

7 to 8

ATTENDEE CONTINENTAL BREAKFAST
sponsored by Leducor Technical Services

8 to 9

Batteries -- Innumerable & Unseen Applications – Are they Worth the Time & Money?*Speaker: Mike Lewis, Sr. Applications Engineer, MEGGER*

Covering battery basics, testing, float voltage, specific gravity, float, ripple and discharge current, temperature, intercell connection resistance, capacity, impedance, resistance and data analysis.

The many worldwide power outages over the past several years make batteries essential as a backup source. We often don't give batteries a second thought; we simply expect them to work when called upon. Batteries are extremely important to support your company's many assets and revenue streams during outages. Example: in a generating station, if the turbine suffers an outage, without the back-up battery, the turbine lube oil priming pumps would not continuously keep the bearings lubricated, causing major damage and lengthy outages. In hospitals, who wants to be in the middle of an operation when an AC outage occurs without proper battery back-up? The applications for batteries are innumerable and frequently unseen.

8 to 9

The Future of Ethernet*Speaker: Cyrille Morelle, VeEX for HELIX*

The presentation will discuss what Carrier Class Ethernet is and identify the challenges to make Ethernet Carrier class. How do you implement synchronized Ethernet and the associated challenges associated with it will be explored in detail.

9 to 10

Demystifying the Path to 100GigE*Speaker: Gwennaël Amice, Senior Application Engineer, EXFO*

The need for bandwidth is persistently increasing and networks are under a lot of pressure. After OC192 and 10GigE, the new standards are 100GigE and 40GigE. Are your networks ready for this upgrade? How could we use our deployed fibre to transfer 100 billion bits per second? What are the evolutions required in our testing methods? What do the standards say?

9 to 10

Planning & Deployment of GPON Technology*Speaker: Todd Richard, Director, Business Development, ATI TELECOM*

Review of the planning steps necessary to implement a GPON deployment providing examples of Network planning topics and objectives. We review the critical elements of the deployment process including; Project selection, location, and site selection criteria, availability and timing of transport, research demographic profiles, competitive assessments & community receptiveness, constructability (aerial vs. buried), deployment and technology selection process w/standards based design approach, network technology selection, NOC control of Element Management Systems, schedule and application of FTTP solution, service and product offering (Data, Voice, Video), deployment considerations, risk carrying capacity & mechanisms, network design & equipment supply, GPON OSP philosophy, Network Access Point (NAP), distribution fibre and feeder approach, OSP design & materials, and customer premise installation.

9 to 10

Outside Plant DSLAM - Technology Evolution & Installation Reality*Speaker: Ron Mansi, Director Sales – Carrier, ADTRAN CANADA*

Summary of the technology options and evolution for outside DSLAMs from ADSL2 plus to VDSL2, bonding options. What applications do these units support and the distance vs. impact on bandwidth. Review an OSP business case with cabinet and pedestal installation

options and experiences. (ADTRAN is the North American leader in Outside Plant DSLAM installs)

10 to 11

Achieving Environmental Efficiency with Green Broadband Initiatives*Speaker: Juan Vela, Director, Solutions Marketing & Strategy, OCCAM NETWORKS*

As subscribers demand anytime availability of IPTV, online gaming, video uploads/downloads, and other bandwidth-intensive, low latency services, telco's responded by significantly building out their networks resulting in huge increases in power and HVAC demands and extra equipment that must be disposed of in an environmentally appropriate way at the end of its useful life. We review savings examples: ie: a watt of energy saved by the telco, has a multiplier effect and ends up reducing the total wattage consumed 2.41 watts, translating to \$1,793 in total power savings for 1,000 circuits. The anticipated growth of broadband and video services over the next few years (IPTV alone is expected to grow from <\$7 billion in 2009 to \$20 billion in 2013). Growth in equipment, power and HVAC needs must grow to accommodate this demand. New initiatives are designed to create more efficient networks, such as a new generation of more efficient equipment that is denser, requires less space and runs cooler. We review initiatives, ranging from MDU enhancements to next generation PON, and greater access and core network integration for the future.

