relax, and enjoy the sunset! Open to all full-conference attendees, speakers, and vendors.
viewing. Learn about new topic areas, such as measuring the impact of “skinny bundles” and “virtual MVPDs,” that have the potential to shake-up the TV industry. In the session, experts in video content and distribution discuss detailed data from Altman Vlianidre & Co.’s latest survey of U.S. consumer video viewing habits and debate the current state of video—and where it’s going in the future.

MODERATOR: Jonathan Hurd, Director, Altman Vlianidre & Company
PANELISTS:
Nick Colsey, VP, Business Development, Sony Electronics
Sherry Brennan, SVP, Sales Strategy & Development, FOX
Anthony Layser, Content Director, Dailymotion
Richard Au, Director, Content Acquisition, Amazon Video

D101 • HOW TO: Fine-Tuning Your Adaptive Encoding
Groups With Objective Quality Metrics
Choosing the number of streams in an adaptive group and configuring them is usually a subjective, touchy-feely exercise, with no way to really gauge the effectiveness and efficiency of the streams. However, by measuring stream quality via metrics such as PSNR, SSIM, and VQM, you can precisely assess the quality delivered by each stream and its relevancy to the adaptive group. This presentation identifies several key objective quality metrics, teaches how to apply them, and provides an objective framework for analyzing which streams are absolutely required in your adaptive group and their optimal configuration.

PRESENTER: Jan Ozer, Principal, Docere Publishing

DT101 • Discovery Track
10:30 a.m. – 10:50 a.m.
4K Live Video Streaming
From doing a full live 4K video production, including switching between multiple 4K cameras, to using a single 4K camera to produce a show with virtual camera angles—what are the practical applications for 4K live streaming today, and what options are right around the corner? Learn with industry expert Dave Kirk as he describes the 4K scenarios he finds most common today and where things are moving in the coming months.

PRESENTER: David Kirk, VP, Marketing, Epiphan Video

Using Object Storage to Reduce Latency and Enable Content Distribution and Delivery
As a content creator or service provider, value in your application is determined by how quickly and easily the digital assets you create are delivered to your audience. A poor end-user experience causes lost viewers, while spending too much on infrastructure can quickly deplete capital. Learn how to resolve these issues with object storage that combines massively scalable, searchable storage with direct HTTP access to radically simplify content storage and delivery infrastructure while reducing latency and costs.

PRESENTER: Adrian Herrera, VP, Marketing, Caringo

11:30 a.m. – 12:30 p.m.
A102 • Using Analytics to Create Better Content & Personalize The End-User Experience
This session discusses how analytics tools can be used to produce more engaging video content. Learn the metrics content owners use to identify if content is sufficiently engaging an audience and how insights gathered impact content owners’ creation and acquisition strategies. The session will also cover what efforts are being made to personalize experiences, reviewing the tactics used to create segmented user groups and target individual users. Speakers have an open discussion about the gaps that must be bridged on the technology side in order to do better content personalization, prediction and the positive impact for content publishers.

MODERATOR: Diane Stratnor, VP, Sales, Business Development, Nice People At Work
PANELISTS:
Christopher Roselli, President, Founder, HOLLYWOODLAND
Mike Flynn, CTO, Studio71
Jeremy Stern, Analytics Architect, WillowTree
Brian Selander, EVP, Whistle Sports Network

B102 • Best Practices for Building an Internal Streaming Solution
Streaming company-wide meetings, training, and other events through your internal network saves on time, travel costs, and resources. This session looks at real-world architectures being used for distributing streams to all screens within an enterprise setting. You learn about how peer-to-peer and multicast technologies fit in, and how to reach remote and mobile...
workers. Our panelists recommend ways to increase quality and broadest audience reach, and share best practices and lessons learned.

MODERATOR: Chris Knowlton, VP, Streaming Industry Evangelist, Wowza Media

PANELISTS:
- Tarek Amara, Senior Director, Video Products, Viacom
- Dan Swiney, Manager, Live Production and Streaming, LinkedIn
- Mike Newman, CEO, MediaPlatform
- Kirby Grines, CTO, Nagra-Kudelski
- Clint Cox, CTO, Nagra-Kudelski

C102(a) • Best Practices in Implementing Live and Synchronized OTT Services

This presentation discusses best practices for implementing a live and synchronized OTT service that enables live OTT streams to be synced to different mobile devices as well as synced and harmonized with regular linear broadcast TV. Learn how a synced live OTT service can open up new business models for content owners and rightsholders, and how this complements a rights holders’ existing business. See examples of how a synchronized live OTT service can be used to greatly enhance viewer experiences, either as a standalone service or in combination with regular broadcast television.

PRESENTERS:
- Per Lindgren, Founder, SVP, Live OTT, Net Insight
- Jeremy Dujardin, CTO Media and Entertainment Services, TATA Communications

C102(b) • Best Practices for Streaming High-Bitrate Video

Video content has seen significant improvement by the introduction of UHD video, high frame rate and high dynamic range. This presentation showcases the improvements these features add to the video watching experience. It also covers the video encoding techniques (encoding standards, bitrates and encoding parameters) used today to deliver high bitrate demanding video to the end consumer and challenges this process faces. Finally, it goes through some recommendations for the encoding stage for both VOD and live streaming applications.

PRESENTER: Tarek Amara, Video Systems Engineer, Twitch

D102 • HOW TO: Streaming Video to the Desktop Without Flash

Google has announced that Chrome will be “HTML5 By Default” as of Q4 this calendar year, meaning that users will need to click to allow Flash content to be played. This is obviously a major concern for the streaming industry, as Flash remains the dominant player technology today. There are native HTML5 solutions available for streaming video, but so far, the adoption has been low. This session reviews the state of the video player industry, and compares a few open source and off the shelf solutions which can help keep those video streams going.

PRESENTER: Dan Balis, Senior Director, Video Products, Viacom

DT102 • Discovery Track

11:30 a.m. – 11:50 a.m.

