

VoIP • Video • Unified Communications • Wireless...



INTERNET TELEPHONY Conference & Expo

ITEXP

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August 17
Update:
Sir Terry Matthews
Keynote Speech
Added.
September 2nd -
2:15 pm

September 1-3, 2009 • Los Angeles Convention Center • Los Angeles, CA

The World's Communications Technology Conference

For: Enterprise/SMB • Service Providers • Resellers • Developers

The Most Comprehensive Exhibit Hall Experience!

Find IP Communications Solutions That Improve
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- Network Security
- Unified Communications
- Contact Center Solutions
- Hosted/SaaS/Cloud Solutions
- Microsoft OCS
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- Microsoft Response Point Blog Entry, 9/24/2008
following ITEXPO West 2008 in Los Angeles



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- **Deliver New Communications Services to Your Subscribers**
- **Develop New Communications Applications**
- **Resell New Communications Solutions**
- **Network with Media and Analysts**



Dear Colleague,

After a decade of innovation, IP communications has come to an important crossroad. From this point forward, the solutions available have become more advanced and

complicated than at any time before. Security, unified communications, CEBP, hosted solutions, disaster preparedness, open source, SIP, IPTV, IMS and FMC are just some of the latest areas of the market you likely need to understand well.

Since 1999, INTERNET TELEPHONY Conference & EXPO (ITEXPO) has been the single event helping companies make purchasing decisions in the world of communications.

ITEXPO helps you understand what is important today, and what is not. You can focus on real implementation issues, while keeping an eye on tomorrow and the decade to come.

ITEXPO still stands alone. You'll meet a unique blend of exhibitors not found anywhere else.

You can attend the conference sessions with confidence because your fee is 100% guaranteed*.

Finally, it is a show designed by the editorial team behind the leading communications publications - TMC's *INTERNET TELEPHONY*, *Unified Communications*, *Customer Interaction Solutions*, and *NGN* magazines. In addition, the TMCnet

editorial team aids in ensuring ITEXPO is always focusing on the topics you need to know about.

Besides a great educational experience in the conferences, you can expect first rate keynotes and networking opportunities that are unrivaled.

As the communications landscape gets more sophisticated, it is imperative you come to conferences to experience everything there is to learn. In addition you are able to network with all the key players and your peers at once, ensuring your education is balanced. The worst thing you can do is make a decision without knowing all of your choices up front.

The ITEXPO team has spent day and night working to ensure -- in fact we promise -- ITEXPO is the World's Communications Conference.

When you leave the show, you will be better equipped in your current job and will have an easier time making the correct decisions on what you need to purchase and how to get the job done correctly.

Sincerely,



Rich Tehrani,
TMC President, ITEXPO Conference Chairman

Who Should Attend?

Enterprise, Service Provider, SMB Corporate Management, CEOs, CTOs

Ultimately, the vendors you choose become as much your partner as your supplier. Whether you are deploying a solution or a carrier offering service, ITEXPO provides the perfect venue for forging these profitable relationships.

Resellers

You get free workshops teaching you how to make money selling both service and equipment and the opportunity to meet with literally hundreds of companies who could become your next partner. Need we say more?

Enterprise, Service Provider, SMB Telecom/IT Management

It's up to you to make sure your deployment is smooth with minimal disruption. You also must ensure your new system meets all organizational objectives. The days you spend in the conference sessions and in the exhibit hall at ITEXPO will supply the answers you need to recommend the perfect solution for your situation.

Developers

Attend sessions teaching you how to take advantage of today's most powerful development tools. Between sessions, form valuable relationships with manufacturers and vendors.

Keynote Speakers:



John W. Combs
CEO
ShoreTel



Arunas A. Chesonis
Chairman and CEO
PAETEC Holding Corp.



Dr. Mohammad Shakouri
Corporate Vice President
Alvarion Ltd.



Sir Terry Matthews
Chairman
Wesley Clover



Dr. Don Brown
Co-founder, CEO,
Chairman of the Board
Interactive Intelligence



Ali Tabassi
Senior VP, Global
Ecosystem & Standards
Clearwire



Mike Regan
Vice President of
Unified IP Development
Aspect



Gain Critical Knowledge

Important Topics Covered Within Each Conference Track

- E-911 Considerations
- Business Continuity
- IMS
- Femtocell Integration
- Unified Communications
- Hosted/Cloud Solutions
- Telepresence
- Cable/Satellite Communications
- Peering
- Open Source
- IP in the Contact Center
- SOA
- Convergent Billing
- Mobile VoIP & Video
- Broadband Wireless VoIP
- SIP Trunking
- Securing VoIP Networks
- Security in a Mobile World
- Enterprise Network Management
- QoS

FREE Workshops

Visit itexpo.com for updates

- Reseller Solutions Day Workshop
- Sipera's UC Security Workshop
- Ingate's SIP Trunking Workshop

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- Microsoft OCS
- IP Network Security



What You'll Gain:

- Independent accreditation for completing each course.
- Certified evidence of your advanced competence using these technologies.
- Impressive certification from a respected source on your resume.
- Credentials to land lucrative consulting/reseller opportunities.
- Immediately become the expert called upon to lead your company's strategies.
- Enhance your chances for a promotion.

Register Online & Save - www.itexpo.com

Why ITEXPO is The World's Communications Conference

1. Commercial-Free Sessions

To maximize your ROI as an attendee, presenters in sessions are forbidden from delivering company pitches. You get a complete education taught in an unbiased manner. Violators are not invited back to speak at future events.

2. Most Knowledgeable Speakers

Each topic and presenter is hand-selected by the *INTERNET TELEPHONY* and TMCnet editorial teams from hundreds of candidates. Only the most relevant sessions presented by seasoned speakers make it on to the the program at ITEXPO.

3. TMC University Certification Courses

Attend any of the in-depth certification and training courses offered by TMC University and you'll receive an independent certification of your competence with today's most important technologies and solutions.

4. Invaluable Networking Time

ITEXPO West 2009 is the perfect venue for you to meet and talk with other enterprises/government, service providers, developers and resellers to share ideas, exchange business cards, and discuss the virtues of one solution over another.

FREE Networking Receptions:

Tuesday, September 1 5:30 pm
Wednesday, September 2 4:00 pm
in Exhibit Hall Sponsored by Aculab

5. Hundreds of Exhibiting Companies

In between sessions, meet vendors and partners you need to successfully deploy or offer solutions. The agenda leaves ample time to stop by each booth to discuss how each exhibitor's offerings can help you.

Diamond Sponsor:



6. Top-Level Keynotes

This year's keynote lineup includes communications industry legend Sir Terry Matthews, plus executives from ShoreTel, Interactive Intelligence, Alvarion, Paetec, Aspect, and Clearwire. Each will show you how today's powerful solutions can benefit your company – whether you deploy them or offer them to customers.

8. Your Fee is Guaranteed

If you do not feel the sessions you attend made you better prepared to tackle your communications project than when you arrived, stop by the registration counter at the show and receive a free pass for any future ITEXPO conference. (No requests honored after the conference ends.)

9. Convenient, Accessible Location

The convention center is conveniently located in downtown Los Angeles, California, easily accessible from virtually anywhere in the world.

10. FREE VIP Pass

If you register online any time, you save the \$50 onsite fee and gain complimentary admission to all keynotes, receptions, free workshops, and the exhibit hall.

11. New! 4G Wireless Evolution

Delve into the key issues and challenges facing the evolution to a 4G, all IP, wireless network. The event will educate carriers and wireless professionals on the apps, technology alternatives, time frames, opportunities and challenges in the new age of mobile broadband.

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Find the Solutions You Need

Come Inspect Hundreds of Today's Most Powerful Communications Solutions • 150 Exhibitors Expected

- APIs
- Application Servers
- ATAs
- ATM
- Billing/OSS Solutions
- Cable Telephony Solutions
- Carrier Class Gateways
- Cloud Computing Solutions
- Compression Algorithms
- CEBP
- CTI
- DSP Chips & Boards
- Echo Cancellation
- Edge Access Devices
- Embedded Software Tools
- Fax Boards
- Firewalls
- Fixed/Mobile Convergence
- FMC
- H.323
- Hosted Solutions
- IMS
- Industrial Computers
- Interconnection Facilities
- IP-based ACDs
- IP Centrex Solutions
- IP Conferencing
- IP Contact Center Solutions
- IP Fax Solutions
- IP PBXs
- IP Phones
- IP Telephony Headsets
- IPTV Solutions
- IP Video Conferencing
- LAN-based Telephony
- Mashups
- Media Servers
- Open Source
- Presence-based Applications
- Programmable Switches
- Protocol Stack
- QoS Network Monitoring
- RAS/Modem Chips
- Routers
- Session Border Controllers
- SIP Software
- SIP Trunking
- SMB VoIP Solutions
- SOA
- Softswitches
- SOHO Solutions
- Speech Recognition/VXML/SALT
- Telepresence
- Testing Platforms
- Unified Communications
- UPS/Power Solutions
- Voice Boards
- VoIP Development Tools
- VoIP Gateways
- VoIP Monitoring
- VoIP Peering Solutions
- VoIP Security
- VoIP Silicon
- VoIP Testing Hardware
- VoIP-enabled Handheld Devices
- Web-based Customer Service
- WiFi Telephony
- WiMax
- Wireless IP Communications

Exhibit Hall Hours:

Wednesday – September 24:00 pm – 8:00 pm

Thursday – September 311:15 am – 5:00 pm



Win a New Jeep

*Jeep Giveaway

Thursday, September 3, 4:45pm, at the conclusion of Exhibit Hall hours.