10 to 11

GigE and 10GigE Generic Product and Technology*Speaker: Winnie Lin, Canadian Account Manager, RAISECOM TECHNOLOGIES for POWER & TEL*

We dig into the fiber optic technology behind the GigE and 10GigE and discuss how Ethernet data is transported through fiber optic cable and the interfaces for Ethernet data equipment. We also examine available functions and features of hardware and software on Ethernet equipment, the applications and trend of Ethernet technology development in the overall telecommunication industry.

10 to 11

Canadian EAS (Emergency Alert System) Initiative – Are You Ready?*Speaker: David McCreath, Vice President Business Development, CAPPELLA TELECOMMUNICATIONS*

The CRC has approved Palmorex (The Weather Network) to establish an emergency alert system (EAS) for Canada. The current deadline to have this system in place is June 2010. Are you ready? We review the status of the Canadian EAS initiative and look at what service providers need to do to get this in place in time.

11 to 12

How to Guarantee Good IPTV Services over Various Last Mile Technologies*Speaker: Gwennaël Amice, Senior Application Engineer & François Marcotte, EXFO*

We address FTTH deployment testing, copper pair acceptance for VDSL2 deployment and RFoG deployment challenges. What are the various metrics that must be measured and controlled for ensuring IPTV, VOIP and Data services.

11 to 12

Transitioning to LTE*Dave Adams, RCATS Product Line Manager, Solutions Division, JDSU*

The marketplace is eagerly awaiting the introduction 4G wireless services enabled through the introduction of Long Term Evolution enhancements to the Universal Mobile Telecommunications System (UMTS) standards. We address the basics around LTE technology, the key advantages of this new technology and the specific challenges associated with deploying and operating an LTE network.

11 to 12

Building All IP Golden Pipes*Speaker: James Tong, P.Eng. & PMP, Director, Wireline Marketing/Business Development, HUAWEI CANADA*

The change in broadband world means that the ultra broadband era is really coming, from the accesses of mobile and fixed networks. With mobile operators upgrading their network from 2G to HSPA, HSPA+, and later to LTE, many users can readily obtain 20M~100M access bandwidth. In the meantime, the acceleration on the fixed broadband continues, starting from VDSL2, GPON/EPON, and later 10G PPOE/10G EPON, and so on. Increase of access bandwidth will impose tremendous challenges to the operators on how to manage network and profit from new services brought by the ultra access bandwidth. The presentation consists two parts – first, we will talk about what's happened and what will happen in the broadband area, second, we will discuss Huawei's vision and strategy on how Huawei, as a leading global telecommunications vendor, can help operators meet the new challenges in the ultra broadband era, and ultimately profit from it.

12 to 1

LUNCH – Sponsored by Power & Tel

1 to 2

OUTDOOR EXHIBIT DEMONSTRATIONS

1:00 Nortruck Mfg / 1:20 Huawei / 1:40 Marjak Leasing

1 to 2

J.83/B Modulation Standard*Speaker: Bob Ellis, Broadcast Test & Measurement Product Manager, ROHDE & SCHWARZ*

Focusing on the J.83/B standard and measurements required to ensure that Cable providers provide the best possible Quality of Service for their customers. We provide the basics for the J.83/B modulation standard and MPEG, plus focus on the ETR-101-290 test for QoS. What are the most common errors within the RF and MPEG compression areas, to reinforce the requirements for testing the complete system.

2 to 3

WORKSHOP: Carrier Ethernet Service Delivery over Next Generation Access Demarcation Device*Trainer: Winnie Lin M.Sc., Canadian Account Manager, RAISECOM TECHNOLOGIES for POWER & TEL*

The challenge of next generation Ethernet service is to provide TDM like leased line service with Ethernet technology since high bandwidth requirement is ever growing from the customer site as well as a low cost solution. Finally, carrier Ethernet will eventually replace old TDM technology on access with the consistent customer experience with TDM leased line. Carrier Ethernet must be improved due to weakness on the OAM, performance monitoring, SLA as well as synchronization.

This workshop offers a way for the next generation access demarcation device to meet all the tough requests with a cost effective and innovation solution. A roadmap for carrier Ethernet deployment, requirement and development will also be introduced.

3 to 4

WORKSHOP: Fusion Splicing*Trainers: TELONIX COMMUNICATIONS & Jonathan Baker, OFS FITEL*

Topics covered will include active core, active and passive profile alignment splicing systems. The hands on part will include preventative maintenance and cleaning of fusion splicers and cleavers. Jon Baker's experience, knowledge and presentation skill, ensure that this will be a useful and informative workshop. This workshop will be product specific (FITEL) but the information will be useful to anyone considering fusion splicing now or in the future.