Why Your Video Streaming Fails and Your Customers Hate You Because of It

Sixty percent of all user interactions suffer from video playback issues, yet not much is done to help solve this. Buffering and downgrading to subpar video bitrates continue unabated as high-speed broadband and faster cellular networks have reached near ubiquity in the United States and some international markets. So why does video still fail and rebuffer? What is the impact of video stream issues on revenue, brand, and churn? We explore these questions and more.

PRESENTER: Nathan Barnett, CEO, Swarmlify

Build 4K and VR/360 Live Streaming Workflows in Minutes

Starting from scratch, we show how to do 4K live streaming in minutes. Using technologies from Wowza and others, we deliver live adaptive bitrate streaming, record the video for on-demand playback, and deliver the live feed with global any-screen streaming. In the remaining time, you see how to leverage 4K to create an immersive VR/360 experience.

PRESENTER: James Jackson, Director, Product Marketing, Wowza Media Systems

12:30 p.m. – 1:45 p.m.

ATTENDEE LUNCH & CHANCE TO VISIT THE EXHIBITS

1:45 p.m. – 2:30 p.m.

A103 • Delivering Content in a Multi-Device World: Technical Challenges & Solutions

Video owners need to reach a myriad of constantly evolving devices in a fractured ecosystem of formats. While standards such as HLS, MPEG-DASH and common encryption make it easier to deliver content, delivering premium content and a premium viewing experience to multiple devices can be a real challenge. In order to do so successfully, content owners need to be able to support multiple formats. In this panel, you learn how leading media companies are solving this problem and the advantages they experience when adopting the best format for their particular platform.

MODERATOR: Matt Smith, Principal Media Evangelist, Brightcove

PANELISTS:
- Ben Miller, VP, Digital Products, SinclairDigital
- Talia Reitiny, Product Manager, Video, Bleacher Report
- Kirby Grines, SVP, Corporate Development, Float Left

B103 • Business and Technical Challenges of Forensic Watermarking for 4K/uhd

As the content ecosystem prepares for HDR, 4K/uhd, and even 8K at scale in an on-demand, any device world, the risk of high-quality pirated content rises in tandem, putting the evolving business models and infrastructure investments at immediate risk. Forensic watermarking is positioned as a requirement in Movielabs’ Enhanced Content Protection Guidelines to mitigate the ravaging effects of un-monetized distribution. However, getting the technology widely deployed is challenging due to misaligned priorities among the many players in the value chain who must implement or enable the technology and related services and policies. On this panel, we bring together key experts from leading companies in the forensic watermarking ecosystem to discuss the technical, business, and practical challenges of implementing such a system at scale.

MODERATOR: Rajan Samtani, Senior Advisor, Digital Watermarking Alliance

PANELISTS:
- Philippe Stransky-Heilbron, CTO, Nagra-Kudelski
- Lawrence Low, VP, Irdeto
- Eric Diehl, VP, Content Protection, Sony Pictures Entertainment
- Clint Cox, VP, Technical Operations, UFC

C103 • Case Study: Live Streaming at The Humane Society of the United States

The Humane Society of the United States is the nation’s largest and most effective animal protection organization. It has gained significant insights into live streaming by going live via Facebook, Periscope, and Youtube around the world. The Humane Society’s live events have reached millions, exposing its brand to new members, allowing the organization to engage, converse, and convince these community members to take actions and support...
their cause. Each livestream event has taught The Humane Society valuable lessons about what to do and what not to do, these lessons are shared in this case study presentation.

PRESENTER: Chad Sisneros, Managing Director, Creative Department, The Humane Society of the United States

D103 • How To: Performing Subjective Evaluation of Encoding Technologies

The video compression industry often encounters claims that some new encoding technology is X% better than previous state-of-the-art encoders, where “X” is some large number. In reality, arriving at a percentage gain is a complex process, depending on the reference (“baseline”) encoding, the encoding settings, the encoding bitrates, the video content being encoded, the method of comparison, and the comparison metrics. This presentation explains how to perform subjective evaluation of encoding technologies using a practical subjective test methodology that is credible and leads to meaningful results. The talk presents several examples of encoded bitstreams to be scored subjectively, shows how to score those bitstreams based on the artifacts present, and illustrates how to collect subjective scores and derive meaningful gain metrics from them.

PRESENTER: Nigel Lee, Chief Science Officer, Euclid

DT103 • Discovery Track

1:45 p.m. – 2:05 p.m.

Using Social Media to Boost Audience Engagement

We discuss Twitter, Facebook, and Instagram, and how content can be integrated from each of these into your live show. We’ll also provide case studies of how these have been used in real-world productions.

PRESENTER: Martin Sinclair, Founder, vMix

2:10 p.m. – 2:30 p.m.

Checklist for Creating OTT Experiences That WOW!

With so many OTT services for consumers to choose from, providers must find ways to improve their OTT experience if they want to attract new and retain current subscribers. In this session, we share a checklist of strategies for ensuring fast, reliable, secure online video experiences that wow audiences and keep them coming back for more!

PRESENTER: Charlie Kraus, Sr. Product Marketing Manager, Video Solutions, Limelight Networks

2:45 p.m. – 3:30 p.m.

A104 • How Periscope Migrated to HTML5 and Low Latency HLS

Providing a good experience is key when providing millions of live video streams to tens of millions of viewers. This session dives into the technology needed to deliver an industry-leading live streaming experience on Periscope. Learn how Periscope, Twitter’s live broadcasting platform and the first to popularize live streaming, recently partnered with OpenTelly to improve its viewer experience through a series of technology migrations.

Attendees hear how Periscope improved the experience delivered to its viewers by migrating to HTML5 and low latency HLS.

PRESENTER: Pieter-Jan Speelmans, CTO, Co-Founder, OpenTelly

Bill Couch, Lead Web Engineer, Periscope

B104 • How to Succeed With OTT: Tackling Business Strategy and Unlocking Revenue

As the OTT market continues to experience dramatic growth, it’s also become incredibly crowded and competitive. Content owners are under more pressure than ever to get to market quickly and having the right business model is crucial. This session discusses the different strategies for going OTT; a templated, turnkey service that enables faster time-to-market or a more customized, highly differentiated offering; and the pros and cons of each. Speakers deliberate on how to best address the growing challenge of device fragmentation in an increasingly complex OTT ecosystem and how content owners are successfully monetizing content via advertising or subscription models.

