

# MEDIA OVER IP

WORKSHOP

OCTOBER 16, 2017



Hosted at **NBCUniversal**

30 Rockefeller Plaza, 11<sup>th</sup> Floor East, Conference Room 11 A, New York, NY

## PROGRAM

**08:15 – 08:55**

**Security Check (lobby) / Escort to 11th Floor  
Event Registration / Light Continental Breakfast (foyer of Conf. Room)**

**09:00 – 09:30**

**Session 1: Welcome and Keynote**

*The media industry, including broadcasting companies, is moving towards streaming professional media over IP (MoIP) infrastructure and guidance on how MoIP can be implemented is needed. Industry organizations like NABA, AIMS, VSF, AES and SMPTE are working on standards, specifications, learning material, industry events etc. to support this transition. They joined together to bring a workshop to the industry to give firsthand knowledge to those who seek information about implementing MoIP. The intention is to spark a dialogue between users and vendors and to discuss the most recent MoIP implementations. The workshop will provide educational resource as well as a discussion forum on the future of MoIP and where users want to go next.*

**Welcome:**

Thomas Bause Mason, Principal, Open Media Consulting (OMC)

**Keynote:**

**Media Transformation to IP: Opportunities and Challenges** - Keith Jackson, CTO and SVP, Engineering, NBCUniversal (10 mins.)

**Introduction:**

**Road to the Workshop** - Thomas Bause Mason, Principal, OMC (15 mins.)

**09:30 – 10:30**

**Session 2: Standards Update**

*Technology is great but, if we want to exchange content, sooner or later we have to agree on how to do it. This session will give an overview of the Standards and Specifications that are driving, or following depending on your point of view, the transition to IP for the professional media and broadcast industry. SMPTE, AMWA, VSF, JT-NM and AIMS are more than just acronyms. Together speakers from each of these groups will provide an overview of the standards and technology that are leading us into the next evolution of professional media exchange.*

Session Chair:

Howard Lukk, Director, Engineering & Standards, SMPTE

Presentation 1:

**SMPTE ST 2110 Update** - Matthew Goldman, SVP, Technology, TV & Media, Ericsson

Presentation 2:

**VSF and AMWA NMOS Update** - Brad Gilmer, Executive Director, VSF / Executive Director, AMWA

Presentation 3:

**JT-NM Roadmap and Interop Testing** - Howard Lukk, Director, Engineering & Standards, SMPTE | Brad Gilmer, Executive Director, AMWA / Executive Director, VSF | Felix Poulin, Senior Manager, New Broadcast Technologies, CBC/Radio-Canada

Presentation 4:

**AIMS Update** - Mike Cronk, VP, Core Technology, Grass Valley / Chairman of the Board, AIMS

**Coffee Break (10:30 - 10:45)**

**10:45 – 11:30**

**Session 3: Deploying MoIP Systems - Production**

*It's all about content - and content starts with production. This session will explore how IP based video and audio can impact the design of facilities and the workflows for producing content. What new flexibility can impact production workflows and what new capabilities are desired?*

Session Chair:

Glenn Reitmeier, SVP, Technology Standards & Policy, NBCUniversal

Presentation 1:

**Current IP Engineering at Fox** - Thomas Edwards, VP, Engineering & Development, FOX

Presentation 2:

**IP Audio & Video Infrastructure at NBC Sports – Challenges and Successes** - Tim Canary, VP, Engineering, NBC Sports

**11:30 – 12:15**

**Session 4: Deploying MoIP Systems - Facilities & Large-Scale Systems**

*Today's Broadcast Networks are comprised of large and complex facilities. Growing the signal switching fabric beyond the practical limits of SDI is one of the motivations for IP. At the same time, large-scale systems increasingly span multiple physical facilities. This session will explore the new opportunities for scale and the challenges of signal timing and system integration in large systems.*

Session Chair:

Glenn Reitmeier, SVP, Technology Standards & Policy, NBCUniversal

Presentation 1:

**A SMPTE ST 2110 Facility** - Andreas Lattmann, CTO, Head, Planning & Projects, tpc

Presentation 2:

**AIMS Guidelines to Preparing Broadcast Facilities for IP-based Live TV Production** – John Mailhot, Systems Architect for IP Convergence, Imagine Communications