Jeep Giveaway Sponsors:



Visit the Exhibit Hall. Find Solutions and You Could Win a New Jeep!

1. Pick up your entry card at the registration counter when you arrive.
2. Visit each booth listed on the card, review their offerings, and receive a stamp from each booth.
3. Collect all stamps, then drop your completed card into the entry bin in the exhibit hall.
4. ***YOU MUST BE PRESENT AT THE DRAWING ON THURSDAY, SEPTEMBER 3rd. 4:45 PM TO CLAIM YOUR PRIZE!**

Day One: Tuesday – September 1, 2009

ITEXPO Tracks	TMC University: Microsoft OCS <i>Sponsored by NET Quintum</i>	Enterprise Opportunities	Service Provider	Contact Center	4GWE Tracks	4GWE: Mobile Broadband Applications	4GWE: WiMAX Adoption Standards & Devices
	<i>Conference fee required</i>	<i>Conference fee required</i>	<i>Conference fee required</i>	<i>Conference fee required</i>		<i>Conference fee required</i>	<i>Conference fee required</i>
8:30	CONTINENTAL BREAKFAST FOR PAID ATTENDEES						
9:00 - 9:45	Introduction & Overview	Effective Planning and Deployment of Unified Communications Collaboration Services	How to VoIP: Numerous Options, Critical Choices	Unified Communications in the Contact Center	9:00 - 10:15	Mobile Broadband-New Apps and New Business Models	Beyond the Phone: Mobile Internet Devices
10:00 - 10:45	OCS-PBX Interoperability	Exploring the Business Impact of Unified Communications: Lessons Learned	SIP Trunking Plus	Outbound Call Centers: Driving Efficiency and Regulation Compliance	10:30 - 11:45	Social Applications: The Mobile Imperative	Does Your 4G Device Communicate or Compute?
11:00 - 11:45			Managed Service and Outsourcing: Not a Dirty Word for Digital Voice Cable	Next-Generation Contact Center Applications			
11:45	CONFERENCE LUNCHEON FOR PAID ATTENDEES						
12:45 - 1:30	OCS Servers	Next-Generation Enterprise Communications Solutions: The Current State-of-the-Art and Future Directions	Dark Fiber & US Stimulus - How New Fiber Drives Broadband VoIP	Agent Performance & ROI - What You Need to Know	12:40 - 1:55	Giving Voice to 4G	The IEEE's Wireless Ethernet Keeps Growing and Going
1:45 - 2:30	Call Flow Scenarios		Fiber & Wireless Backhaul - Two Technologies That Actually Feed Each Other	Ensuring Quality in the Contact Center	2:00 - 3:15	The Ecosystem of Application Developers	LTE Vs. WiMAX
2:45 - 3:30	Configuration & Planning	Next-Generation Enterprise Communications Solutions: The Current State-of-the-Art and Future Directions	IP Communications Continues to Evolve	The Hosted Model & the Holy Grail of Contact Center Services	3:15 - 4:30	Enabling the App Store: The Network Operators Perspective	Stimulating Rural WiMAX
3:45 - 4:30	TMC University Exam		Effective IP Peering Strategies	Voice Documentation and Recording	4:30	FREE Keynote Session Featuring Towerstream	
4:30	FREE Keynote Session featuring Shoretel, Aspect, Paetec						
5:30	NETWORKING RECEPTION						

Special Workshops - Free Admission With Any ITEXPO or 4GWE Conference Badge

ITEXPO Free Workshops	Sipera's UC Security Workshop	Ingate's SIP Trunking Workshop	Reseller Day Workshop	WiNOG@ITEXPO
	<i>Free for all attendees</i>	<i>Free for all attendees</i>	<i>Free for all attendees</i>	<i>Conference fee required</i>
Tuesday, September 1		9:00am - 4:00pm		8:30am - 2:00pm
5:30PM	FREE NETWORKING RECEPTION			
Wednesday, September 2	9:00am - 2:00pm	9:00am - 2:00pm	9:00am - 2:00pm	8:30am - 2:00pm
4:00 - 8:00PM	EXHIBIT HALL OPEN			
Thursday, September 3		9:00am - 2:00pm		8:30am - 2:00pm
11:15AM - 5:00PM	EXHIBIT HALL OPEN			

Gold Sponsors:



Day Two: Wednesday – September 2, 2009

ITEXPO Tracks	TMC University: Network Security	Enterprise Solutions	Service Provider	Regulation	HD Voice	4GWE Tracks	Alternative 4G Delivery Strategies	LTE
	Conference fee required	Conference fee required	Conference fee required	Conference fee required	Conference fee required		Fees required	Fees required
8:00	CONTINENTAL BREAKFAST FOR PAID ATTENDEES - SPONSORED BY NET Quintum					8:00	CONTINENTAL BREAKFAST	
8:30 - 9:15	Secure Voice Communications: It's Not Small Talk	Addressing the Challenge of Hosted IP-PBX in the Large Enterprise	Cloud Computing: What's In It For Me?	A Look at the Administration's Communications-Related Policies	HD Voice and Network Interconnection	8:30 - 9:45	Our Genealogy	Development Tools for 4G Hardware and Software Part I
9:30 - 10:15	Secure, Real-Time Enablement of Unified Communications	Enterprise Class Telephony for the SMB	Exploring Applications in the Cloud	American Recovery & Reinvestment Act: What it Means for Telecom	HD Voice and Wideband Codecs	10:00 - 11:15	FemtoCell Solutions	Development Tools Part II
10:30 - 11:15	Secure Threat Mitigation in Enterprise Telephony Environments	Adding Video to the Mix	Maximize Your Investment with a Network Management Strategy	The Stimulus and Vertical Markets	Pushing the Envelope with HD Voice: A State-of-the-Industry Panel Discussion	11:15 - 11:40	Self Organizing Networks	Using Design to Compel the User Experiences
11:30 - 12:15	Who's Listening? The Truth About Enterprise SIP Security	Unified Communications: The Hard ROI	Leveraging Content Delivery Networks (CDNs) to Maximize Network Efficiency	E-911: The State of Emergency Services for VoIP		11:40 - 12:15	Wireless Video Strategies	If You Build It, They Will Come
12:15	CONFERENCE LUNCHEON, Featuring keynote presentation by Alvarion					12:15	CONFERENCE LUNCHEON Featuring Keynote by Alvarion	
1:15 - 2:00	TMC University Exam	Distributed Enterprises: Can You Reduce Operating Costs & Maintain Reliability?	Network Planning to Ensure Quality of Experience	Real World Compliance Strategies for Dealing with Byzantine Laws	HD Voice Deployments	1:10 - 1:35	The Next Generation Connected User	Wireless Security: The Other CIA
2:00	SPECIAL KEYNOTE PRESENTATION: Sir Terry Matthews					1:35 - 2:00	LTE When Worlds Collide	While We Are Waiting - WiFi Dual Mode Devices
3:00	FREE Keynote Session featuring Interactive Intelligence, Clearwire					2:00	SPECIAL KEYNOTE: Sir Terry Matthews	
4:00 - 8:00	EXHIBIT HALL GRAND OPENING RECEPTION - SPONSORED BY ACULAB					3:00	FREE Keynote by Clearwire	
						4:00	EXHIBIT HALL GRAND OPENING	

Day Three: Thursday – September 3, 2009

ITEXPO Tracks	Open Source	Unified Communications	Service Provider	Trends in IP Communications	Communications Developer Sponsored by Avaya	4GWE Tracks	Wireless Backhaul	Advocacy Issues
	Conference fee required	Conference fee required	Conference fee required	Conference fee required	Conference fee required		Fees required	Fees required
8:00	CONTINENTAL BREAKFAST FOR PAID ATTENDEES							
8:30 - 9:15	How Open Source Spurs Innovation	Best of Breed Vs. Best of Suite for UC	Intro to Local Number Portability: What VoIP Providers Need to Know	Is VoIP Dead? Where Do We Stand?	Enabling Ultra Low Latency Applications over Ethernet	8:30 - 9:45	Testing 4G Ahead of the Curve	Broadband Stimulus Package: How Does it Impact You?
9:30 - 10:15	Premise or Hosted Solutions? Why Not Both?	Hosted UC Alternatives for the SMB	Assuring Network Performance for High-Quality Video	Mobile UC Market Landscape	Developing Profitable Web 2.0 Solutions	10:00 - 11:15	Migrating the Core: Wireless Backhaul	White Space Strategies
10:30 - 11:15	Open Source Telecom: Enabling Anyone to Build a Bad Telephony Application	Leveraging UC to Optimize the Customer Experience	Using IMS to Deliver Services Across 3 Screens	Tailoring Fax over IP Survivability	Creating Mobile Voice & Video Applications	11:30 - 12:00	Services Requires Systems: OSS in the IP World	Voice over LTE via Generic Access (VOLGA)
11:15 - 5:00	EXHIBIT HALL OPEN							
12:00	CONFERENCE LUNCHEON FOR PAID ATTENDEES							
1:00 - 1:45	Leveraging Open Source for Contact Center ROI	Mobile UC Strategies for the Enterprise	Deploying IPTV	When Voice Meets Web 2.0	Leveraging Video in an Enterprise Setting	1:45 - 2:45	CSI: An Autopsy of Public Wireless	Beyond the App Store: Smarter Applications for 4G
2:00 - 2:45	Open Source: Lessons Learned		Fused Vs. Bundled - The Next Evolution of Operator Services	Using Social Network Analysis to Retain Customers & Increase Revenue	Mobile App Stores: The Developer's Perspective			

ENTERPRISE OPPORTUNITIES

Tuesday, September 1: 9:00 - 9:45 am

Effective Planning and Deployment of Unified Communications/ Collaboration Services

This session will serve as an introduction to the overall themes to be discussed during the conference track. How can customers benefit from IP Communications? What are some of the key economic considerations? What are some of the key business considerations? In this session the speaker will lay the foundation for effective planning and deployment of Unified Communications/Collaboration services, with a focus on user-based/role-based perspectives of creating value for UC/Collaboration.