MODERATOR: Albert Lai, CTO, Brightcove

PANELISTS:

Titus Bicknell, CDO & EVP, Operations, Acorn TV
Jarred Reeves, Director, OTT & International, Machinima
Nathan Guetta, VP, Product & Technology, Condé Nast Entertainment

C104 • Emerging Streaming Technologies: Picking the Winners

Streaming continues its rapid evolution, moving away from proprietary core technologies and towards open standards. Which leading-edge technologies (H.265, VP9, AOMedia Video, WebM, DASH, HEVC H.265, HTML5 & WebRTC) should you be adopting to future-proof your streaming deployments so you reach your targeted devices and deliver a great user experience? We look at the royalty-laden HEVC vs. royalty-free VP9 vs. the new open-source AOMedia Video for streaming with MPEG-DASH. Which will win out in the end? How will Apple’s adoption of fragmented MP4 for HLS impact DASH adoption? Will the death of browser plug-ins finally herald the age of HTML5 video streaming, and how does WebRTC fit in? Our panel dives into these and other questions, helping you decipher which technologies are here to stay, and which should be forgotten.

MODERATOR: Chris Knowlton, VP, Streaming Industry Evangelist, Wowza Media

PANELISTS:

Omer Luzzatti, Senior Director, Head of Yahoo Video Platform
Mark Arana, VP, Distribution Technology, The Walt Disney Studios
Will Law, Chief Architect, Media Cloud Engineering, Akamai
Spencer Stephens, CTO, Sony Pictures
D104 • HOW TO: Improving the Quality of Experience By Iterating Your ABR Logic 🌈🌈
This presentation covers how broadcasters can improve quality of service by making small changes to their ABR algorithms and analyzing via an effective AB testing workflow. We begin by offering practical feedback on how OuiMedia was able to improve QoS significantly via small player-side ABR iterations, explaining what metrics were used and the results obtained. In the second part of the talk, we delve into how to build an effective AB testing analytics stack, honing in on the tools needed and the appropriate environment to be able to effectively analyze our actions and make changes in real time.

PRESENTERS:
Erica Beavers, Head, Marketing & Partnerships, Streamroot
Nikolay Rodionov, Co-Founder, OuiMedia, Streamroot

DT104 • Discovery Track
2:45 p.m. – 3:05 p.m.
Managing Your Digital Assets 🌈🌈
The confluence of data forces and sources—cloud, mobile, social, analytics—are at the center of today’s massive data growth, and it’s essential that your business can economically and securely store, manage, and leverage that data. With on-premise, cloud, or hybrid solutions, IBM Cloud Object Storage offers unmatched flexibility, massive scalability, and powerful simplicity to address your diverse set of needs and content.

PRESENTER: Bruce Ross, Global Solutions Leader, Media & Entertainment & Service Providers, IBM Cloud Object Storage

3:10 p.m. – 3:30 p.m.
Enabling Scalable Watermarking 🌈🌈
Watermarking is becoming a crucial component for UHD distribution. However, due to the proprietary nature of different watermark algorithms, integrating various watermarking technologies has not been straightforward. We present ongoing work in the UHD-Forum on best practices and standardized interfaces to allow scale.

PRESENTERS:
Niels Thorwirth, VP, Advanced Technology, Verimatrix
Jaap Halsma, CTO NexGuard, Kudelski Group

3:30 p.m. – 4:00 p.m.
COFFEE BREAK in the Exhibit Hall

4:00 p.m. – 5:00 p.m.
A105 • The Future of TV: Shifting From Linear to Online 🌈🌈
The way that people watch television is changing. As the broadcast industry gradually transitions to IP and consumers adopt more online video, it’s clear that a transformation is underway. But what will TV look like in 5 years? This session explores the future of television and how the gradual, generational shift from linear broadcast to online will fundamentally change not only consumption but the underlying business models as well. Attendees learn about the long-term vision for the television experience and how they can prepare (and plan) to take advantage of the evolution in video consumption that is happening today.

MODERATOR: Jason Thibeault, Executive Director, Streaming Video Alliance

PANELISTS:
Roger Williams, VP, Media Operations, MLBAM
Campbell Foster, Director, Product Marketing, Adobe Primetime
Keith Valory, CEO, Plex

B105 • Best Practices for Executing High-Profile Live Streaming Events 🌈🌈🌈🌈🌈
This presentation focuses on best practices around reliable live streaming of critical, high-importance global events with multiple redundant signal pathways. Learn how to overcome challenging on-site environments like flaky internet, failing encoders, faulty cables and failing CDNs. Learn some best practice tips covering the gamut of on-site challenges (cameras, switches, signal paths, ingest/uplink) to reliable end-user playback (transcoding/transmuxing, reliable playback engines, CDN selection). Find out how you can implement backups and redundancy at every possible level of your live workflow. The presenters also cover best practices (and caveats) around successful leveraging Facebook Live—Facebook’s native new entry into the live streaming category that is gaining enormous traction and engagement right now. Learn from our experiences (and the odd failure) to make sure your next event is a resounding success.

PRESENTERS:
Eric Zawolok, Media Systems Engineer, Facebook
James Broberg, Founder, CEO, MetaCDN

C105(a) • Case Study: How Tastemade Built Its Own Global Video Platform 🌈🌈
Tastemade is a video network built for the mobile generation that enables people to come together to discover and share their passion for great food and travel. In this case study presentation, Tastemade outlines how it went from using YouTube as its primary distribution source to building its own global video platform and applications, which connect with over 100M monthly users around the globe.

PRESENTER: Jay Holtzer, Head of Production, Tastemade.com

C105(b) • Case Study: Building a Video Publishing Pipeline at The New York Times 🌈🌈
In 2016, The New York Times created a new team to build a faster, cloud-based and reliable video publishing pipeline. This presentation walks through the set of microservices being developed by The New York Times Media Factory team to create an elastic and reliable solution that can be used across the globe. Learn about content acquisition; transcoding; distribution; APIs and how The New York Times is supporting a set of new requirements such as adaptive streaming and VR/360° videos.