## Deli Lunch (12:15 - 13:00)

**13:00 – 13:45**

### Session 5: Deploying MoIP Systems - Virtualization and Future Directions

*The replacement of SDI with IP interconnects is only the first step in a complete infrastructure transformation. Hardware is being replaced by software, "black boxes" are becoming computer servers and computation and storage are moving into "the cloud." Where will it end? This session will explore the vision of virtualization and discuss some of the practical considerations that should be taken into account as virtual systems are designed.*

Session Chair: Glenn Reitmeier, SVP, Technology Standards & Policy, NBCUniversal  
Presentation 1: **A New House for CBC - IP for leaner infrastructure** - Felix Poulin, Senior Manager, New Broadcast Technologies, CBC/Radio-Canada  
Presentation 2: **Virtualization Challenges** - Thomas Edwards, VP, Engineering & Development, FOX

**13:45 – 14:45**

### Session 6: Operations and Training in a MoIP World: Evolutionary or Revolutionary?

*Imagine for a moment working in the future world of MoIP. There will be significant changes in the technologies supporting the workflow. New technologies bring with them new operational requirements, plus the need for new knowledge, skills and abilities (competencies) that may or may not already exist.*

*Presenters in this session will help explain how operations will likely change, what competencies will be required, and what gaps may exist in workforce competencies. In addition, speakers will explain how to manage changing operations, as well as how to acquire and implement the new competencies required by the MoIP workforce.*

Session Chair: Joel Welch, Director, Education, SMPTE  
Presentation 1: **Operations: What Will Change and What Will Not** - Dafydd Rees, Deputy Director, Operations, Arena TV | Chris Homer, Consultant, Broadcast & Media, Chris Homer LLC (remote participation)  
Presentation 2: **What Knowledge, Skills and Abilities will be required to support Professional MoIP?** - Wes Goldstein, Director, Engineering and Chief Engineer, BTN  
Presentation 3: **Managing the Changes and Leading the Competency Transition** - Joel Welch and John McCoskey, Industry Lead Executive, Technology, Media & Entertainment, Eagle Hill Consulting

## Coffee Break (14:45 - 15:00)

**15:00 – 16:00**

### Session 7: Future of Media in an IT World

*Subject matter experts look beyond technology changes to the drivers behind our industry's shift to IT. Attendees will have an opportunity to interact with our speakers as they talk about fundamental changes in IT technology that have already transformed other IT-driven industries.*

Panel Chair: Brad Gilmer, Executive Director, AMWA / Executive Director, VSF  
Panel Participant 1: Chuck Meyer, CTO, Production, Grass Valley  
Panel Participant 2: Thomas Edwards, VP, Engineering & Development, FOX  
Panel Participant 3: John Mailhot, Systems Architect for IP Convergence, Imagine Communications  
Panel Participant 4: Subha Dhesikan, Principal Engineer, CISCO / Co-Chair, NMOS Network Control API Group, AMWA

**16:00 – 16:50**

### Session 8: Moving Forward as an Industry: Gaps and "What is Needed"

*The last year has been a time of historic collaboration amongst broadcasters, vendors and the technical standards and specification community alike, and much has been accomplished. In the spirit of that collaboration, participants will have the opportunity to share what they see as the gaps that we as an industry still need to cover. Participants will be able to interact with a panel of leaders from industry organizations dedicated to progress in IP interoperability and help shape what are the priority topics for the future as we move towards technologies that enable a more agile broadcast environment.*

Panel Chair: Michael Cronk, VP, Core Technology, Grass Valley / Chairman of the Board, AIMS  
Panel Participant 1: Steve Reynolds, CTO, Imagine Communications / Vice-Chairman of the Board, AIMS  
Panel Participant 2: Brad Gilmer, Executive Director, AMWA / Executive Director, VSF  
Panel Participant 3: Glenn Reitmeier, SVP, Technology Standards & Policy, NBCUniversal / Director, NABA Board  
Panel Participant 4: Chris Lennon, President and CEO, MediAnswers / Chair, 34CS Technology Committee, (Media Systems, Control and Services), SMPTE

**16:50 – 17:00**

### Closing Remarks - Michael McEwen, Director-General, NABA

**17:00 - 18:00**

### Social Networking Event sponsored by ARISTA and CISCO (Conf. Room Lounge)

**ARISTA**

**CISCO**

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