

2014 Summer Conference  
August 3-5, 2014  
Keystone Conference Center, Keystone CO (Summit County)



10:00 am – 5:00 pm

**REGISTRATION**

**Location:** Shavano Foyer, Keystone Conference Center



7:00 am – 7:00 pm

**REGISTRATION**

**Location:** Shavano Foyer, Keystone Conference Center

6:30 – 8:00 am

**BREAKFAST**

**Location:** Longs Peak Foyer

8:15 – 8:30 am

**WELCOME: PHIL MCKINNEY**, President & CEO, CableLabs

**Location:** Shavano Peak & Red Cloud Peak

8:30 – 9:30 am

**KEYNOTE: DR. P.W. SINGER**, Senior Fellow and Director of the Center for 21<sup>st</sup> Century Security and Intelligence, Brookings Institute

**Location:** Shavano Peak & Red Cloud Peak

9:30 – 9:45 am

**BREAK**

9:45 – 10:45 am

**INNOVATION SHOWCASE (part I)**

**Location:** Shavano Peak & Red Cloud Peak

10:45 – 11:00 am

**BREAK**

11:00 – 11:45 am

**INNOVATION SHOWCASE (part II)**

**Location:** Shavano Peak & Red Cloud Peak

11:45 am – 1:15 pm

**LUNCH**

**Location:** Longs Peak Foyer

**BIRDS OF A FEATHER TABLES**

**Location:** Quandary Peak

**DEMO FLOOR OPEN** (until 7pm)

**Location:** Grays Peak & Longs Peak

**1:15 – 2:00 pm**

**KEYNOTE: DAVID MORKEN**, Republic Wireless

**Location:** Shavano Peak & Red Cloud Peak

**2:00 – 2:15 pm**

**BREAK**

**2:15 – 3:30 pm**

**CONCURRENT SESSIONS**

**The DOCSIS® 3.1 Network**

This session focuses on the state of technology and planning considerations needed in preparation for DOCSIS 3.1 trials and deployments. Discussions will address new developments in mid-split migration and spectrum splits in general, capacity and spectrum planning, timetables and transition roadmaps, including CCAP™ deployments, dealing with MoCA and LTE Interference and Proactive Network Maintenance tools and practices.

**Moderator:** Terry Cordova, Suddenlink

**Speakers:**

Scott Helms, ZCorum  
David Hunter, CableLabs  
Phil Oakley, Virgin Media  
Jorge Salinger, Comcast

**Location:** Shavano Peak

**Best Practices for RDK Adoption**

Early cable operator and vendor adopters of the RDK are gaining valuable experience working with a large and dynamic open source project. Along the way, they have had to address various startup challenges and are beginning to identify best practices for successful adoption. This session will provide a brief update on the RDK and insight into best practices for adoption.

**Moderator:** Ed Miller, CableLabs

**Speakers:**

Ken Klaer, Comcast  
Nick Nielsen, Time Warner Cable  
Bill Warga, Liberty Global

**Location:** Red Cloud Peak

**3:30 – 3:45 pm**

**BREAK**

**3:45 – 5:00 pm**

**CONCURRENT SESSIONS**

**All IP Super-Session**

This session will highlight new developments in four key areas of the All-IP video service delivery chain: (1) Software video encoding and virtualization; (2) optimized caching within content delivery networks; (3) efficient delivery of adaptive-bitrate video via IP multicast; and (4) HTML5 adaptive video delivery and content protection.

**Moderator:** Jon Courtney, CableLabs

**Speakers:**

Alan Arolovitch, PeerApp  
Tom Gonder, Time Warner Cable  
Tom Lattie, Harmonic  
Bob Lund, CableLabs

**Location:** Shavano Peak

**Wireless Super-Session**

As wireless communication speeds into its second century of existence, it continues to evolve every decade and has become the primary medium by which most of the world communicates. Join us and look ahead to the next decade of wireless communication as our industry experts discuss future wireless technologies including 5G, LTE-U, 802.11ax, and the services that cable will use to monetize them.

**Moderator:** Rob Alderfer, CableLabs

**Speakers:**

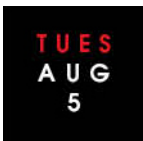
Osama Aboul Magd, Huawei  
Jennifer Andreoli-Fang, CableLabs  
Tom Nagel, Comcast  
John Smee, Qualcomm

**Location:** Red Cloud Peak

5:00 – 7:00 pm

**RECEPTION & DEMONSTRATIONS**

**Location:** Grays Peak & Longs Peak (demo floor)



7:00 am – 7:00 pm

**REGISTRATION**

**Location:** Shavano Foyer, Keystone Conference Center

6:30 – 8:00 am

**BREAKFAST**

**Location:** Longs Peak Foyer

8:15 – 8:30 am

**GREETING: PHIL MCKINNEY, President & CEO, CableLabs**

**Location:** Shavano Peak & Red Cloud Peak

8:30 – 9:30 am

**KEYNOTE: TONY WERNER, CTO, Comcast**

**Location:** Shavano Peak & Red Cloud Peak

9:30 – 9:45 am

**BREAK**

9:45 – 10:45 am

**CONCURRENT SESSIONS**

**Internet of Things**

The Internet of Things ecosystem is evolving at an incredible pace. This session will examine three emerging areas of Internet of

Things: Smart Cities, Health Care, and the Connected Home. Speakers will provide an interesting overview of the emerging opportunities and developments in these areas with focus on the state of the art and emerging applications.