PRESENTERS:
Maxwell Da Silva, Director, Technology, Video, The New York Times
Flavio Ribeiro, Senior Software Engineer, Video, The New York Times

D105 • HOW TO: Building Audiences on the Roku Platform 🌈🌈
Building a great Roku channel has never been easier. In this session, Roku unveils new methods to quickly publish on the Roku platform and monetize with video advertising. The presenter discusses these new tools and some of the ways that developers and content creators can build their audiences on the Roku platform.

PRESENTER: Chris Traganos, Director, Developer Relations, Roku

DT105 • Discovery Track
4:00 p.m. – 4:20 p.m.
Video Encoding and HTML5 Playback With Native DRM 🌈🌈
Today there’s a huge range of different devices, platforms and environments on which users want to watch videos. Therefore, it’s important to use a technology and a streaming standard which fits for all devices. HTML5 is now replacing Flash. But there are problems and challenges, especially when it comes to playback of DRM protected content. Stefan Lederer presents solutions that enable developers to deliver adaptive streaming and DRM without plug-ins.

PRESENTER: Stefan Lederer, CEO and Co-Founder, Bitmovin

4:25 p.m. – 4:45 p.m.
How Big Broadcasts Are Streaming in 360° 🌈🌈
Discover how ABC’s Dancing With the Stars and the Rio Olympics used 360° streaming technologies like the Teradek Sphere to provide their viewers with unique second screen content. Join us to learn all about real-time stitching, proper rigging, and network management for 360° productions.

PRESENTER: Jon Landman, VP, Sales, Teradek

5:00 p.m. – 6:00 p.m.
EXHIBIT HALL RECEPTION

6:00 p.m. – 7:30 p.m.
STREAMING MEDIA BEER GARDEN & NETWORKING EVENT
Sponsored by
Cloud TV Service

Jeff Tapper is a SVP of Multiplatform Engineering at Viacom. Jeff runs a team that is responsible for building and maintaining the Video Players, Identity, Advertising and Analytics components used by all of the Viacom brands. Jeff has worked in the Streaming Media community for over a decade, and has been a frequent speaker at NAB, IBC and the Streaming Media East and West conferences.

8:30 a.m.
STREAMING MEDIA MAGAZINE’S READERS CHOICE AWARDS BREAKFAST

9:00 a.m. – 10:00 a.m.
KEYNOTE
Jeff Tapper, SVP, Engineering, Viacom
Jeff Tapper is a SVP of Multiplatform Engineering at Viacom. Jeff runs a team of engineers who are responsible for building and maintaining the Video Players, Identity, Advertising and Analytics components used by all of the Viacom brands. Jeff has worked in the Streaming Media community for over a decade, and has been a frequent speaker at NAB, IBC and the Streaming Media East and West conferences.

10:00 a.m. – 10:30 a.m.
COFFEE BREAK in the Exhibit Hall

10:30 a.m. – 11:15 a.m.
A201 • Best Practices for Captioning Live Video on the Web
LinkedIn is one of the first online broadcasters to use YouTube’s recently added support for CEAS and ATSC, the standard for closed captioning for ATSC digital television (DTV) streams in the United States and Canada. This session talks specifically about the encoders and signal flow, voice writing/respeaking method for generating captions and best practices to improve the quality of captions.

MODERATOR: Heather Harford, Live Video Producer, LinkedIn

PANELISTS:
Jake Dozier, Access Services Manager, SDI Media
Matthew Szatmary, Senior Video Encoding Engineer, Twitch
Rob Dillon, Manager, Digital Operations, Tribune Media
Ben Cruz, YouTube Video Accessibility Evangelist, Google

B201 • How Telus Is Deploying a Personalized Cloud TV Service

In late 2016, Telus, one of Canada’s largest service providers, will launch its enhanced Optik TV service, offering a seamless, personalized and engaging TV experience on any device, wherever and whenever. In this case study, Ericsson and Telus discuss how the two companies worked together to bring TV to the cloud. Learn how Telus is delivering 630 channels and 26,000 video-on-demand assets via a completely different business model. Hear the process and challenges of transitioning to a continuous engagement model and the tools and capabilities that the cloud enables for both service providers and viewers. Attendees get an insight on the shifting TV landscape, and hear what operators and media companies are doing to keep pace with the rapid technology innovations.

PRESENTERS:
Elisabetta Romano, Head, TV & Media, Ericsson
Ibrahim Gedeon, CTO, Telus

C201 • HOW TO: Deploying Server Side Ad Insertion
Server side ad insertion (SSAI) is an excellent path for content providers and distributors to improve a better user experience, higher overall video consumption, and providing less obtrusive ad delivery. This presentation explains the differences between SSAI and client side ad insertion. Learn how SSAI works, its limitations, architecture readiness for migration, ad preparation considerations, and possible changes to existing workflows. This presentation also covers planning for target devices, platforms and video delivery methods and will highlight real-world use cases.

PRESENTER: Julian Sikievich, VP, Technology, Viacom

DT201 • Discovery Track

The Two Most Important Things About Streaming to Facebook Live
Live video is a key tool to engage with audiences and Facebook is poised to help you get the right people viewing your stream, interact with your content and measure results. But there are two key things you need to stand out and be successful. This session covers what they are and how other Facebook Live customers are doing it right now.

PRESENTER: Claudia Barbiero, VP Marketing and Live Events Production, LiveU

11:30 a.m. – 12:30 p.m.
A202 • How the Industry Can Address the Challenges Around Virtual Reality

During this session, leading content owners and distributors join top technology companies to examine the elements essential to making VR not just a reality but also a viable business opportunity. The expert panel defines VR video and discusses the workflow required to deliver a high-quality VR experience. Considering audio, video, and CGI, the group covers capture and production, processing, delivery, and consumption. The session also addresses the importance of standards in scaling the VR business, current technical challenges, and how the industry can address those challenges via more concerted efforts—such as those undertaken in the past by the DASH Industry Forum and the Ultra HD Forum—to drive the technology forward.