Tuesday, September 1: 10:00 - 11:45 am

Exploring the Business Impact of Unified Communications: Lessons Learned

This session will center on the use case of actual customers who will speak to their experience deploying unified communications, discuss their expectations prior to deployment and whether these expectations have been met, and offer a real world perspective on adopting this highly touted technology. The conversation will focus on business-related impacts, user-oriented benefits and process employed to justify the investments; lessons learned; and recommendations for similar company deployments.

Tuesday, September 1: 12:45 - 2:30 pm

Next-Generation Enterprise Communications Solutions: The Current State-of-the-Art and Future Directions

The days of the siloed proprietary PBX are rapidly drawing to a close. Emerging in its place are software-based architectures that tightly link with the desktop and business applications deployed in the customer's broader IT environment. Rather than relying on traditional system-level packaging at every location, these solutions are implemented on open hardware at key enterprise sites or data centers, via SaaS-based offerings based in the cloud, or hybrid approaches blending the two. These alternatives provide an architectural foundation for the advanced Unified Communications and Collaboration capabilities that are now dominating the industry discussion, and the flexibility to tailor their functionality to the needs of specific areas of the business and job functions.

This session will help customers identify who the leading manufacturers are for delivering next-generation capabilities, what their current offerings are, and what they should be looking for in the future.

Tuesday, September 1: 2:45 - 4:30 pm

Implementing Next-Generation Solutions Today: Strategies, Tactics, Advice for Deploying in the Current Technology and Business Environment

- What are the upfront technology questions that need to be addressed before implementing?
- Are there compelling cost savings arising from this technology and what is the time horizon for realizing them?
- What are the productivity and business process benefits of these solutions, and how do I tangibly measure their value?
- How do I sell that internally in the current business environment?
- Who are the key business stakeholders that need to be engaged in order to move the UC/Collaboration discussion forward?

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ENTERPRISE SOLUTIONS

Wednesday, September 2: 8:30 - 9:15 am

Addressing the Challenge of Hosted IP-PBX in the Large Enterprise

As financial and human resources become increasingly strained for businesses of all sizes, CIOs and CFOs within larger enterprises are beginning to look at more cost effective ways of deploying and managing their corporate phone systems. Hosted IP voice solutions, which have witnessed significant adoption in the SMB community, are now being viewed by corporations as viable, money-saving alternatives to complex, on-premise systems that require a hefty financial investment along with knowledgeable staff.

Cost effectiveness, alone, is not enough for the larger enterprise to justify the movement to hosted telecom solutions. Performance attributes like scalability, reliability, manageability, quality and security are equally, if not more important, than the economic advantages. Today's hosted IP voice solutions can successfully address these challenges while providing significant financial benefits.

Wednesday, September 2: 9:30 - 10:15 am

Enterprise Class Telephony for the SMB

In a down economy, small businesses are under more pressure than ever to re-evaluate infrastructure costs while preserving business process, continuity and ease-of-use for staff. Enter a new class of telephony products designed for the SMB and SoHo user that meets the three criteria of affordability, reliability, and DIY simplicity. The panel discussion will also address the benefits of how SIP trunking and premise based IP PBX equipment serve the dynamic needs of the SMB as well as the role of hosted VoIP in providing communication applications to multi-site enterprise and SMB customers.

Wednesday, September 2: 10:30 - 11:15 am

Adding Video to the Mix

A number of factors are driving the increased adoption of video in the enterprise space. The sad state of the economy is forcing enterprises to reconsider travel and implement instead videoconferencing solutions. These solutions are not limited solely to room-sized deployments, but are increasingly taking the form of desktop video conferencing solutions leveraging the latest videophone technology on the market. These low-cost, robust endpoints are also creating an opportunity for new Video SIP Trunking Providers to deliver new multimedia services, such as Video Voice Mail, Video Ring Back Tones, Mobile Video Sharing and much, much more. Come to this session to learn about the various ways that video is being added to the mix of enterprise communications.

Wednesday, September 2: 11:30 am - 12:15 pm

Unified Communications: The Hard ROI

UC's return on investment is typically referenced in terms of "improved productivity" – something that is often difficult for companies to quantify. Some of the specific UC components, such as video conferencing, deliver a hard ROI, but that is more of a positive statement for video conferencing than it is for UC. However, UC, implemented in the context of the automation of business processes, has a very compelling, well-defined, hard ROI. Communications-based Process Automation (CBPA) eliminates process inefficiencies and is the approach that makes UC actually make sense for businesses. CBPA takes the key components of UC functionality – things like enterprise-wide presence, queuing and routing, call and screen recording, VoIP, etc. – and uses that functionality to automate critical business processes and save companies money. This session will define CBPA, quantify the hard ROI, provide a typical use case, contrast CBPA vs. traditional process automation applications, and deliver a checklist for implementing a successful CBPA project. Each attendee will also receive a white paper titled, "A New Approach to Business Process Automation."

Wednesday, September 2: 1:15 - 2:00 pm

Distributed Enterprises: Can You Reduce Operating Costs & Maintain Reliability?

The migration to VoIP based communications systems has a number of business and financial advantages which is driving adoption in a many different enterprise deployments. Distributed enterprises (banks, insurance, government and retail) have been leaders in the adoption of VoIP, allowing these organizations to leverage their wide-area-network (WAN) infrastructure for branch-to-branch and branch-to-HQ calling, saving significantly on their communications costs. However, some worry about WAN failure situations and wonder 'how will these branch offices continue to provide service to their customers or enable emergency communications?' Addressing these concerns is paramount for effective deployment of VoIP based solutions to distributed enterprises. Attend this session to learn how solution developers are addressing branch office connectivity, enabling remote branch offices reduce operating costs and remain connected and in business despite WAN outages.

UNIFIED COMMUNICATIONS

Thursday, September 3: 8:30 - 9:15 am

Best of Breed Vs. Best of Suite for UC

Unified Communications (UC) is comprised of several capabilities – including Voice, Video, Messaging, Conferencing, Mobility, IM and Presence. Several of these capabilities (such as enterprise voice) have been deployed across businesses for many years; others, such as IM, Web Conferencing and HD Video and Voice, are relatively new and still undergoing initial deployments. All of these may come from different vendors and may have been acquired separately, over time. Several vendors are advocating complete UC suites that they provide end-to-end. In this session we explore the plusses and minuses of businesses adopting a Best-of-Breed or Best-of-Suite strategy for forward going UC deployments.

Thursday, September 3: 9:30 - 10:15 am

Hosted UC Alternatives for the SMB

SMBs want to compete with enterprises on a level playing field, deploying advanced video, hosted IP, presence, cloud computing, real-time & streaming video services and the like, without the cost and complexity of premise deployments. Today's hosted solutions offer a means to an end — enabling SMBs to cost-effectively deploy UC services, without the headaches associated with traditional CPE deployments. In this session, the speakers will discuss critical issues hosted solutions must address — including bandwidth along the WAN link, interoperability of devices, integration of applications and devices, and cost parameters — to achieve productive, cost-effective voice, video and data communications for the SMB.

Thursday, September 3: 10:30 - 11:15 am

Leveraging UC to Optimize the Customer Experience

This presentation will address common questions and challenges that companies encounter in developing a UC strategy. Companies must understand how to leverage contact center and UC applications in tandem to drive increased productivity and more responsive service, including what organizations should look for from technology partners, and how to ensure the seamless interoperation of existing and next-generation solutions to drive the success of UC strategies. In addition, the presentation will identify UC strategies that companies can begin to implement today in order to realize more significant ROI, get ahead of business demand and gain a competitive advantage. Attendees will learn:

- How to understand the architecture requirements for successful UC initiatives.
- How presence servers can enable contact center agents to have visibility to a list of available experts within the enterprise
- Most effective ways to measure the success of a UC rollout

Thursday, September 3: 1:00 - 2:45 pm

Mobile UC Strategies for the Enterprise

Until you can unify applications on a mobile handset, you cannot achieve the benefits that unified communications has the potential to provide. Dual-mode mobile smartphones work 100% wirelessly and were built for voice conversations as well as messaging that can be conducted equally over WiFi or cellular. This session will discuss solutions available today that can unlock the power of dual-mode phones, providing the technology that enables seamless roaming between WiFi and cellular networks. Solutions that can be integrated into the handset so that end users can make calls, send e-mail, send IMs and broadcast their presence from any location making true Unified Communications a reality.



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SERVICE PROVIDER SOLUTIONS

Tuesday, September 1: 9:00 - 9:45 am

How to VoIP: Numerous Options, Critical Choices

ISPs entering the VoIP services arena face numerous choices in bringing a service offering to market. Among these, one of the most key decisions is in choosing a platform for offering the services. Some carriers have built their service offerings upon in-house systems utilizing various open source and internally developed components. Many ISPs choose to simply resell the services of another provider and merely take a commission of those sales. Other ISPs invest in commercial platforms which are installed on the ISP's own premises. This session will use real world data to compare the cost vs. benefit and present an ROI for these options.

