

SET EXPRESS | IP

In this panel, the technical aspects of the infrastructure of a broadcasting station will be discussed: Project digitizes Brasil -PDB from the project to the situations under implementation and already installed; a methodology to predict lightning strikes and thus protect stations and equipment and the importance of maintenance of stations by city halls in the PDB.

Chair: Caio Klein - General Director of TVE-RS

STATE-OF-THE-ART AI-POWERED IP BROADCAST ECOSYSTEM INFUSING MACHINE AND DEEP LEARNING APPROACHES INTO AV OVER IP

John Lau - Director, Solution & Service Architecture, Caton Technology

With the rapid development of the Internet, network-based real-time video transmission systems have been widely used in various fields such as live streaming of sporting events, mission-critical applications like telemedicine, and video communication tools. The convergence of Information Technology (IT) and Audio/Video (AV) has allowed the industry to move towards a faster, more cost-effective and advanced content delivery method. Compared to traditional methods, AV over IP is not only cheaper, but also offers better signal quality and functionality.

While convergence has introduced many benefits, IP transmission is known to have packet loss, delay, and other limitations that affect transmission performance.

In this session, the audience will learn about traditional IP transport protocols and how their limitations have brought about a range of transmission protocols and next-generation distribution platforms. With high-quality (4K) content and real-time low-latency delivery slowly becoming the standard, these next-gen ecosystems are slowly falling behind, resulting in a pressing need for more advanced technologies. Audiences will learn about how data science can be applied to next-generation broadcast ecosystems to meet tomorrow's demand.

LEVERAGING INTEROPERABILITY IN AN IP WORLD

Vinicius Val de Casas - Solution Architect / Project Manager at Pebble

Vinicius will provide an overview of what it means to connect devices within an IP workflow and the importance of leveraging interoperability especially as interoperable workflows allow broadcasters to take advantage of the best features of each manufacturer's technologies. He'll explain how it's possible in an ideal world to combine different technologies from different vendors into one seamless, highly customisable and adaptable workflow and why interoperability provides the highest levels of flexibility and scalability that organisations require to accommodate future growth.

IP CONTRIBUTION WHEN 3G/4G/5G FAILS (OR IS NOT AVAILABLE)

Bart Van Utterbeeck -VP Business Development - ST Engineering

We cannot always rely on terrestrial (cellular) network availability for IP journalism. Congestion, shady areas or even areas without permanent – (remote places) or temporary (after storm) coverage mean that alternatives may be necessary.

During the lecture, some cases will be discussed where of satellite IP contribution will complement to cellular connectivity:

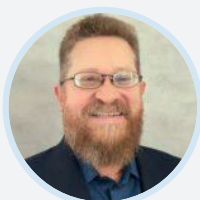
- Solar Power Punch desert race
- Cellular + satellite combination for Royal Wedding in England
- Contribution of traveling sporting events (Tour de France)

**Caio Klein - General Director of TVE-RS**

Electrical Engineer graduated from UFRGS, with a postgraduate degree in Strategic Leadership in Business and People from ESPM-RS. He started his career at RBS, passing through various roles within the group. Then, for 10 years, he was the Technical Director of TVE-RS. He returned to RBS to be the Technical Manager of the Group's Radios and then the Executive Manager of TV Operations, where he participated in the coverage of the 2006, 2010, 2014 and 2018 World Cups, 2008 and 2012 Olympics and Interclub World Cup in 2006. , 2010 and 2017, coordinating the logistics of Grupo RBS in these events. Currently he is the General Director of TVE / RS

**John Lau - Director, Solution & Service Architecture, Caton Technology**

Heading the Global Caton Solution & Services Architecture Team, John leverage innovative & new cutting-edge technologies & product to offer future proof solution and services for different business. With over two decades of leadership experience in the technology, network, Telco & broadcasts industries, John has successfully directed teams to develop some of the most revolutionary innovations, propelling organizations to greater heights. Prior to joining Caton, John led teams at Vodafone, BT & former Alcatel Lucent and become a bridge amongst the network, telco and broadcast industries providing architectural framework for the industries.

**Vinicius Val de Casas - Solution Architect / Project Manager at Pebble.**

Vinicius Val de Casas has been working in the broadcast industry for over 20 years with extensive experience in supporting solutions for integrated networks, video and data systems.

He held a variety of senior roles for renowned and highly respected organisations such as TV RECORD, BAND, SBT and ESPN Brasil, as well as major systems integrators. His experience spans across business development and sales functions, as well as in technical and operation roles. Over the last 5 years he focused his career in the fields of playout automation delivering leading broadcast solutions across Brazilian and global markets.

**Bart Van Utterbeeck -VP Business Development - ST Engineering**

Acting for 15 years in the Latin American satellite market, Bart started the regional office for Newtec in Brazil in 2006. Under his leadership as GM/VP Sales Latam he grew the business in the region, transitioning Newtec from being a broadcast oriented player towards a key player in the telco, offshore and enterprise markets. After the acquisition of Newtec by ST Engineering in 2019 he continued his role as General Manager of the regional office where he now focusses on Business Development in Latin America for ST Engineering iDirect.

Prior to moving to Brazil he worked as Project Manager for commercial and R&D projects at Newtec in Belgium.

Bart Van Utterbeeck holds a degree of Electromechanical Engineering from KIH De Nayer/Thomas More and a Master of Biomedical Engineering from the Catholic University Leuven.