MODERATOR: Thierry Fautier, VP, Video Strategy, Harmonic

PANELISTS:
Drea Bernardi, Director Video Programming, AOL Partner Studio & The Huffington Post
Scott Barbour, VP, Production Technology, Sony Pictures
Richard Lucquet, Business Development Manager, Verizon
Aylac Biber, Product Manager, Qualcomm

B202 • Building Streaming Workflows for K-12 and Higher Education

Education video usage both inside and outside the classroom is on the rise. The process of creating, managing, and delivering live and on-demand content continues to evolve. What technologies and best practices are schools using? This session explores successful workflows schools have developed to simplify video adoption and make the technology more transparent to educators and students. Our education panelists also recommend crawl-walk-run implementation steps and share lessons learned.

MODERATOR: Chris Knowlton, VP, Streaming Industry Evangelist, Wowza Media

PANELISTS:
Jonathan Schwartz, Director, Video Productions & Operations, University of Southern California
Todd Stabley, Senior Media Engineer, Duke University
Gary San Angel, Distance Education Specialist/Media Technology, Keck School of Medicine, University of Southern California
Nicholas Berrios, Media Specialist, Argo Community High School

C202 • HOW TO: Build Your Own Cloud Encoder With FFmpeg
Almost all of the commercial cloud encoding services, and many of the largest streaming producers, encode in the cloud using FFmpeg. It’s cheap, relatively simple, and highly effective. To accomplish this yourself, you need two basic skill sets: first how to encode with FFmpeg, and then how to automate, schedule, and manage the encoding processes.
This presentation details how to produce H.264 files with FFmpeg and describes the tools and techniques available to simplify the automation and management of these encoding jobs for both live and VOD encoding.

PRESENTERS:
Jan Ozer, Principal, Docemo Publishing
David Hassoun, Owner, RealEyes

DT202 • Discovery Track
11:30 a.m. – 11:50 a.m.
Why Operational Analytics Are Vital to Support Live Streaming QoE
Using operational streaming analytics to monitor and support streaming media deployments is as important as—and in many cases more mission-critical than—just deploying an in-player streaming analytics solution. In-player and last-mile solutions focus on issues as they affect the customers, which is often too late and does little to improve customer retention and minimize churn. Operational streaming analytics alert content distributors and live streaming solution providers to delivery problems as they happen and provide immediate solution responses, before they become end-user issues.

PRESENTER: Joe Friend, VP, Digital Products and Video, CBSi

C203 • HOW TO: Choosing & Benchmarking HTML5 Players
This presentation provides a brief overview of how modern video players work, what broadcasters should look for depending on their technical and business goals, and the different open-source tools that are available. It discusses compatible formats, codecs and supported DRMs; user performance; the ability of each media engine to handle edge cases; and the performance of the ABR algorithms. At the end of the presentation, broadcasters will better understand what tools are right for their needs and be able to evaluate the pros and cons of each solution available.

PRESENTER: Mike Zolin, VP, Ad Technology Systems, Fox

DT203 • Discovery Track
1:45 p.m. – 2:05 p.m.
Best Practices in Implementing Live and Synchronized OTT Services and the Impact of This on Current OTT Business Models
This presentation discusses best practices for implementing a live and synchronized OTT service that enables live OTT streams to be synced to different mobile devices as well as synced and harmonized with regular linear broadcast TV. The session, in particular, discusses how a synced live OTT service can open up new business models for content owners and rightsholders, and highlights how this complements a rightsholder’s existing business. This presentation also delves into emerging examples of how a synchronized live OTT service can be used to greatly enhance viewer experiences, either as a stand-alone service or in combination with regular broadcast television.

PRESENTER: Erik Bevers, Head, Marketing & Partnerships, Streamroot

A203 • Using QoE Data to Ensure a High-Quality Viewing Experience
This session explores why publishers need a holistic view of consumers’ Quality of Experience (QoE) in today’s open and unpredictable internet environment. Learn how companies are using data to adapt to the changing entertainment landscape and how correlations can be made across the video delivery spectrum to understand the impact of experience as it pertains to the engagement of your audience. In this session, OTT providers talk about the holistic and comprehensive picture QoE data provides that enables their services to ensure successful video delivery, engaged audiences, and exceptional viewer experiences.

MODERATOR: Ed Haslam, CMO, Conviva

B203 • The Latest With DASH, HLS, & MPEG-CMAF
A lot of recent changes are going on in the area of online streaming formats. Apple announced at WWDC 2016 the support of fragmented MP4, a key feature of CMAF, and others have demonstrated its usage on all major browser platforms. Video players now support HLS in HTML5 via re-multiplexing in JavaScript, so that HLS can be played using the HTML Media Source Extensions. In parallel, MPEG-DASH got a lot of traction for DRM-protected premium content, as all major web browsers now support the HTML5 Encrypted Media Extensions. This panel provides an overview about MPEG-CMAF, and discusses whether it is an opportunity to actually harmonize deployments that currently have to support both (and separate from each) DASH and HLS. Finally, we discuss potential threats on existing deployments having its clear focus on MPEG-DASH and DASH-IF.

MODERATOR: Stefan Lederer, CEO, Bitmovin

Supercharge Your Revenue Streams: Unlock the Device and Conundrum and Reach Them All to Maximize Your Returns
In this session you will learn how easy it can be to create and customize your offer and then build native applications for deployment on all app stores for personal devices, streaming players, smart TVs, and game platforms with Cisco’s cloud-hosted Infinite Video Platform.

PRESENTER: James Field, Product Manager, SPYDAS, Cisco

A204 • HOW TO: Virtual Reality & 360° Live Streaming
Virtual Reality (VR) and 360° are emerging as two of the most innovative live streaming trends, powering events such as sporting events, concerts, corporate meetings, education, medicine, military applications, and many other areas. In this interactive session, attendees get to try live demos and get more familiar with the technology as we walk through some common 360° live streaming workflows, including the Lollapalooza Berlin 2015 music festival, which allowed virtual attendees to attend the live concert series and be immersed with the band on stage. Most VR technologies use industry-standard streaming protocols that can be implemented with common streaming servers and platforms. We show a few examples of 360° camera examples and also review how playback is achieved using common player apps.

