

**Speakers:**

**Jeremiah Golston** is a

Distinguished Member of Technical Staff at **Texas Instruments** and Chief Technical Officer for the Streaming Media Business. He is responsible for TI's device architecture roadmap for emerging markets in IPTV and media convergence in the connected home. Golston led the definition of the TMS320C64x instruction set extensions for video and broadband communications. He was chief architect for the DM64x digital media processor family and one of the lead architects for the DaVinci media processing SOC platform. Golston received bachelors and masters degrees in EE. He holds 20 patents in media processor architecture and optimized algorithm implementations.



**Translating HD Content at the Tower of Babel**

If you've conquered receiving HD content in your home, you may soon face challenges storing this content on a DVR or moving it to standard definition equipment and portable video devices. HD content requires tons of disk space to store and high performance to decode. Portable devices and legacy devices in your home typically don't support HD decoding and advanced codecs used to achieve higher compression for HD content delivery. Transcoding is an emerging technology for converting content across resolutions, frames rates, and video coding formats. This presentation provides an overview of the typical formats used for HD broadcast and some of the associated processing requirements for decoding and displaying it. Various transcode scenarios will be described along with some of the challenges for transcoding in client devices.

**Shahbaz Rahmanian, Access Product at Samsung Telecommunications**

Shahbaz Rahmanian is managing the systems engineering team at Samsung Telecommunications and he is responsible for next generation access product development. Prior to Samsung Telecommunications, Shahbaz served as Product Line Manager at OMECOM technologies, and Yotta Networks. He also worked at Fujitsu Network Communications in Richardson Texas as Distinguished Product Planner responsible for planning of access products and SONET products; in addition he set requirements for Ethernet features on next generation SONET products. He also led the development of the access products in Racal-Datacom. Previously, Shahbaz worked for AT&T for 10 years as strategic Product Market Manager and he was responsible for development and marketing of the advanced data services. Shahbaz received his MS in Computer Engineering and Electrical Engineering from Computer Sciences department of University of Illinois 1982.

**IPTV Access Network Architecture**

There are several choices of Access Network infrastructure for delivering of IPTV services, which is influenced by a number of factors. Obviously, one network architecture does not fit all service providers when it comes to providing for IPTV delivery. In this presentation, we will look at a few of the leading access architectures and address some of the technology and economic-based factors that influence the selection of a particular access network architecture for delivering IPTV.



The presentation covers the access technologies such as FTTx, B/E/GPON, ADSL2, VDSL2, which compliment to video delivery. It covers understanding of fundamental of access network architectural framework, understanding of key IP video services elements. It also review some of challenges exists for IPTV services.

**Steven Magee, Texas Instruments**

**IPTV Demonstration**

**William Yue** is senior product planner of access product planning in **Fujitsu** Network

Communications. William has over 15 years of experience in telecommunications. He started his telecommunications career with Nortel Networks working on SNA, X.25, Token-Ring, and ATM. In Fujitsu, he has been involved in defining next-generation data features on a very successful FLASHWAVE 4000 product line. Currently, he is working on planning Fujitsu's next-generation access product with focus on PON, DSL and WiMAX technologies. He holds a MS in EE & a B.S in Computer Engr.



**The vision of Network convergence toward a consolidated packet-based network has been discussed for years.** The evolution pace towards convergence has been slow due to economic, technical and regulatory issues. However, the current wave of packet-based broadband applications like Internet access, VoD, IPTV, HDTV, broadband wireless, and FTTH push the network evolution. In this talk, new emerging broadband technologies like GPON, WiMAX and Pseudowires will be discussed and show how those technologies can be integrated together to provide a seamless converged wireline and wireless network, and outlines the challenges ahead to make the vision of a packet-based network successful.