INFRASTRUCTURE
14h30 – 16h00 | 01/09/2016 Thursday | Room 17

IP infrastructures

Moderator: Nelson Faria Jr
Deputy International Director of SET. Technology and Innovation Consultant at Consultoria Inovtec - Chief Executive Officer of Petchannel Comunicação

TV CDN’s: A new approach to delivering TV over IP networks
Speaker: Carlos Cunha
Solutions Architecture Manager Brazil / Southern LATAM Edgeware

Multiple options for live transmission over Streaming – “broadcasting over IP”
Speaker: Chance Mason
Digital Media Executive / Haivision / Foccus Digital

IP Infraestructure on Broadcast World
Speaker: David Tasker
Vice-Presidente de Sistemas e Tecnologia / Snell Advanced Media (SAM)

Transition From SDI To IP Studio Infrastructure
Speaker: José Antonio Garcia
Gerente de Engenharia da EBC / SET

Infraestrutura de Vídeo sobre IP, Padrão Atual e suas Tendências.
Speaker: Carlos Capellão
Diretor / Phase Engenharia
IP INFRASTRUCTURES

Moderator: NELSON FARIA JR – Deputy International Director of SET. Technology and Innovation Consultant at Consultoria Inovtec - Chief Executive Officer of Petchannel Comunicação

- TV CDN’s: A new approach to delivering TV over IP networks
  Speaker: Carlos Cunha
  Solutions Architecture Manager Brazil / Southern LATAM Edgeware
  With TV creating the majority of network traffic, general-purpose CDN’s cannot sufficiently scale to deliver more content to more viewers, if we include live and VoD, time-shift TV, Cloud DVR, fast channel change, ad insertion, 4K, and even VR. This new generation of TV services requires a new type of CDN – one that is optimized for TV and gives control of content delivery back to content owners. This presentation will describe how a new TV CDN architecture can deliver:
  - A rich set of services in high quality.
  - A cost-effective way to scale.
  - Insight and control over the viewing experiences.

- Múltiplas opções de transmissão ao vivo sobre Streaming “broadcasting over IP”
  Speaker: Chance Mason
  Digital Media Executive / Haivision / Foccus Digital
  Os broadcasters têm transmitido vídeo sobre IP por décadas. Novas tecnologias os permitem ter uma ampla seleção de métodos para alcançar um equilíbrio em seus custos operacionais e necessidades dos conteúdos. Essa sessão destacará as várias opções de soluções desde satélite até redes privadas e MPLS, além de focar na mais recente tecnologia que dá suporte a contribuição, backhaul, entrevistas remotas, monitoramento remoto e aplicações de retorno de alta performance e qualidade através de redes já existentes e internet pública de baixo custo.

- IP Infrastructure on Broadcast World
  Speaker: David Tasker
  Vice-Presidente de Sistemas e Tecnologia / Snell Advanced Media (SAM)
  We take a look at the evolving standards, interoperability testing and questions to ask when considering migrating to IP infrastructure.

- TRANSITION FROM SDI TO IP STUDIO INFRASTRUCTURE
  Speaker: José Antonio Garcia
  Gerente de Engenharia da EBC / SET
  In recent years, with the massive arrival of 4k/UHD equipment, we have witnessed a search for connectivity solutions for these new devices. This year, NAB represented a moment when media industry entities, including manufacturers, major domestic networks, groups of local stations and cable channels embraced the mission of transitioning from SDI to IP. This transition will not happen overnight but, as made clear by broadcast executives in the debates at NAB, the change to IP will have a profound impact on how they go about their business. Several expectations have become reality and have leveraged new IP-based systems. However, what is needed is an ecosystem where everyone is on the same page, with a common approach to the use of IP technology. Otherwise, there
will be no winners. Clients will not migrate easily to IP if they do not have a choice from among systems that use standards that are proprietary.