PRESENTER: Chris Knowlton, VP, Streaming Industry Evangelist, Wowza Media

DT204 • Discovery Track
3:15 p.m. – 3:35 p.m.
Object Storage: An Efficient Data Management Solution for Streaming Media
Private clouds built on object storage offer huge potential for more efficient, streamlined content delivery. This session will outline elements for success with this new architecture, including: applications that operate on objects vs files, web interface integration, and data management that integrates content delivery with the content production environment.

PRESENTER: Dave Frederick, Sr. Director Media & Entertainment, Quantum
Chief Advisor, Al Roker Entertainment & Co-Founder, RokerLabs, Roker Media
Ronald C. Pruett, Jr., Jon Burk, programs for an always-on generation. The “win” for live streaming platforms and why it makes sense to develop destination influencers, and audiences. Jon Burk and Ronald C. Pruett explain how programming is first multi-platform live streaming network and lives at the intersection of brands, inspired. Using real-time data and award-winning media production chops, Roker Media channel both technological advances and the creative energy that live streaming has gained.

Developing Content and Programming for Live Streaming
11:30 a.m. – 12:00 p.m.
LS101 • Live Streaming Platforms: Compare & Contrast
There’s a growing number of options when it comes to live streaming distribution platforms, but each one is different in terms of feature sets, distribution functions, audience reach, monetization opportunities, interactivity, and the factors. We’ll open the Live Streaming Summit with a lively panel discussion that compares and contrasts Facebook Live, YouTube Live, Twitter, Periscope, Twitch, Ustream, Livestream, and other platforms and services in the live streaming domain. This panel will help you understand which platforms and approaches are best suited to particular content genres as well as overall business goals.
MODERATOR: Brian Ring, President, Ring Digital
PANELISTS:
Steve Oh, Chief Business Officer, The Young Turks
Adam Rymy, President, Legendary Digital Networks
Tarek Amara, Video Systems Engineer, Twitch
Ryan Troy, TV Devices Global Lead, Twitter
Gus Elliott, Senior Director Video Operations and Technology, Silver Chalice

Optimizing End-to-End Latency and Reliability for Large-Scale Live Events
With increasing demand for high-quality video (4K/ULTRA HD) and availability of more capable display devices, both latency and reliability are important factors in live streaming. This case study focuses on a live music event in South America that was streamed on the VDMS Media Ingest platform by Live Media Group (LMG). We discuss the methods employed in providing low latency for ingest, storage, and propagation through the CDN, along with reliability measures adopted by LMG.
Karthik Sathyanarayana, Senior Software Engineer (Streaming), Verizon Digital Media Services

Achieving Live Streaming Success
Planning for Failure: The Essential Step to Revolutionize Live Streaming?
After a brief review of the traditional Ku-band workflow, we discuss the state of technologies enabling video-over-IP contribution. We look at protocols, cellular bonding products, and Ka-band satellite solutions that are available today, as well as future solutions such as Google’s LEO constellation. We examine the business case: Can IP-only cut costs? Does it simplify workflows? Is it mature enough to force the fleet of Ku trucks into retirement?
Casey Charvet, CEO, Tourgigs

Revolutionize Live Streaming?

NDI: What It Is, How It Works, & Why It Is Important
With the distribution of video programming moving to internet protocol, it only makes sense that production do the same. Network Device Interface, or NDI, is an enabling technology for live production IP workflows over Ethernet networks, allowing multiple video systems to identify and communicate with one another over IP and to encode, transmit, and receive many streams of high-quality, low-latency, frame-accurate video and audio in real time. This session covers the “how-to/best practices” basics that will allow attendees to learn about what NDI is, how it’s different from other protocols, and how they can incorporate it into their workflows.
Will Waters, Director of Product Marketing and Video Specialist, NewTek

NDI: What It Is, How It Works, & Why It Is Important

Revolutionize Live Streaming?

Live Streaming Spotlights
11:30 a.m. – 12:00 p.m.
LS102 • Developing Content and Programming for Live Streaming
From Periscope and Twitch to YouTube and Facebook Live, “live” has become the newest way to engage an uber-connected audience. But technology is only as good as the content that is broadcast on these social broadcasting networks. Roker Media began in 2016 to channel both technological advances and the creative energy that live streaming has inspired. Using real-time data and award-winning media production chops, Roker Media is the first multi-platform live streaming network and lives at the intersection of brands, influencers, and audiences. Jon Burk and Ronald C. Pruett explain how programming is the “win” for live streaming platforms and why it makes sense to develop destination programs for an always-on generation.
Jon Burk, Director, Content Marketing/Digital Strategy, Al Roker Entertainment & Roker Media
Ronald C. Pruett, Jr., Chief Advisor, Al Roker Entertainment & Co-Founder, RokerLabs, Roker Media

Live Streaming Summit
Tuesday, November 1 • All sessions will take place in the Fountain Room unless otherwise noted.

9:00 a.m. – 10:00 a.m.
WELCOME & OPENING KEYNOTE

10:00 a.m. – 10:30 a.m.
COFFEE BREAK

10:30 a.m. – 11:15 a.m.
LS101 • Live Streaming Platforms: Compare & Contrast
There’s a growing number of options when it comes to live streaming distribution platforms, but each one is different in terms of feature sets, distribution functions, audience reach, monetization opportunities, interactivity, and the factors. We’ll open the Live Streaming Summit with a lively panel discussion that compares and contrasts Facebook Live, YouTube Live, Twitter, Periscope, Twitch, Ustream, Livestream, and other platforms and services in the live streaming domain. This panel will help you understand which platforms and approaches are best suited to particular content genres as well as overall business goals.
MODERATOR: Brian Ring, President, Ring Digital
PANELISTS:
Steve Oh, Chief Business Officer, The Young Turks
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Tarek Amara, Video Systems Engineer, Twitch
Ryan Troy, TV Devices Global Lead, Twitter
Gus Elliott, Senior Director Video Operations and Technology, Silver Chalice