4 to 6

WELCOME RECEPTION – sponsored by JDSU

8 to 9

EtherSAM: The New Standard in Ethernet Service Testing*Speaker: François Marcotte, EXFO*

As Ethernet continues to evolve as the transport technology of choice, networks are shifting their focus from purely moving data to providing entertainment and new applications in the interconnected world. This webinar will focus on the existing test methods and introduces the new Ethernet service activation methodology, EtherSAM, as a service test tool based on the draft ITU-T Y.156sam methodology.

Specific topics include:

- Key challenges encountered when testing backhaul and carrier Ethernet services
- Test methodologies related to turning up and troubleshooting backhaul and carrier Ethernet services

8 to 9

DWDM Optical Transmission System Design Considerations*Speaker: Faraz Yusuf, WaveReady Application Engineer, JDSU for POWER & TEL*

We cover design considerations with Optical power budget, Dispersion compensation strategies, Non-linear phenomena, OSNR and EDFA application, RAMAN amplification, ROADM concepts, 10G/40G and 100G transmission system design considerations.

8 to 9

WORKSHOP: Assuring Fibre Optic Connectivity (Fibre Inspection & Test)*Speaker: Mike Dee, Communications Test Group, JDSU*

Attendees are provided with an understanding of how optical connectors work and how physical parameters affect their performance. We discuss root causes for 75% of optical network failures, methods for preventing these failures & optimizing signal performance with a review of current optical inspection and cleaning technology. As fiber and optical connectors penetrate further into the network and data rates increase, this knowledge is critical to the success of the physical plant.

Hands-on stations will be available for attendees to put the above information to use during the workshop.

Audience: This session is applicable to anyone who handles fiber or supervises those who do. If you're not inclined to clean/inspect jumpers because they are new, or have cleaned fiber without inspecting it, or not sure in general how much of an issue cleanliness is; then this session will be very informative and useful.

9 to 10

New In-Home Wireless Technologies & Implications with Installations & Maintenance

Speaker: Sean Yarborough, Director - Strategy & Business Development, SPIRENT COMMUNICATION

WiFi devices are growing at 20% CAGR through 2013. Consumer demand, the availability of 802.11n devices, and the need to lower installation costs, are driving MSOs and Telcos to look at new services to deploy. WiFi. 802.11n can support physical rates up to 300Mbps, enabling it to now deliver high-quality video, high-speed internet and VoIP. The deployment of this Triple Play bundle over wireless brings new challenges for installation & maintenance crews, requiring new solutions & methods. Seminar provides (1) overview and market data of the various WiFi (802.11 b/g/n) plus other complimentary in-home technologies, (2) new IPTV/Triple Play service offerings over WiFi, and (3) new test methodologies for supporting the installation and maintenance of these new WiFi-delivered services.

9 to 10

FTTP Battery Replacement - Key Considerations*Speaker: Dean Tryon, Product Specialist, ALPHA TECHNOLOGIES*

Sophisticated Fiber to the Premises (FTTP) networks providing voice, data and video are aging and require

battery backup replacement. Whether this is the responsibility of the service provider or subscriber, we discuss how battery replacement can affect the subscriber's media experience by looking at the different FTTP installation configurations and how the batteries designed for these applications affect overall network reliability and uptime.

9 to 10

Network Monitoring 2.0 – Adopting the Vision*Speaker: Vadi Dhurgan, Director, Telecom Business, VSS MONITORING for TESTWORX*

This session will address the complexity challenges associated with the existing network monitoring approach, which can be termed broadly as the "Network Monitoring 1.0" environment. As the network evolves, the monitoring solution also evolves toward a "Network Monitoring 2.0" model – in which a single distributed traffic capture layer creates a simplified and elegant architecture that many large network operators have begun to adopt today. A number of key issues and differentiations between the two generations are described and compared. Significant advantages of the "2.0" model include lower management overhead, shorter time to troubleshoot and repair, faster ROI, fewer customer churns and shorter time to revenue. Attendees will gain valuable insight into using a distributed, traffic capture architecture to develop a holistic and forward-looking strategy for network monitoring and management.