**Speakers:**

Andy Castonguay, Machina Research  
Phil Fritz, IBM  
Mark Rolston, argodesign

**Location:** Shavano Peak

**Fiber Deep**

Whether considering fiber to the home solutions or just pushing fiber deeper using node + 0 architectures, the trend is clear...Fiber Deep. Is RFoG the best option for pushing fiber to the home, or is RFoG just one step in a progression toward digital optics (e.g., PON) and all-IP transport? Are there fiber distribution options available today that will make FTTH simpler in the future? What are the FTTH solutions in use today by cable operators? This panel will discuss views on economics, deployment challenges, operational advantages, and future technologies for pushing fiber deeper.

**Moderator:** Curtis Knittle, CableLabs

**Speakers:**

John Dickinson, Bright House  
Guy McCormick, Cox  
Peter Wolff, Time Warner Cable

**Location:** Red Cloud Peak

**10:45 – 11:00 am**

**BREAK**

**11:00 am – Noon**

**CONCURRENT SESSIONS**

**Managing Services in the Home**

Demands on home networks have been rapidly increasing in recent years due to the proliferation of connected devices and high bandwidth applications like streaming video. With the advent of cable operator-provided Wi-Fi gateways in the home, operators assume responsibility for their access points while customer's expectations of network performance and stability are significantly raised. The objective for this panel session is to clarify the challenges and available solutions for home networks, providing insight into testing, trials, deployment tools, new architectures, management tools, and operational optimization.

**Moderator:** Vikas Sarawat, CableLabs

**Speakers:**

Sam Heidari, Quantenna  
Joseph Jensen, Block Communications  
Clayton Wagar, Benu Networks

**Location:** Shavano Peak

## **Security Internet of Things**

Refrigerators not only hold spam, they can send it too! More devices in and around the home are becoming Internet aware (thermostats, refrigerators, baby monitors, cars ...) allowing cable customers to do more online. As new devices become Internet aware, the companies developing these devices are not addressing how to protect users from online threats. This session will discuss the concerns of security on the Internet of Things.

**Moderator:** John Civiletto, Cox

**Speakers:**

Nancy Davoust, Comcast

Mary Haynes, Charter

Tyson Macaulay, McAfee

**Location:** Red Cloud Peak

Noon – 1:30 pm

## **LUNCH**

**Location:** Longs Peak Foyer

## **BIRDS OF A FEATHER TABLES**

**Location:** Quandary Peak

## **DEMO FLOOR OPEN (until 6:45pm)**

**Location:** Grays Peak & Longs Peak

1:30 – 2:30 pm

## **KEYNOTE: PHIL MCKINNEY, President & CEO, CableLabs**

**Location:** Shavano Peak & Red Cloud Peak

2:30 – 2:45 pm

## **BREAK**

2:45 – 3:45 pm

## **CONCURRENT SESSIONS**

### **The Future Content Ecosystem**

We've entered a period of rapid innovation for video content formats that aim to provide a higher quality and a more compelling viewing experience for consumers. In addition to Ultra HD and 4K, new buzzwords in the industry, such as High Dynamic Range, Wide Color Gamut, and Color Bit Depth are being thrown around in hundreds of forums. What are these new advanced factors? How will they impact the consumer? When will they realistically happen? And, how will these technologies impact the cable ecosystem?

**Moderator:** Ed Shrum, Cox

**Speakers:**

Walt Husak, Dolby

Ajay Luthra, ARRIS

**Location:** Shavano Peak

### **Agile Development**

The need to bring new products to market faster, increasing customer expectations and the widespread availability of cloud services is driving agile adoption across cable operator software

development organizations. Join the session and listen to industry experts share their challenges, lessons learned, and expectations for the upcoming year related to agile software development.

**Speakers:**

Mark Bridges, CableLabs  
Rob Martell, Charter  
Jason Press, Comcast

**Location:** Red Cloud Peak

**3:45 – 4:00 pm**

**BREAK**

**4:00 – 5:00 pm**

**CONCURRENT SESSIONS**

**Distributed CCAP™: Big MAC, Little MAC, or Have it Your Way?**

Throughout telecom, service providers are moving the termination infrastructure closer to the customer and virtualizing network functions to increase performance, reduce cost, and efficiently scale their deployments. Will this trend manifest itself in the HFC Access Network? Advocates of different CCAP architectures will champion their cases.

**Moderator:** Jay Rolls, Charter

**Speakers:**

John Chapman, Cisco  
Tom Cloonan, ARRIS  
Samir Parikh, Gainspeed  
Karthik Sundaresan CableLabs

**Location:** Shavano Peak

**Business Services – New Technologies**

This panel will explore three important technology trends supporting future cable business services growth. Federation of technology platforms will be explored through articulation of the state-of-the-art on interconnections, global reach and current technology gaps for the enablement of Ethernet services for larger businesses. The implications and opportunities presented from SDN/NfV for Cloud/Datacenter enablement and implications of private clouds and OT provider services. Additionally, future business communications will be presented as impacted by RTC (Real Time Communications) and service development/delivery platforms for RTC services role in shaping the future communications landscape discussed.

**Moderator:** Kurt Fennell, CableLabs

**Speakers:**

Nan Chen, MEF  
Pete Hicks, Charter  
Chris Wendt, Comcast

**Location:** Red Cloud Peak

**4:45 – 6:45 pm**

**RECEPTION & DEMONSTRATIONS**

**Location:** Grays Peak & Longs Peak (demo floor)