11:30 a.m. – 12:30 p.m.
LS102 • Live Streaming Spotlights
11:30 a.m. – 12:00 p.m.
Developing Content and Programming for Live Streaming
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Jon Burk, Director, Content Marketing/Digital Strategy, Al Roker Entertainment & Roker Media
Ronald C. Pruett, Jr., Chief Advisor, Al Roker Entertainment & Co-Founder, RokerLabs, Roker Media

12:00 p.m. – 12:30 p.m.
Optimizing End-to-End Latency and Reliability for Large-Scale Live Events
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Karthik Sathyanarayana, Senior Software Engineer (Streaming), Verizon Digital Media Services

12:30 p.m. – 1:45 p.m.
ATTENDEE LUNCH & CHANCE TO VISIT THE EXHIBITS

1:45 p.m. – 2:30 p.m.
LS103 • NDI: What It Is, How It Works, & Why It Is Important
With the distribution of video programming moving to internet protocol, it only makes sense that production do the same. Network Device Interface, or NDI, is an enabling technology for live production IP workflows over Ethernet networks, allowing multiple video systems to identify and communicate with one another over IP and to encode, transmit, and receive many streams of high-quality, low-latency, frame-accurate video and audio in real time. This session covers the “how-to/best practices” basics that will allow attendees to learn about what NDI is, how it’s different from other protocols, and how they can incorporate it into their workflows.
Will Waters, Director of Product Marketing and Video Specialist, NewTek

2:45 p.m. – 3:30 p.m.
LS104 • Will Ka-band, Cellular Bonding, & LEO Satellites Revolutionize Live Streaming?
After a brief review of the traditional Ku-band workflow, we discuss the state of technologies enabling video-over-IP contribution. We look at protocols, cellular bonding products, and Ka-band satellite solutions that are available today, as well as future solutions such as Google’s LEO constellation. We examine the business case: Can IP-only cut costs? Does it simplify workflows? Is it mature enough to force the fleet of Ku trucks into retirement?
Casey Charvet, CEO, Tourgigs

3:30 p.m. – 4:00 p.m.
COFFEE BREAK

4:00 p.m. – 5:00 p.m.
LS105 • Planning for Failure: The Essential Step to Achieving Live Streaming Success
They say that to become a world-class athlete, it’s important to visualize success. While size, scope, audiences, and objectives vary, one thing is true of every live event: If it doesn’t reach the audience, it’s a failure. To become world-class at executing live streaming events, nothing is more important than visualizing failure and establishing contingency plans at every step in the delivery chain, from source to encoder, from signal to CDN, all the way to the end user’s viewing platform or device. This session will share insights and experiences gleaned from hundreds of live events and centered on the premise that focusing on the worst possible outcome is the best way to ensure that outcome never becomes a reality.
Travis Petershagen, Digital Media Services Manager, Microsoft Production Studios
Jeff Tyler, Audience Experience Lead, Microsoft Production Studios

5:00 p.m. – 6:00 p.m.
EXHIBIT HALL RECEPTION

Tuesday, November 1
6:00 p.m. – 7:30 p.m.
Lighthouse Courtyard, Hyatt Resort
Sponsored by UStream
Join us for a fun night on the lawn as you network with industry peers while enjoying a selection of good brews and eats. Open to all attendees, speakers, and vendors.
livestreamingsummit.com
Live Streaming Summit is a conference produced in conjunction with Streaming Media West, that focuses exclusively on the challenges and opportunities inherent in delivering large-scale live events and live linear channels to multiple screens. The best practices presentations will cover every step of the live video workflow, including ingestion, transcoding, management, protection, distribution, analytics, and post-event evaluation. It’s open to Live Streaming Summit, Platinum, and Combo pass holders.

Wednesday, November 2  •  All sessions will take place in the Grand Ballroom, Salon G unless otherwise noted.

8:30 a.m.
STREAMING MEDIA MAGAZINE’S READERS CHOICE AWARDS BREAKFAST

9:00 a.m. – 10:00 a.m.
KEYNOTE

10:00 a.m. – 10:30 a.m.
COFFEE BREAK in the Exhibit Hall

10:30 a.m. – 11:15 a.m.
**LS201 • Beyond the Live Stream: Improving the Viewer Experience**
Content will always be king, but without a compelling viewer experience and Quality of Service and Quality of Experience insights, even the best content won’t keep viewers around. A bad user experience can be disastrous, as disgruntled viewers are quick to take to social media to complain about a poor-quality stream or slow start times. This session looks at ways to avoid those pitfalls and to make sure the entire viewing experience—content, stream quality, player, and social media interaction—is top-notch.
MODOERATOR: Noam Geri, VP of Business Dev North America, Giraffic
PANELISTS:
Mitch Singer, Principal, Digital 360 Venture
Matthew Burgin, Director, Smart TV Content, LG Electronics
John Penney, Chief Strategy Officer, Starz
Brenton Ough, CEO, Touchstream

11:30 a.m. – 12:30 p.m.
**LS202 • Live Streaming Spotlights**
Content owners behind some of the most innovative live streaming success stories—both live event and live linear—share what they’ve done, how they’ve done it, and what you can learn from their experiences.
11:30 a.m. – 12:00 p.m.
**Live From Intuit, It’s a Global Meeting: Best Practices for Live Streaming Internal Communications**
This session will explore best practices for using live streamed video within a major corporation. For more than two years, Intuit has leveraged Ustream to manage the company’s internal video communications across an international workforce. Intuit will share key learnings from live-streaming global conferences, routine business meetings, and investor calls, and Ustream will speak to the complex technology required to deliver successful video solutions at scale. Both speakers will explore the wide array of use cases for live-streaming within the enterprise, and opportunities for innovative applications of streaming technology.
David Martin, Sr. Manager & Solutions Architect, Intuit Events Technology
Scott Grizzle, Manager of Sales Engineering, Ustream, an IBM Company