10 to 12

Service Provider VoIP – Why and How?*Speaker: Rob McCann, President, Clearcable*

This two part session examines the established market opportunities and technical implementations for high-quality residential and commercial VoIP offerings for Canadian Service Providers.

Part 1 (10am) – This session addresses the "Why" details for the business case, by summarizing competitive offerings, consumer demand, market dynamics, cost considerations, and regulatory requirements.

Part 2 (11am) – We provide the "How" highlights with a cross-section of go-to-market technology, vendors, and partners with specific attention to technical network architecture, customer premises challenges, and service troubleshooting.

Attendees can expect to leave these sessions with fresh insight into how to start building a new service offering or how to refine an existing deployment.

10 to 11

Grounding & Bonding Telecommunications/Datacom Systems*Speaker: Mike Lewis, Sr. Applications Engineer, MEGGER*

With increasing demand for computer network installations, telecommunications grounding and bonding has become a growing opportunity for electrical contractors. Although similar grounding principles apply, understanding the telecommunications terminology and special considerations has been a challenge. We define what terms mean, and discuss the basic schematics of a properly grounded and bonded telecommunications network. Also covered: Schematics of telecom grounding, main grounding bus bar (TMGB), bonding backbone (TBB) and complete grounding and bonding system

12:00

LUNCH – Sponsored by ATI Telecom (12:45)
PASSPORT DRAWS – Provided by Silver show sponsors)

1:30

EXHIBITOR FORUM CLOSURES

1:30 to 3:30

WORKSHOP: Fiber/Last Mile -- Hands On*Speaker: Gwennael Amice, Senior Application Engineer & François Marcotte, EXFO*

This workshop includes a complete FTTX platform. This platform will allow attendees to test troubleshoot and simulate real fiber to the home networks (2 hours) A complete IPTV setup with real videos and DSLAM/ Modem: attendees can test and troubleshoot, copper pair, DSLAM and IPTV circuit. Includes a dispersion workshop bench with various types of fiber and emulator and provides three different dispersion analyzers that attendees can use to identify and troubleshoot fiber. This will help demystify different types of dispersion and measure various effects on CD and PMD. An OTDR bench including fiber and different events (mechanical splices, fusion splices, connectors) is setup and will simulate a real deployed network and allow attendees to test and troubleshoot.

1:30 to 3:30

DOCSIS 3.0 PANEL – Open Forum Discussion

Moderator: Greg O'Brien, President/Editor, CARTT.CA
PANEL: Rob McCann, President, CLEARCABLE NETWORKS

PANEL: Richard Lefebvre, Cable Expert, CISCO

PANEL: Graham Johnston, Network Planner,

WESTMAN COMMUNICATIONS

Cable operators have long since changed from traditional TV delivery to full service providers of video, voice and data – and fundamental to that successful growth has been the DOCSIS standard. The latest iteration, DOCSIS 3.0, provides a number of new enhancements, including channel bonding, which can allow cablecos to dramatically boost speeds to customers to at least 320 Mbps downstream and 160 Mbps upstream. This panel will talk about deploying DOCSIS 3.0 and the challenges operators may face getting there (if speeds can be that high, why isn't everyone offering "up to" 100 Mbps right now, for example?), the new products needed, services that can be delivered and what we've learned so far about migrating to 3.0. Panelists will also dive into what's next in wideband (IPv6? IPTV?).

1:30 to 3:30

The Smart Way to Make Mobile Broadband*Speaker: Fan Zhang, Wireless Marketing Director, HUAWEI CANADA*

In today's Wireless world, the smartphone takes on a more and more important role as the major driver of Mobile Broadband. On the application side, the video-based content & social networking services/applications are picking up as dominant growth drivers. And from a user's perspective, the behavior will change to "read more and stay longer". All of the above are pushing massive traffic volume growth at RAN, Bearer and CORE sides. With recent research by Huawei, in the next 10 years, there will be 10, 20 and 100 times the requirement increase on Device, Service and data traffic areas respectively. To meet those requirements, operators are facing 3 big challenges – bandwidth, ARPU and Cost. How do you balance, Growth with Pain or Growth with Profitability? This seminar will introduce Huawei's Smart MBB Solution which provides a good way for operators to reach their target – increase bandwidth and ARPU with lower TCO