

# 2009 CalCom Showcase & Tech Expo Training Seminar Topics & Descriptions

## WEDNESDAY, FEBRUARY 25

### **9:30AM**

#### **The Last Mile of Copper and How to Prepare for IPTV**

- Provisioning and maintaining the copper plant
- Identifying and mitigating interferers and disturbers to DSL
- AC interference and its effect on bandwidth
- Dirty power in the house and its effect on DSL

Presented by Donald E. McCarty, McCarty Products

### **10:30AM**

#### **Powering the Broadband Network**

Broadband networks are pushing DSLAM's, Wireless nodes and Fiber termination equipment deep into the access network. The deployment of millions of small active devices into the OSP network has created a new challenge for communications network providers during natural disasters. Recent FCC rulings, based on the Katrina hurricane panel recommendations, now mandate twenty-four hour battery backup in the Central Office (CO) and eight-hour battery backup in the outside plant (OSP) for critical network telecom "assets" involved in primary line voice telephone service. Line power is a proven technology that is an economic alternative for continuously powering small remote network elements keeping the communications network "four nines" reliability. Join Neil Olsen of Generonix to discuss new and unique applications for network line power.

Presented by Neil Olsen, Generonix

### **1:30PM**

#### **Fuel Cells**

Relion is the world leader in the development and marketing of modular, cartridge based, hydrogen fuel cell solutions. Hydrogen fuel cells have been used for a number of years as backup power solutions in the telecommunications industry in the U.S. and abroad. They provide a viable alternative to incumbent power solutions like battery and generator sets. Longer runtimes, higher reliability and environment-friendly power generation are among fuel cells many benefits. In this session, you'll gain an understanding of hydrogen fuel cell technologies. We'll discuss how fuel cells work and which applications are best suited for fuel cell deployment. You'll learn how to improve network reliability and availability and how fuel cells can future-proof your sites, especially during disasters. Attendees will also gain an understanding of hydrogen fuel availability and on-site storage options to allow extended hours of backup power.

- How fuel cells work
- Pros and cons of fuel cells
- Key differences between fuel cells and batteries/generators and when each is appropriate
- Environmental concerns of various technologies
- Footprint assessments
- How solutions can future-proof your sites, especially during disasters

- Real-world case studies
- Presented by Mike Maxwell, ReliOn Inc.

**2:30PM**

## **Making Money with Your Wireless Network**

In this breakout Cisco will talk about service provider-managed services that can be deployed on your wireless network.

- **PROBLEM**
- More Americans are employed in SMB than any other sector
- These business' are found in cities with less than 100,000 residents (Tier II/III cities)
- Access to credit in the down economy prevents healthy business' from investing to grow so they are especially hard hit
- Improving SMB operations (sales, service, marketing) while lowering fixed costs is critical to surviving and thriving
- This points to an increased demand for outsourced Managed Services
- SMB's want the data services and solutions available to larger companies but can't afford IT staff or equipment spend (e.g. Unified Comms, Webex, Cloud Apps, Guest Access, Video Surveillance, Point of Sale, Concierge, wless credit card readers)

### **SOLUTION**

Fixed wireless managed service "bundles" aimed at business' with 2-50 employees in Tier II/III cities, along dense corridors (Main Street USA). Topology: Mesh in the last mile to Pepwave window mount antenna (bi-directional in/out) then hang Cisco UC 500 (ISR) and wireless VOIP bundles off the end of the Pepwave CPE. These low cost CPE (\$75) are fully manageable from Cisco WCS. The channel to market is SP/Cisco SMB, co-marketing.

### **Target Users:**

- SOHO (2 employees) - Entrepreneurs, Call Center workers, Mobile employees
- Very Small Business (2-10) - Generally "mom and pop" retail stores, salons, restaurants, car repair (point of sale, avg. sales per sq foot mentality)
- Small and Medium Biz (10-50 employees) - machine shops, light manuf., architects, law offices etc.

### **Service offering:**

- Hosted Unified Communications
- Guest Access
- Digital Signage
- Hooks to CRM tools like SF.com
- Merchant Services, POS
- Access Control
- Mobility (Accounts to-go)

### **BENEFITS**

- Truck roll free provisioning using Cisco ServiceMesh customer installable CPE
  - Low opex
  - Fast time to revenue for SP
  - Improved operations at lower cost for SMB
- Presented by Cisco

**3:30PM**

**Fiber Management & Records**

Optimize management of your entire network integrating equipment inventory, element management and network monitoring. Maintain a common environment for complete system control. Maximize the benefits of your existing system for maintenance, installation and planning.

Presented by Mid-State Consultants

**THURSDAY, FEBRUARY 26**

**9:30AM**

**Carrier Ethernet Services & Cell Site Backhaul**

Transforming your legacy network to Carrier Ethernet infrastructure and services.

Presented by Overture Networks

**10:30AM**

**Air Power Versus Acid Power an Alternative Technology for Use in DC Power Systems**

This session will cover how this new technology can fit into your existing network's DC power architecture to extend battery life by preventing shallow cycle discharges and eliminate generator nuisance starts. Other topics to be covered are dual voltage outputs (24 & -48V), generator hold off and remote site applications as well non-maintenance battery costs (cable sizing and excess rectifier capacity). The session will define where the technology is applicable including critical path issues associated with bridging solutions for both traditional DC plants and fuel cells.

Presented by US Energy

**11:30AM**

**Carrier Ethernet Options In the Access Network: PBB-TE and MPLS**

What are Carrier Ethernet Services, which represent a rapidly growing market opportunity for service providers? And in these tough economic times, how does a service provider best implement these new carrier-grade services to maximize margins and minimize time to revenue? Our presentation examines how service providers are transitioning from routed architectures and protocols, to an easier-to-use, switch-based approach to deliver Carrier Ethernet services using PBB-TE. PBB-TE can stand alone, or can easily complement current MPLS implementations.

This presentation will discuss both technologies and will cover the following:

1. Overview: What are Carrier Ethernet Services and the market demands?
2. Primer: Short tutorial and review on Ethernet acronyms and existing and new MEF standards. (For example, what does TWAMP stand for?)
3. PBB-TE and MPLS technical review. How they are different, as well as how the two technologies complement one another. Examples of network applications and implementations.
4. Conclusion, Q&A, whiteboarding.

Presented by Chris Stecko, Ciena Communications

All seminars will be held inside the Expo Hall. A complete list of seminars and descriptions will be provided at the Tech Expo registration desk upon check-in. All seminars are open to attend; you do not need to pre-register for them.