Tuesday, September 1: 10:00 - 10:45 am

SIP Trunking Plus

While SIP Trunking is largely perceived as a low-cost replacement technology – exactly the sort of VoIP services that have traditionally sold well – it is also a doorway to a variety of services and applications that have a notable, growing audience. Once a SIP Trunking service provider can focus on individual applications that increase productivity, work better with mobility, improve the existing PBX functions and allow for growth, there is a huge potential for VARs and service providers to generate new, recurring monthly revenue through add-ons that are of great benefit – in both cost and functionality – to the enterprise. Also, what is very important to note is that with integration through the pre-existing SIP Trunk, there is little or no service disruption. Leveraging the powers of creativity, we call these services SIP Trunking Plus. In this session, the speaker will highlight several examples of applications that would be useful to the SMB market, and that SIP Trunking providers could easily add to their menu of products/services.

Tuesday, September 1: 11:00 - 11:45 am

Managed Service and Outsourcing: Not a Dirty Word for Digital Voice Cable

Tier-2 cable operators are more and more counting on managed digital voice and video offerings to help them compete with RBOCs. In this session, The panel of speakers will highlight what works – and what doesn't – based on their collective experience of working with more than 200 operators worldwide. Be sure to attend this session if you are seeking advice on how to compete with a strong managed service offering.

Tuesday, September 1: 12:45 - 1:30 pm

Dark Fiber & U.S. Stimulus – How New Fiber Drives Broadband VoIP

Over the next two to five years broadband speeds and penetration will increase giving VoIP service providers and equipment vendors more opportunities than ever before. This session will connect the dots between the Broadband Stimulus, fiber deployment and the VoIP applications that will grow from it. The moderator will give an overview of the current status of the ARRA BTOP. The panel will discuss the benefits of wide-scale broadband deployment and how that will positively impact the VoIP industry.

Tuesday, September 1: 1:45 - 2:30 pm

Fiber & Wireless Backhaul – Two Technologies That Actually Feed Each Other

Since the invention and commercialization of both fiber and wireless transport there has been a perception of competition between the two. Vendors positioned their products and services as a “one, or the other” choice. Very recently it has become very apparent to the mainstream buyer that fiber and wireless actually complement each other. There is probably no better example of this than with 4G wireless deployment and backhaul needs of wireless data from cell towers. This session will provide an overview of the current state of wireless backhaul over fiber, the benefits, where it is and is not happening, and why.

Tuesday, September 1: 2:45 - 3:30 pm

IP Communications Continues to Evolve

VoIP Peering for enterprises and consumers is the latest move in transitioning users from the high cost structure of TDM Networks to lower cost IP networks. Additionally, VoIP Peering changes the pricing paradigm where “free” calling becomes a reality. This discussion is intended to provide a VAR, IT Manager or Telecom Manager with enough information to explore how adding VoIP Peering to the use of SIP Trunking will improve their call quality, enable end-to-end unified communications applications, expand IP media support to video and decrease their telecom cost dramatically.

Tuesday, September 1: 3:45 - 4:30 pm

Effective IP Peering Strategies

The reality of IP Peering is that there are so many peering points, backbone providers and content networks to connect to, how can you efficiently build a global IP network that can effectively deliver the content to the right target audience? The short answer is it takes a long time, a lot of relationships and the right knowledge. This session will feature several industry experts who will illustrate several strategies and offer their insight into how best to take advantage of this constantly evolving technology.

SERVICE PROVIDER SOLUTIONS

Wednesday, September 2: 8:30 - 9:15 am

Cloud Computing: What's In It For Me?

The cloud computing phenomenon is happening — it's a reality and can provide more flexibility for a company's Web hosting — faster, easier and at a lower cost. Companies do not need to own their own server hardware anymore. The ease of scaling up when the need arises, the speed which new Web applications can be designed, prototyped, tested, and deployed and the cost savings are truly attractive. As the cloud continues to gain acceptance developers and designers need to understand the advantages and how to determine what application to use to fit their needs.

In this session, the speakers will discuss:

- What cloud computing is
- Competitive benefits of cloud computing
- Cost Savings of cloud computing — pay only for what you need; and more.

Wednesday, September 2: 9:30 - 10:15 am

Exploring Applications in the Cloud

Today the industry is buzzing about cloud computing and pushing applications out into the network cloud. Google has brought out their AppEngine platform while Amazon offers their EC2 and S3 services and Microsoft and others prepare their own offerings. In this session, attendees will learn about what is involved with developing voice applications on cloud computing platforms. What options are out there? What do you need to look for in a platform? How can you get started? The session will include demonstrations and offer insight and real world examples of how cloud-based solutions are impacting the market today, challenges and opportunities, as well as what the future holds.

Wednesday, September 2: 10:30 - 11:15 am

Maximize Your Investment with a Network Management Strategy

Companies across the globe are facing a perfect storm of information explosion — from VoIP to IPTV to secure content, and management fragmentation. This has put tremendous stress on IT departments and their ability to ensure delivery of key information, business and infrastructure services. What's necessary is the ability to tie this information together — across what are disjointed domains — making it possible to manage the information delivery chain in an automated fashion. Companies need to have end-to-end service visibility and control across all silos, whether they be physical assets, virtual assets or mixed. Furthermore, the convergence of voice and data networks combined with growing overall traffic volume, increased numbers of discrete applications and a broadening array of systems and servers is presenting

formidable challenges to the integrated network operations staff tasked with assuring voice and data service quality. This presentation will outline best practices for network operations managers and other staff managing voice and data service performance to integrate these three elements for cost-effective, simplified and proactive management.

Wednesday, September 2: 11:30 am - 12:15 pm

Leveraging Content Delivery Networks (CDNs) to Maximize Network Efficiency

Many broadband service providers are beginning the process of embedding technology within their networks capable of treating each session flow — OTT video, VOIP, gaming, etc. — with the service quality it is engineered to expect. This puts content distribution networks (CDNs) in the position to deliver, for the first time, guaranteed quality of service. One key trend is the role for mobile CDNs. Current mobile networks have limited data throughput, less than a typical DSL connection. Simultaneously, devices such as the iPhone, G1, and others are encouraging dramatic increases in mobile data usage (both downstream and upstream). With these improved handsets, the network throughput has become the bottleneck in delivering high quality video. A variety of solutions to these challenges are being developed today, however, there's room for significant debate on which solutions are best.

Wednesday, September 2: 1:15 - 2:00 pm

Network Planning to Ensure Quality of Experience

Carriers are struggling to roll out new services as fast as possible without sacrificing Quality of Experience (QoE) for users. This task is especially difficult for IP-based services, which are more sensitive and prone to adverse network effects. Telecom operators will need to revise their operating models as they implement Next Generation Network upgrades. Provisioning, delivery, monitoring, maintenance, performance analysis, billing, management will become even more complicated as they attempt to deliver next-generation services. This session will explore the importance of proper network planning to smoothly introduce new products and services at optimal cost. It will also illustrate how integrating business planning, marketing and engineering enables carriers to build a network that handles service demand fluctuations in near real-time, giving customers the quality of service they expect.

SERVICE PROVIDER SOLUTIONS

Thursday, September 3: 8:30 - 9:15 am

Intro to Local Number Portability:

What VoIP Providers Need to Know

This presentation will be a tutorial on Local Number Portability (LNP). It will explain in detail how LNP works and why it can save VoIP operators money and improve their service. The presentation will focus on providing practical details on how VoIP operators can implement LNP using freely available software.

Thursday, September 3: 9:30 - 10:15 am

Assuring Network Performance for

High-Quality Video

While much of the discussion around IP video is about content acquisition and delivery, quality assurance is the key to customer retention. As video traverses the IP network, ensuring correct timing, signaling and synchronization, as well as the ability to identify and remedy impairments is unglamorous, but crucial to successful IP video service offerings. The launch of any successful video service depends on the service providers' readiness in the lab, and their capacity to act swiftly to acknowledge and address issues in the field. This session will discuss the various approaches to monitoring video streams, and how these approaches directly impact the residential and enterprise focused video services from a quality, and price, perspective.

Thursday, September 3: 10:30 - 11:15 am

Using IMS to Deliver Services Across 3 Screens

With more and more service providers looking to deliver IP-based voice, data and video services to subscribers' TVs, PCs, and mobile devices, the NGN/IMS architecture – which defines and standardizes network architectures to enable voice, data, and IP video service interoperability across networks – will play a critical role in handling video session initiation. IMS is also critical to maintain subscriber and session awareness when users switch from their TV to their mobile device and pause that stream to quickly make a voice call. Coupled with service delivery platforms (SDPs), which is where such blended services are created, the IMS architecture ensures these IP video services are delivered to the right subscriber and the right device.

This session will explore:

- How long it will take to achieve the converged NGN/IMS network down to the third screen on the mobile phone
- The role of the NGN/IMS architecture in delivering IP video across converged networks
- How SDPs deployed for IP video services will evolve to support the integration of mobile devices

Thursday, September 3: 1:00 - 1:45 pm

Deploying IPTV

Telcos face countless challenges today. These include increasing competition from cable operators, decreased revenue from voice, issues with customer churn, as well as cautious capital outlays after the bursting of the bubble. But if IPTV is to be a silver bullet, technology performance needs to live up to its expectations. This session will provide service providers with the knowledge and tools to implement lower-cost IPTV architectures, including practical ways to implement a broadcast optical IPTV backbone that offers a high QoS and meets all other triple-play requirements. Topics to be covered in detail during this presentation include:

- Triple play network migration;
- IPTV service requirements;
- Broadcast vs. multicast IP video; and more.