**Infraestrutura de Vídeo sobre IP, Padrão Atual e suas Tendências.**

*Speaker:* Carlos Capellão  
*Director / Phase Engenharia*

Nos últimos dois anos, muitos dos grandes projetos de Sistemas de Vídeo ao redor do mundo empregaram a tecnologia 10GbEther, em lugar do tradicional SDI. Só a Evertz já equipou mais de 30 destes projetos. Portanto, IP é a tecnologia de vídeo de hoje, não do futuro. Os Roteadores IP/SDVN para Video permitem a transição para IP com muitos ganhos operacionais, transparentemente e sem nenhuma limitação em relação às soluções tradicionais em SDI. A natureza agnóstica a formatos do mundo IP permitiu que os sistemas SDVN, inicialmente baseados no padrão SMPTE 2022-6, fossem beneficiados com o advento do ASPEN (SMPTE RDD 37) e estejam prontos para suportar o novo padrão baseado em TR03 e AES67, esperado para o futuro próximo. Com a escala e os avanços dos componentes de TI, os Sistemas de Vídeo IP terão assegurada uma rápida evolução, prevendo-se para muito breve a disseminação das interfaces 25GbE e 100GbE.

**NELSON FARIA JR**  
*Deputy International Director of SET. Technology and Innovation Consultant at Consultoria Inovtec - Chief Executive Officer of Petchannel Comunicação.*

An electronics engineer with an MBA in Finance and Marketing, he worked for 37 years at TV Globo in the Engineering Operations Department. He was also Advisor on Innovation and Technology at TV Globo. He is currently Deputy International Director of the Brazilian Society of Television Engineering, and Technology and Innovation Consultant at Consultoria Inovtec and Chief Executive Officer of Petchannel Comunicação SA.

**CARLOS AUGUSTO B. DA CUNHA**  
*Specialization in Telecommunications Engineering from Poli-USP, Brazil*

– 23 years’ experience in the subscriber TV market as an operator and supplier;  
– Projects engineer at NET during implementation of cable TV in São Paulo;  
– Dozens of digital headends designed and installed in Latin America at GI/Motorola/ARRIS;  
– Edgeware Architecture Solutions Manager for linear IP video, VOD, cloud-DVR, Time-Shift TV, Pause-TV, Catch-Up TV & Start-Over via TV CDN for IPTV and/or OTT programmers and operators.

**CHANCE MASON**  
*Digital Media Executive - Haivision / Foccus Digital*

A seasoned Digital Media Executive, and one of the first in the online technology industry to embrace over-the-top (“OTT”) video delivery markets. With 15+ yrs of experience building and leading global commercial digital media companies in Americas, EMEA, and APAC, he has built and delivered several significant, vertically focused media platforms.; Chance is globally recognized as a true pioneer and expert in new media, and IP video convergence. Led multiple companies through significant growth on both national and international scale. Managed acquisitions, mergers, turnaround activities, and the processes that drive success in each. He provides insight into the application of technology; True knowledge for solving fundamental challenges within the technology markets, which has shown immediate and long-term benefits for Haivision and their clients.
DAVID TASKER

Vice-Presidente, Sistemas e Tecnologia - Snell Advanced Media (SAM)

David é Vice-Presidente, Sistemas e Tecnologia da SAM. Sua carreira profissional começou na Mullards, uma divisão da Philips, onde atuou como engenheiro de desenvolvimento. Em 1981, David entrou no departamento de engenharia da BBC antes de passar ao lado comercial de broadcasting na Quantel, alguns anos mais tarde. Tendo ocupado cargos da alta administração na Europa, na Ásia e nas Américas, durante a sua variada carreira na Snell, David vem atuando na evolução do processamento digital de imagens em tempo real e na conversão de padrões de televisão, onde é reconhecido como perito global, ganhando para a empresa diversos prêmios Emmy®.

JOSÉ ANTONIO GARCIA

Engineering Manager - EBC/ SET

He has a technical education from the Francisco Moreira da Costa Electronic Technical School at Santa Rita do Sapucaí-MG and a degree in Telecommunications Engineering from the São Judas University in São Paulo-SP. He has worked since 1977 in Radio and TV companies, in the fields of maintenance, projects, installations and quality control, participating in the implementation of studio, transmitters and systems at major domestic and international events. He is currently Engineering manager of EBC – the Communication Company of Brazil, in São Paulo. He has been involved with SET since its early days, and currently participates in the technology division and in the technical module of the SBTVD Forum.

CARLOS CAPELLÃO

Director - Phase Engenharia

Electronics Engineer with a degree from the UFRJ in 1974 and an MBA from FGV-RJ. Since 1973 he has been involved in the Television and Telecommunications industry, having worked at TV Globo, TV SBT, Radiobrás and Embratel.

Since 1980 he has managed Phase Engineering in Rio de Janeiro, working on the supply Television and Telecommunications Equipment and Systems.

Founding partner and member of the Council of Former Presidents of SET- the Brazilian Society of Television Engineering.