12:00 p.m. – 12:30 p.m.
**Create Professional Live Event Streams for Facebook Live**
Learn the ins and outs, as well as the opportunities and challenges, of producing and streaming live events on Facebook. Get practical tips and best practices on how to make the most out of this new and exciting global broadcast channel including how to maximize audience reach, and the best choices for production.
Robert Hix, Audiovisual Collaboration & Senior Partner, Enlightened Audio Visual
Andrew Haley, Product Evangelist, Telestream

12:30 p.m. – 1:45 p.m.
**LUNCH BREAK** visit the Exhibit Hall

1:45 p.m. – 2:45 p.m.
**LS203 • Live Virtual Reality/360° Video: Today and Tomorrow**
VR/360° video is still in its infancy, but it’s growing fast. It’s a new way of telling stories, and the one thing everyone agrees on is that live streaming is where it’s going to make its biggest mark. This session talks about the opportunities and challenges presented by 360° video, from both technology and content perspectives.
MODERATOR: Robert Klug, CEO, Streaming Media Hosting
PANELISTS:
Rikard Steiber, President, Viveport; SVP of VR, HTC
Malachi Bierstein, Head of Sales, Nokia Technologies Digital Media Division
Randy Stude, Director, Strategy/Content, Alliances, VR Radeon Technology Group (RTG), AMD
Tom Vance, Head Of Narrative Content, Jaunt VR

2:45 p.m. – 3:15 p.m.
**COFFEE BREAK** in the Exhibit Hall

3:15 p.m. – 4:00 p.m.
**LS204 • The Future of Live Streaming**
Live streaming is growing faster and keeping viewers’ attention longer than VOD, and that growth shows no sign of slowing down. This forward-looking session examines the content types, technologies, and monetization strategies that will lead the way for the next 5–10 years and offers attendees insights into how they can win the live streaming game.
MODERATOR: Michelle Abraham, Senior Analyst, Media & Communications, SNL Kagan
PANELISTS:
Jon Alexander, Senior Director, Product Management, Level 3 Communications
Omer Luzzatti, Senior Director, Head, Yahoo! Video Platform, Yahoo!
Paula Minardi, Head, Content Strategy, Ooyala

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Michelle Abraham  
Senior Analyst, Media & Communications, SNL Kagan

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Tarek Amara  
Video Systems Engineer, Twitch

Mark Arana  
VP, Distribution Technology, The Walt Disney Studios

Richard Au  
Director, Content Acquisition, Amazon Video

Dan Balis  
Sr. Director, Video Products, Viacom

Claudia Barbiero  
VP Marketing and Live Events Production, LiveU

Scot Barbour  
VP, Production Technology, Sony Pictures

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CEO, Swarmify

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Director of Video Programming, AOL Partner Studios

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Media Specialist, Argo Community High School

Aytaç Biber  
Sr. Product Manager, Qualcomm

Titus Bicknell  
CDO & EVP, Operations, RLJ Entertainment

Malachi Bierstein  
Head of Sales, Nokia Technologies Digital Media Division

Sherry Brennan  
SVP, Sales Strategy & Development, FOX Networks

Jamieson Brettle  
Product Manager, Chrome Media, Google

James Broberg  
Founder, CEO, MetaCDN

Jon Burk  
Director of Content Marketing and Digital Strategy, Al Roker Entertainment

Casey Charvet  
CEO, TourGigs

Nick Coley  
VP, Business Development, Sony Electronics

Bill Couch  
Lead Web Engineer, Periscope

Clint Cox  
VP, Technical Operations, UFC

Ben Cruz  
YouTube Video Accessibility Evangelist, Google

Maxwell Da Silva  
Senior Video Software Engineer, New York Times

Eric Diehl  
VP, Content Protection, Sony Pictures Entertainment

Rob Dillon  
Manager, Digital Operations, Tribune Media

Jake Dozier  
Access Services Manager, SDI Media

Jeremy Dujardin  
CTO, Media & Entertainment Services, Tata Communications

Matthew Durgin  
Director, Smart TV Content, LG Electronics

Gus Elliott  
Senior Director Video Operations and Technology, Silver Chalice

Thierry Fautier  
VP, Convergence Solutions, Harmonic

Perry Fetterman  
Senior Director, Enterprise & Education, Kaltura

James Field  
Product Manager, SPVSS, Cisco

Mike Flynn  
CTO, Studio71

Campbell Foster  
Director, Product Marketing, Adobe Primetime

Dave Frederick  
Sr. Director Media & Entertainment, Quantum

Joe Friend  
VP, Ad Technology Systems, Fox

Ibrahim Gedeon  
CTO, Telus

Noam Geri  
VP of Business Development North America, Giraffic

Kirby Grines  
SVP, Corporate Development, Float Left

Scott Grizzle  
Manager of Sales Engineering, Ustream, an IBM Company

Nathan Guetta  
VP, Product and Technology, Condé Nast Entertainment

Jaap Haitsma  
CTO NexGuard, Kudelski Group

Andrew Haley  
Product Evangelist, Telestream

Ed Haslam  
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Director, Altman Vilandrie & Company

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CEO, Streaming Media Hosting

Chris Knowlton  
VP & Streaming Industry Evangelist, Wowza Media Systems

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Sr. Product Marketing Manager, Video Solutions, Limelight Networks

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Product Manager, Chrome Media, Google

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Chief Architect, Media Cloud Engineering, Akamai Technologies

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Content Director, Dailymotion

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**Tuesday, November 1**
10:00 a.m. – 6:00 p.m.

**Exhibit Hall Reception**
5:00 p.m. – 6:00 p.m.

**Wednesday, November 2**
10:00 a.m. – 3:15 p.m.
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Salt Lake City, UT 84047
www.bigvideonetwork.com

Chetu, Inc.
10167 W. Sunrise Boulevard
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Plantation, FL 33322
www.chetu.com

Bitmovin Inc.
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Palo Alto, CA 94301
www.bitmovin.com

Cisco
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Lawrenceville, GA 30044
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Caringo
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www.eegent.com

Elemental Technologies, an
Amazon Web Services company
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Portland, OR 97205
www.elementaltechnologies.com

Epiphan Video
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Palo Alto, CA 94301
www.epiphan.com

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