Thursday, September 3: 2:00 - 2:45 pm

Fused Vs. Bundled –

The Next Evolution of Operator Services

As demand for bandwidth and mobility continues to grow, traditional telecommunications markets need to evolve to meet market changes. Service providers' bundled services, a combination of voice, video and data, were the first step in giving consumers a converged network. Today, customers are looking for a way to make their daily lives easier using less electronics equipment, and service providers are looking to provide services that increase ARPU. To meet that need at home and at work, service providers are evolving their networks to support new services for entertainment and managing communications that are always-on, content-rich, and offer integrated use of voice, video and data that can be delivered to any end-user device.

TMC UNIVERSITY - MICROSOFT OCS



Tuesday, September 1, 2009

Sponsored by:



9:00 am: Introduction and Overview

OCS business communications scenarios:

- Instant messaging
- On-premise Web conferencing
- On-premise audio/video conferencing including Microsoft's Roundtable
- Telephony

10:00 am: OCS–PBX Interoperability

This session explores and explains SIP-Session Initiation Protocol and how SIP is used to provide internet telephony functions in an OCS enterprise telephony solution. This session will explain:

- SIP and versions of SIP used in OCS
- SIP-to-PBX interoperability
- SIP-to-IP-PBX interoperability
- OCS and IP-PSTN gateway integration
- Remote office telephony integration

11:00 am: OCS Servers

Explore various types of servers used in an OCS environment:

- Mediation Server
- Front End Server
- Active Directory

12:45 pm: Call Flow Scenarios

The following call flow scenarios supported by OCS will be covered in-depth:

- Telephony users can connect to other telephony users by using OCS
- Internal telephony users can also communicate with PSTN and PBX users
- Outgoing calls
- Incoming calls

1:45 pm: Configuration & Planning

Top-10 SIP/OCS Site Planning – “Best Practices”

This session is designed to provide the student with an overview of key requirements for planning and implementing OCS.

2:45 pm: TMC University Exam

At the conclusion of the program, you will sit for an exam covering the course topics. Those who receive a passing grade on the exam receive TMC University's Certificate of Achievement, certifying that you have successfully completed the course and received a comprehensive education regarding Microsoft OCS.

About Course Leader, Thomas B. Cross: The CEO of TECHtionary.com has three decades of experience in startups and consulting advisor with leading providers and venture capital companies in market planning and development, hardware/software design and development, project management, intellectual property in telecommunications, information technology, conferencing, teletraining, telecommuting, groupware, networks, call centers, internet, artificial intelligence and other fields. He has managed the successful development of more than 10 software, hardware and internet products to market and received industry awards for this work. He has authored 13 books, wrote, produced and directed 15 commercial videos and creator and producer of the World's Largest Animated Knowledge Source on Technology - <http://www.techtionary.com> - recipient of Web Hosting Magazine Editors Choice for Best Technical Help. He is a member of the Technical Board of Advisors for the VoIPSA-VoIP Security Alliance.

TMC UNIVERSITY - NETWORK SECURITY



Wednesday, September 2: 8:30 - 9:15 am

Secure Voice Communications: It's Not Small Talk

Are your mobile phone conversations secure? Unless you are President Obama or another high-level government official, your conversations are likely to be exposed to eavesdropping and intercept, putting the integrity of your conversation at risk. In this session, the speaker will cover secure voice communications from identifying this active and global threat to exploring tools and solutions to remediate.

Wednesday, September 2: 9:30 - 10:15 am

Secure, Real-Time Enablement of Unified Communications

Enterprises are embracing VoIP and Unified Communications (UC) to increase productivity, lower communications costs and improve collaboration. While UC is being deployed as a simple, ubiquitous and cost-effective channel for communication, security and granular control of UC endpoints and control of enterprise assets are top priorities for the seamless expansion of UC. The true potential of UC applications, including IM and video cannot be realized if enterprises deploy applications in a closed network. Cost-savings, business continuity, employee mobility and other UC benefits are compelling enterprises to examine opening up their UC communications beyond the enterprise perimeter with rapid expansion of SIP remote users and SIP Trunks.

To make UC a reality, comprehensive security, enablement of WiFi/dual-mode remote phones, extension mobility, and call admission control are key requirements. This session will address:

- Remote worker configurations, and related firewall and NAT issues
- Voice and Data VLAN separation with layer-7 application knowledge
- VoIP/UC-specific vulnerabilities and media anomalies that are risks in all deployments
- Privacy issues that are magnified with road warriors accessing enterprise networks via remote Internet connections
- Fine-grained policy enforcement based on UC network, user, device and time of day

Wednesday, September 2: 10:30 - 11:15 am

Secure Threat Mitigation in Enterprise Telephony Environments

Increasingly, large enterprises in North America are moving Unified Communications (UC) applications out of the lab and into production environments. But UC's long-touted benefits aren't free. The real-time IP technologies and VoIP infrastructure elements that underlie UC provide many new inroads for criminal attackers (both inside and outside the enterprise) and unwitting bearers of malware. Further, it's clear that many current countermeasures cannot defend the new attack surfaces presented by real-time VoIP, instant messaging, video, and collaboration applications.

Failure to quash these new security threats can mean lost revenue, diminished customer loyalty, corporate brand devaluation, liability exposure, and regulatory non-compliance penalties. This session builds a risk assessment taxonomy for UC security; ranks the criticality and value of UC resources at risk; rates the reality, imminence, and success probability of various UC security attacks; and identifies specific technologies that can be deployed to deflect or mitigate the impact of those attacks on business-critical applications and networks.

Wednesday, September 2: 11:30 am - 12:15 pm

Who's Listening?

The Truth About Enterprise SIP Security

Session Initiation Protocol (SIP) has emerged as the predominant protocol for VoIP deployments. While SIP is gaining headway in the IP communications market, any new technology brings with it some inherent security challenges. In this webinar, we discuss these challenges, the misconceptions surrounding SIP Security, and examine the tools available to counter them. This session will also explore robust solutions that not only tackle security threats, but also empower businesses to proactively protect their networks from current and future attacks. Included in this webinar, we will examine the Interactive Intelligence suite of products as a communications platform case study that empowers businesses to tackle security threats while maintaining affordability and performance.

1:15 pm: TMC University Exam

At the conclusion of the program, you will sit for an exam covering the course topics. Those who receive a passing grade on the exam receive TMC University's Certificate of Achievement, certifying that you have successfully completed the course and received a comprehensive education regarding IP Network Security.

CONTACT CENTER

Tuesday, September 1: 9:00 - 9:45 am

Unified Communications in the Contact Center

In spite of all the attention given to enterprise unified communications (UC) in the last few years, an important component is often overlooked: the contact center. This is a mistake, as a UC strategy is just as critical to customer facing activities as it is to internal communications. This discussion will address the role that the contact center plays in a successful unified communications strategy, focusing on best practices for leveraging contact center and UC applications in tandem and how companies can make use of existing and next generation technologies to make this happen. Attend this session for a lively discussion on products, services and the state of the unified communications industry as it regards the contact center. This session is a must for anyone working on or planning to develop a UC strategy

Tuesday, September 1: 10:00 - 10:45 am

Outbound Call Centers:

Driving Efficiency and Regulation Compliance

In the present economy, Call Center operators are seeking ways to do more with less. The pressures have never been so high to reduce costs, while maintaining a superior customer service. In this session, the speaker will describe recent trends in outbound contact centers, including new regulation requirements, new dynamics in agent employment and new technology advances that all combine to yield a unique opportunity for improvement. The talk finally presents architectures and best practices to leverage this context for superior business results.

Tuesday, September 1: 11:00 - 11:45 am

Next-Generation Contact Center Applications

Fierce competition and the need to differentiate through the customer experience are driving the demand for agility within the contact center. Advanced contact center applications are now playing a crucial role by integrating Service Oriented Architecture (SOA) and Web services into day-to-day business applications, allowing companies to automate services and processes, while offering multiple channels of communication. In this session, participants will learn how to make the contact center more valuable to the business by incorporating next generation features like SOA and Web services to help drive greater efficiency and flexibility in the contact center, reduce costs, and speed time-to-revenue

Tuesday, September 1: 12:45 - 1:30 pm

Agent Performance & ROI – What You Need to Know

In any economy, organizations should never underestimate the value of their contact center. Smart organizations know that maintaining its customer base is their number one

goal. This session will focus on the necessity of agent performance management solutions in the contact center and how to build a solid business case and return on investment (ROI) for agent performance management tools. Conversation will also range to include how to get the best performance out of call center agents as well as studies on customer satisfaction and how the two can be aligned.

Tuesday, September 1: 1:45 - 2:30 pm

Ensuring Quality in the Contact Center

Focus on assuring IP telephony voice quality in the contact center and the enterprise. The presenters will address concepts such as active call monitoring and multilayer monitoring, and discuss how these strategies can be used to determine when a failure has occurred or is about to occur in an IP telephony network. The conversation will include a discussion of how performance management reporting can be used to assure that service level objectives are met and how recurring failures can be identified and prevented in real-time. Proactive multi-channel testing and monitoring of contact center and communication solutions and their role in improving customer experience will also be addressed.

