

# Real-Time Evolution of Real-Time Communications

*The Architectures, Technologies, Services and Applications that will shape Tomorrow*

## **Moderator:**

- **Carol Davids** - Director, Real-Time Communications Lab, Illinois Institute of Technology

## **Distinguished Experts Panel:**

- **Jose de Francisco Lopez** – Marketing Director – Cloud Computing, Alcatel-Lucent
- **Samuel Rausch**– Principal Engineer of Voice & IP Services, Comcast
- **Chris Norton** - Assistant Director Telecom at Texas A&M University
- **Michael Sandoval** – Executive Director – Network – Southwest Region , Verizon Wireless

# Real-Time Evolution of Real-Time Communications

*The Architectures, Technologies, Services and Applications that will shape Tomorrow*

- The Internet, the Web and smart mobile devices have moved telecommunications into the data domain augmenting – and sometimes replacing - it with text and video.
- Global resources - network, machine and human - are called upon to support even simple voice calls and chat sessions.
- Multiple identifications on multiple networks are available, including phone numbers, email addresses, and ecosystem IDs such as Skype, FaceTime and Gmail.
- While the various networks and ecosystems may be closed, we expect seamless interworking between them all as well as privacy, security and a good end-user experience.
- This panel will discuss the future of telecommunications networks as they are being shaped by contemporary technologies including WebRTC, SDN, Cloud, 4G, 5G and more.

# Real-Time Evolution of Real-Time Communications

*The Architectures, Technologies, Services and Applications that will shape Tomorrow*

## Introductions

- **Jose de Francisco Lopez** – Marketing Director – Cloud Computing, Alcatel-Lucent
- **Samuel Rausch**– Principal Engineer of Voice & IP Services, Comcast
- **Chris Norton** - Assistant Director Telecom at Texas A&M University
- **Michael Sandoval** – Executive Director – Network – Southwest Region , Verizon Wireless

# Questions

- Application vs. Service
- How to achieve End to End Quality when we don't know where the other end is?
- Is there a trade-off between Security and Quality

# Discussion Topics

- WebRTC
  - How do we monetize or productize WebRTC et al – add value and support innovation
  - How do we manage the traffic of the OTTs?
  - How do we provide Quality for RTC applications? Applications need a way to pass to the network what it needs – need gateways to observe its network usage; WebRTC does not tell the network what it needs
- Network Functions Virtualization (NFV) and Software Defined Networks (SDN)
  - For managing carrier networks
  - As a service offering
  - Do we need a new OSS for our NFV and SDN networks?
  - Abundance of cloud based applications demands a programmable network
- IMS
  - IMS in Public Safety
  - Cloud version of IMS
  - Over the top is not sufficient some of the time – IMS can broker this
  - IMS as a cloud service that enables the support of different IP-based applications that have different network requirements?