Tuesday, September 1: 2:45 - 3:30 pm

The Hosted Model & the Holy Grail of Contact Center Services

Come learn how organizations improve their customers' end user experiences. Get a review of active customer applications, the requirements that led the customers to implementation of such service and how it resulted in improving their end customer experience. The presentation will provide a look into the issues surrounding implementing a hosted on demand delivery of contact center service and provide a guide as to where these services are — and are not appropriate. Receive a guide to new applications that the on demand platforms can allow as well as review the ROI model for on demand services.

Tuesday, September 1: 3:45 - 4:30 pm

Voice Documentation and Recording

In the wake of current economic uncertainty, businesses are recognizing the importance of identifying, understanding and addressing the risks facing their organizations. Companies are focusing much more on practices that promote the retention of their existing customers, serving to safeguard their ongoing revenue streams. Come discuss how voice documentation technology is used to manage risks and ensure ethical, professional and customer-friendly employee conduct. Specific topics include compliance, personnel development and collaboration and how voice documentation can contribute to each of these areas. This session will also address the role of VoIP call recording, the pros and cons of different implementation approaches, how to decide which is best for your operation and keys to ensure a smooth implementation.

REGULATION

Wednesday, September 2: 8:30 - 9:15 am

Where to From Here: A Look at the Current Administration's Communications Related Policies

This session will examine the Obama's administration's policies with regard to Internet applications, broadband and other related issues. Where does this administration fall with regard to the following issues: competition, network neutrality, universal service, and more? What impact will the Obama team's policies have on the nation's infrastructure? Come to this session to garner an understanding of the issues at work and where we — as an industry — can expect to move next.

Wednesday, September 2: 9:30 - 10:15 am

American Recovery & Reinvestment Act: What it Means for Telecom

For the telecom industry, as well as other sectors of the economy, the American Recovery and Reinvestment Act (ARRA) of 2009 presents the opportunity for obtaining billions of dollars of grants and loans and delivering jobs and hope to the economy. For the telecom industry, \$7.2 billion in grants, loans, and loan guarantees are targeted for broadband projects in the coming months. What does this mean for our industry? How have the funds been appropriated to date? What trends are developing in the wake of this landmark legislation? Come to this session to find out what our collective national investment has meant to the telecom industry.

Wednesday, September 2: 10:30 - 11:15 am

The Stimulus and Vertical Markets

Much has been made of the stimulus package and its impact to the telecom industry. In this session, the speaker will address what the billions of dollars of Federal spending might mean to a number of key verticals including healthcare, education and the public sector. How will the government's involvement help spur investment in new and exciting technologies? What will be the net effect on enterprise employees, consumers, and operators as stimulus money starts to flow? Come to this session and find out.

Wednesday, September 2: 11:30 am - 12:15 m

E-911: The State of Emergency Services for VoIP

Public safety agencies were encouraged to apply for \$7.2 billion that Congress appropriated for broadband projects in the American Recovery and Reinvestment Act (ARRA) of 2009, as leaders hailed the growing awareness in Washington circles of the importance of enhanced "E911" and other emergency services in the greater homeland security framework. The National Telecommunications and Information Administration must consider when evaluating applications for the \$4.7 billion it is charged with distributing. The projects that propose to "test bed" new technologies or applications also may get a positive response from NTIA. The Rural Utilities Service in the Department of Agriculture will distribute the remaining \$2.5 billion for broadband projects. While the ARRA allows both state and local entities to apply for grants, there's a lot of debate about the role of the states, about how active they will be.

The speakers will address the Future State of E911 for VoIP. Specifically, they will analyze and recommend technical options to enable accurate and reliable dynamic E911 location identification for interconnected Voice over Internet Protocol (VoIP) services

Wednesday, September 2: 1:15 - 2:00 pm

Real World Compliance Strategies for Dealing with Byzantine Laws

In this session you will learn strategies for addressing laws attempting to regulate SPAM, privacy, use of intellectual property, and terrorism. Specific laws covered will include: CAN-SPAM, and various state initiatives, FTC regulation of privacy, DMCA and other methods used by copyright owners, and the USA Patriot Act.

This session will be based on actual case studies in which an innovative web hosting company and their attorney developed operational procedures to deal with these issues using current resources.

Participants will learn how to maximize the use of internal resources and leverage critical legal strategies to develop cost effective solutions to problems that present a high risk of liability and high cost to outsource. Participants will leave with ideas that they can implement immediately to address each of these issues.

HD VOICE

Wednesday, September 2: 8:30 - 9:15 am

HD Voice and Network Interconnection

With VoIP trunking becoming more common, the next step is for service providers to peer their networks through such services as the Voice Peering Fabric and Xconnect. When they do so they can not only often avoid settlement charges, but they can ensure that calls negotiate wideband codecs. This session is for service providers, and explains how they can use HD Voice as a differentiating benefit.

Wednesday, September 2: 9:30 - 10:15 am

HD Voice and Wideband Codecs

Historically high-quality voice codecs have been compute intensive and complicated to license due to multiple ownership of intellectual property. This has now changed. Moore's Law has made the compute requirements easily manageable, and several vendors have released state of the art royalty-free codecs, for example Polycom, Skype and Speex. This session explains the benefits of each.

Wednesday, September 2: 10:30 am - 12:15 pm

Pushing the Envelope with HD Voice:

A State-of-the-Industry Panel Discussion

High-definition voice is starting to take hold in the market, replacing the 50-year-old technology in the public switched telephone network (PSTN). As more vendors add support for wideband codecs we finally have the ability to experience the power of VoIP through HD voice and richer, fuller, crisper and clearer audio. Just as the HD television has changed forever how we watch television so will HD voice and how we communicate.

In this session we will discuss the benefits of HD voice services and how this higher quality of sound can be used to attract, retain and drive service providers' success in a highly competitive marketplace where it is no longer sufficient to offer "me too" services.

Join us as our expert panel introduces the technical background, why end customers have expressed such strong interest in the capability and how HD VoIP likely will be deployed.

Wednesday, September 2: 1:15 - 2:00 pm

HD Voice Deployments

As enterprises and service providers alike begin to adopt HD Voice solutions, how is the technology being received in the marketplace? Join this session to hear from distributors and service providers about the real world deployments, the benefits to the customers embracing high-definition voice, and the prospects for future adoption of this exciting technology.

Media Sponsors:



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COMMUNICATIONS DEVELOPER

Thursday, September 3: 8:30 - 9:15 am

Enabling Ultra Low Latency Applications over Ethernet

The rapid adoption of VoIP, telepresence and IP-based conferencing is placing significant demands on the packet-based networks required to deliver these real-time services with carrier-grade Quality of Service (QoS). Managing the QoS of an increasing number of co-existing, IP-based applications is a challenge for service providers seeking to differentiate their offerings and maintain market share in an increasingly competitive landscape. This session will provide an overview of service mapping and traffic management techniques that can be employed to establish high-performance services, including bandwidth policing, traffic filtering and shaping, as well as developments in technology that allow near-zero latency implementations of these approaches over existing multi-vendor, multi-technology and multi-carrier networks. Real-time service assurance techniques will also be reviewed, including scalable, cost-effective methods service providers are using to gain per-second visibility into per-application QoS and SLA performance from their existing management platforms. Case studies from leading service providers will be used to complement theory with actual technology deployment examples.

Thursday, September 3: 9:30 - 10:15 am

Developing Profitable Web 2.0 Solutions

In today's economy, global corporations have to lower communications costs while increasing the communications capabilities they offer their users. In every instance, lower costs and increased capability is derived from moving voice from its legacy model to the web model a.k.a. voice-as-a-web service. The shift from hardware to software, from proprietary protocols to standard protocols, from routing calls over the PSTN to routing them over IP, from vendor-specific APIs to Web 2.0 interfaces, from developers with specialized telephony knowledge to generic web developers is taking place and will have a profound impact on the face of telephony. In this session, we will discuss how Web 2.0 programming models, protocols and standards — such as REST, AJAX and XML — can enable voice-as-a-web service and the delivery of voice to browser-based applications. Attendees will learn how Web 2.0 allows organizations to gracefully migrate expensive legacy telephony to a lower cost software model without disrupting existing operations.

Thursday, September 3: 10:30 - 11:15 am

Creating Mobile Voice & Video Applications

Voice over IP use is becoming more significant within the enterprise. As more executives become 'road warriors' it will be crucial to develop a mobile VoIP application that rivals PSTN and mobile phone quality. The speakers will discuss some of the more challenging components to consider when working to ensure a quality VoIP system, including choosing the correct speech codec, the impact of latency, and jitter buffer design. This session will also address in depth comparisons of how two 'game changing' mobile operating systems, the iPhone OS and Android OS have changed the communications landscape, their inherent challenges and what it means for application developers building solutions for mobile unified communications. This session will also provide insight for product managers who are wondering which to select for their development platform.

Thursday, September 3: 1:00 - 1:45 pm

Leveraging Video in an Enterprise Setting

Video in the enterprise is now a reality. Early adopters are using video conferencing from their conference rooms, laptops and mobile devices. It's no longer a question of how these services will be deployed but when. The main hindrance today is that high-quality video services are still too expensive. In order to reach mass market adoption, these services must be available at a reasonable cost, and at the touch of a button. The speakers will discuss how to create video applications designed for the enterprise setting.

Thursday, September 3: 2:00 - 2:45 pm

Mobile App Stores: The Developer's Perspective

Several mobile carriers, device manufacturers and mobile service providers — including Palm, RIM, Nokia, Google, Samsung and Microsoft — recently unveiled an app store or announced plans for one. This session will offer the developers' perspectives on this new flood of app stores. Is it necessary for them to build an app for each store? What are the pluses and minuses of each store? How do you price things? How is advertising in mobile apps working? The speaker will address these questions and how to handle user perceptions of "quality" and "premium" applications.

Communications Developer Track Sponsored by:



TRENDS IN IP COMMUNICATIONS

Thursday, September 3: 8:30 - 9:15 am

Is VoIP Dead? Where do We Stand?

Some pundits have already proclaimed VoIP to be dead and say we need to move on to the next thing. Is this really true? In this panel, industry experts will talk about the reality of Voice over IP in today's marketplace. In tough economic times, the rollout of VoIP to carriers has slowed in some cases and speeded up in others. Let's take a pulse on what's really happening. The session will answer questions including:

- Have carriers stopped the migration from TDM to IP infrastructure?
- What are hot new use cases driving new VoIP rollouts?
- Is VoIP beginning to show up in the wireless world?

Thursday, September 3: 9:30 - 10:15 am

Mobile UC Market Landscape

The market for mobile unified communications is constantly changing, with vendors adding features and support for third-party systems. This session will delve into the current state of the market landscape, touching on the availability of features for mobile unified communications from an array of vendors each with unique target markets, channels and customers. The fact that customers have so many choices, even given one or more brand of telephony system suggests that the mobile unified communications application has in fact progressed to the point of consistently delivering capabilities that improve the productivity and security of mobile workers. Join this panel discussion to learn about the latest solutions available on the market and — more importantly — learn what questions you should be asking your mobile UC solution vendor before spending your hard-earned dollars implementing a solution.

Thursday, September 3: 10:30 - 11:15 am

Tailoring Fax over IP Survivability

In today's competitive and dynamic global business world, communication speed is critical to success. Organizations must cost-efficiently process contracts, invoices, purchase orders, and other legally binding, mission-critical documents. The fundamental business value of fax is: low costs, format insensitivity, ubiquity and global standardization, as well as transport velocity, security, and general robustness. Any downtime associated with efficient fax communications can potentially adversely impact employee productivity, revenue, customer service, compliance processes, and even corporate reputation. This session highlights the need for IT/network administrators, architects and business leaders to better understand the tradeoffs associated with different Fax over IP (FoIP) survivability" solutions. The adoption of a specific

survivability strategy should not compromise the overall fax server solution's scalability features and security attributes. This technical presentation will reveal the parameters of IP-optimized, fax "survivability" solutions for accelerating the ROI case for UC, bearing in mind today's economic challenges.

Thursday, September 3: 1:00 - 1:45 pm

When Voice Meets Web 2.0

As with all technologies, voice communications continues to evolve in unexpected and innovative ways. Voice 2.0 is the concept of merging voice and data technologies to service businesses and lifestyles in ways never before dreamed possible. As a result, innovative start-ups are giving us new ways to manage our social network, schedule conference calls, avoid long distance fees, and navigate phone menus. Imagine having voice or calling preferences automatically set based on a person's location or movements. Or the ability to automatically record, transcribe, and index conversations with customers that automatically initiate service changes without a representative's input or interactions. This is the type of evolution that will be available in Voice 2.0.

Thursday, September 3: 2:00 - 2:45 pm

Using Social Network Analysis to Retain Customers & Increase Revenue

One of the most pressing challenges facing service providers today is the need to retain and expand the customer base in the midst of a cost-conscious, price-sensitive environment. With products commoditized and margins slashed, providers are in real need for tangible solutions that allow them to better understand and serve the evolving demands of their customers. This vendor-neutral session examines how Social Networks Analysis (SNA) solutions can help service providers increase retention, build customer loyalty, promote new services, and improve profitability. The session would discuss the mechanics behind SNA, how it maps customer interactions and interfaces with core CRM infrastructure to deliver useful, actionable data to providers. The session would incorporate case studies to illustrate how SNA solutions work in a real-world environment.

OPEN SOURCE

Thursday, September 3: 8:30 - 9:15 am

How Open Source Spurs Innovation

How the open source development process works, Digium's role in that as it relates to Asterisk, trends in open source and why businesses are choosing open source for UC deployments. If the main benefits of open source are cost savings, stability, interoperability, rapid development & customization, when you're looking for an inexpensive, stable, UC solution that interoperates with all of your communications solutions and can be customized when necessary, Open Source is the only answer.

Thursday, September 3: 9:30 - 10:15 am

Premise or Hosted Solutions? Why Not Both?

Confused about which IP PBX architecture makes the most sense for your business? You may already be familiar with traditional Premise based systems as well as newer Hosted solutions, but had a difficult time deciding between the mix bag of pros and cons of each. This presentation investigates Hybrid-Hosted architecture, which combines key elements of both a hosted and premise system. Similarly to a premise based solution, the customer buys and owns the IP PBX equipment, but the vendor monitors and helps manage the equipment from its secure data center. We will investigate each approach and explain the advantages and disadvantages of each. Finally we will provide an easy to follow checklist to help those in the market analyze their needs and identify the smartest choice for their needs.

Thursday, September 3: 10:30 - 11:15 am

Open Source Telecommunications: Enabling Anyone to Build a Bad Telephony Application

Open-source has made it possible for nearly anyone with a bit of development background to create a telecom application or add telecom functionality to a business process. However, open source does not help developers make usable TUIs (telephony user interfaces). Many of the IT or Web developers that are now attempting to telecom enable their applications would benefit from understanding the rules for good IVR and telecom application interface design that were developed during the late eighties and early nineties.

As it was in the early days of PC based telephony, many new developers risk creating nearly un-navigable DTMF telephony interfaces to their applications. This presentation will discuss the details of designing application interfaces that need to be used in a "listen only" mode. This discussion will include good prompt design, application flow and menu design for both DTMF and ASR implementation.

Thursday, September 3: 1:00 - 1:45 pm

Leveraging Open Source for Contact Center ROI

Today's contact centers face unparalleled challenges – an increasingly competitive landscape where every customer service interaction is critical, each qualified prospect is precious, and technology is increasingly called upon to deliver more performance using fewer people – all with flat or reduced budgets... This session discusses the role of transformational open-source technologies like Asterisk and how they are steadily unseating traditional platforms.

Thursday, September 3: 2:00 - 2:45 pm

Open Source: Lessons Learned

This panel of industry experts will address the most important issues to consider when deploying Asterisk in Enterprise situations, and how to avoid the most common mistakes that Enterprise or SMB customers make during roll-out.

WINOG @ ITEXPO

Track 1: Broadband Stimulus Workshop *Presented by the WiNOG Grants Coalition*

The WiNOG Grants Coalition is a not for profit (NFP) business association that was established to help rural broadband providers take advantage of Broadband Stimulus Program Funding. The WiNOG Grants Coalition helps service providers draft, implement, deploy and audit their funding applications and manages project implementation and funding administration and audit in a cost-efficient manner.

More information can be found online at: <http://www.winog.org>
It is being said that the Broadband Stimulus Rules will employ a "point scoring" system very similar to the RUS Community Connect Program of 2009. Nevertheless, the Broadband Stimulus Workshop will discuss the latest updates in regards to Stimulus Act Strategies, lessons learned from the round 1 application process and updates for round 2 and 3.

Presenters will include:

- Former RUS Community Connect Grant Winners
- Applicants who have submitted Stimulus Proposals
- Public Policy Analysts who are working with NTIA & RUS

Tuesday, September 1: 8:30 am

Program Overview

This session will provide an overview of the Broadband Stimulus Program, a review and update of the Round 1 NOFA Rules and Application Processes, upcoming changes to Round 2 NOFA Rules and a forward-looking timeline for the remainder of the process.

Tuesday, September 1: 9:45 am

Competitive Update – Broadband Strategy

This session will discuss the competitive landscape of current Round 1 and potential future Broadband Stimulus applicants. In relation to the recently released FCC Broadband Strategy Report, the strategic positioning and the relative strengths and weaknesses from both a policy and technological front will be discussed.

1. Rural ILEC Strategies
2. Rural MSO Strategies
3. Independent WISP/WiMAX Strategies
4. Enterprise / Critical Institution Strategies
5. Opportunity Organization Strategies
6. Broadband Adoption & Application Strategies

Tuesday, September 1: 11:00 am

Application: Putting it Together

This session will discuss the nuts and bolts of putting together a Broadband Stimulus application. Applicants with extensive RUS and Round 1 Application experience will present their experiences and lessons learned throughout this process.

Tuesday, September 1: 1:00 pm

And If I Actually Win?

This session will discuss the implications that come with winning a Broadband Stimulus Grant/Loan. Providers that have gone through the RUS Implementation and Audit process will share their experiences and knowledge in regards to the implementation and closing-out of such a project.

Some pundits have already proclaimed VoIP to be dead and say we need to move on to the next thing. Is this really true? In this panel, industry experts will talk about the reality of Voice over IP in today's marketplace. In tough economic times, the rollout of VoIP to carriers has slowed in some cases and speeded up in others. Let's take a pulse on what's really happening. The session will answer questions including:

- Have carriers stopped the migration from TDM to IP infrastructure?
- What are hot new use cases driving new VoIP rollouts?
- Is VoIP beginning to show up in the wireless world?

WINOG @ ITEXPO

Track 2: ISP Evolution

Wednesday, September 2: 8:30 am

CLEC 2.0

Pro-RBOC legislation over the past decade has virtually eliminated the “easy” CLEC play in regards to reciprocal compensation or UNE-P resale. That said, rumors of the CLEC’s demise have been exaggerated. Learn about providers who are thriving and creating exciting new business models based upon the world of the UNE-L, Central Office and Remote Terminal. Topics discussed include:

1. CO Colocation
2. ADSL+ Technologies
3. G.SHDL for Metro E over Copper
4. Bundled Voice Services

Wednesday, September 2: 9:45 am

WISP 2.0

In what was originally dubbed as “junk” bands due to the plethora of devices occupying spectrum only because RF energy was a byproduct of their operations, entrepreneurs across the country have turned spectrum that was formerly the exclusive province of microwave ovens into a viable means of delivering last-mile connectivity. With large regional networks spanning large geographical and statewide areas, the license-exempt WISP has spun wheat into gold and created an industry consisting of over 2,500 independent operators servicing over 3 million broadband access across the United States. This session will discuss the future evolution of the WISP.

Wednesday, September 2: 11:00 am

Application Service Provider Route

Some service providers, not wanting into the facilities construction business, have instead opted to take a path towards providing enhanced applications over “dumb Internet pipes.” From VoIP to Hosted Exchange to reselling Gmail, this session will discuss and explore the variety of options available that will enhance the independent service providers offering.

Wednesday, September 2: 1:00 pm

FTTx

Fiber is the end-game for the facilities based provider. This session will discuss the underlying technologies and strategies to be adopted by the Independent Service Provider.

Track 3: Business

Thursday, September 3: 8:30 am

Sales & Marketing: Residential

How does one build a marketing engine that produces, month-over-month, over 1,000 new residential accounts a month? How well do billboards actually work? How does one effectively harness social-networking and word-of-mouth marketing to one’s advantage? This session will discuss and explore successful residential marketing strategies.

Thursday, September 3: 9:45 am

Sales & Marketing: Business

Everyone wants to reach a \$5,000 ARPU, but those customers seldom come knocking on our doors. Business-to-Business sales is a high-touch direct selling world that requires a completely different level of expertise beyond what is known by the traditional residential ISP. Do direct reps work? Does one go commission only? What about channel? This session will discuss and explore successful business direct-sales strategies.

Thursday, September 3: 11:00 am

Regulatory: FCC

How long do I have until F1 copper pair retirement? Do I need to comply with CPNI? What about FCC Form 477? This session, presented by CISPA and Legal Expert Kris Twoomey will provide the latest FCC Regulatory updates and their ramifications to your business.

Thursday, September 3: 1:00 pm

Regulatory: Spectrum

What’s going with 700 MHz? How do I go about leasing EBS Spectrum? Will the upper 3650 Band ever come to fruition? This session, presented by WISPA and Legal Expert Steven Coran will provide the latest FCC Spectrum Policy updates and their ramifications to your business

ASTERISK TRAINING COURSES

Tuesday, Sept. 1 - Time TBD

Introduction to Switchvox



Course Overview

This course serves as a one-day introduction to the Switchvox system. The goals and objectives of this class are to:

- * Explain the role of a Switchvox system within a corporate IT/telephony infrastructure.
- * Familiarize the student with the initial setup and configuration of their Switchvox system.
- * Describe the telephony connections which Switchvox supports and identify the hardware needed to effect this connectivity.
- * Identify the basic characteristics of analog and digital PSTN connections and how they compare and contrast with VoIP.
- * Configure Switchvox to deliver basic PBX functionality including basic call routing, voicemail and directory services.
- * Connect Switchvox to a Voice-over-IP service provider.
- * Show how to use Switchboard application to give users a rich interface with which to interact with the system.

Course Outline

- * Introduction to Switchvox | What is Switchvox? | Where does it fit in my infrastructure? | What hardware is available? | What different versions of the software are available?
- * Preparing for a successful Switchvox deployment | Power | Network | Physical mounting | Analog/digital connectivity | Setting expectations for change | Choosing handsets
- * Initial Configuration | Turning on your Switchvox system for the first time | Network configuration | System registration, activation, and updates
- * Creating extensions | Configuration for a physical handset | Configuration for a soft phone | Creating a numbering plan | Setting up voicemail | Setting up music on hold | Setting up conference rooms
- * Auto-attendants
- * Connecting to the outside world | Analog telephony | Digital telephony | VoIP fundamentals | VoIP and your network | Connecting to analog circuits | Connecting to digital circuits | Systems administration | Reporting | Backups | Troubleshooting and diagnostics
- * Q and A

Participants receive a student kit which includes:

- * Digium TDM411B Analog card (1 FXO port + 1 FXS port)
- * Polycom SoundPoint@IP 330 SIP Phone
- * Asterisk Tote Bag
- * Asterisk T-shirt
- * Asterisk Swag Kit (Asterisk calculator, pen, mousepad.)

Course Prerequisites

This is an entry-level course; There are no prerequisites to attend this training.

Wednesday, Sept. 2 - Time TBD

Asterisk 123



Course Overview

The Asterisk 123 course is a gentle introduction to the Asterisk Open Source PBX. It introduces the student to the role that Asterisk many roles that Asterisk can play, and walks them through setting up Asterisk for the first time. At the end of the course, the student should be able to:

- * Identify the purpose and primary functionality of Asterisk as a PBX and as an application development platform.
- * Describe the telephony connections which Asterisk supports and identify the Digium hardware needed to effect this connectivity.
- * Identify the basic characteristics of analog and digital PSTN connections and how they compare and contrast with VoIP
- * Configure Asterisk to deliver basic PBX functionality including basic call routing, voicemail and directory services.
- * Learn the basics of becoming an Asterisk administrator.

Course Outline

- * Intro to Asterisk | Capabilities and roles of Asterisk | Different ways of licensing Asterisk | Overview of the Asterisk architecture
- * Connecting your first phone to Asterisk
- * The Asterisk dialplan | Contexts, extensions, priorities, and apps | "hello world" | Auto-attendants/voice menus | Voicemail and a dial-by-name company directory | variables, expressions, and conditionals
- * Telephony | Circuit-switched networks vs. packet-switched networks | How does analog telephony work? | Analog only on the last mile | Digital audio / sampling | VoIP fundamentals | Introduction to the SIP and IAX VoIP protocols | VoIP and your network | Connecting Asterisk to a VoIP provider
- * Questions and Answers

Participants receive a student kit which includes:

- * Digium TDM411B Analog card (1 FXO port + 1 FXS port)
- * Polycom SoundPoint@IP 330 SIP Phone
- * Asterisk Tote Bag
- * Asterisk T-shirt
- * Asterisk Swag Kit (Asterisk calculator, pen, mousepad.)

Course Prerequisites

This is an entry-level course; There are no prerequisites to attend this training.

FtOCC @ ITEXPO



FtOCC Technician - (trixbox Pro and PBXtra) September 1-3, 2009

FtOCC Technician is a three-day technical certification course designed to train resellers and consultants to support their clients running trixbox Pro and PBXtra systems. Taught by Fonality technical support instructors and designed for Linux system administrators, FtOCC Technician dives deep into platform and application installation, carrier setup and integration, network configuration, echo causes and remedies, and other common issues. This course is required for Fonality Certified and Premium Resellers.

What do you get?

- * Free trixbox Pro demo kit w/Call Center Edition and support
- * Discounts on PBXtra and trixbox Pro licenses*
- * Discounts on Fonality support*
- * FtOCC Certified polo, tshirt, and hat
- * Upon acceptance into Fonality's Ultimate Channel Program

During the course, we will cover:

- * Tier 1 and Tier 2 level troubleshooting
- * LAN & WAN environments
- * Proper system hardware configuration
- * trixbox and PBXtra installation guidelines
- * IP phone and SIP provisioning
- * Proper router and firewall configuration

Who Should Attend?

- * Resellers and consultants growing their trixbox and PBXtra businesses
- * Linux technicians and engineers
- * Fonality Certified and Premium resellers

Course Objectives:

At the end of the class you should:

- * Install and configure trixbox CE, trixbox Pro, and PBXtra with confidence
- * Resolve installation, administration, and usage problems more quickly
- * Provision your own phones, thereby decreasing the turnaround time required for add-on phones and devices!
- * Experience fewer problems by avoiding the usual "beginner" mistakes!
- * Have an in-depth understanding of how trixbox and PBXtra work (product, process, policy, protocol)
- * Receive full reseller discounts (for signed Authorized and Premium resellers only)
- * Receive direct priority Level 2 access to trixbox and PBXtra support services (for signed Authorized and Premium resellers only)

FtOCC Technician Agenda:

Day 1: September 1, 2009 –

Moves/Adds/Changes, Installation, and Pre-Sales

Pre Sales
Installation Best Practices
Installation Lab
MAC / HUD Overview
MAC Lab
Case Studies
Advanced Call Menus

Day 2: September 2, 2009 –

Carriers, Networking, Echo

PRI, PSTN, and VoIP
Networking Fundamentals for VoIP, UDP vs. TCP Networking
Troubleshooting
Call Traces Lab
Phone Troubleshooting
Grepping for Channels Lab
Hardware Troubleshooting

Day 3: September 3, 2009 –

Integration, Case Studies, Troubleshooting

Backup Servers Lab
Cards Page Lab
Click-to-Call Lab
Fixing Broken Phones Lab
Recorded Calls Lab
Perl Teaser!
Class Summary/Wrap-up,
Presentation of Certificates
Executive Roundtable

NOTE: A practitioner's knowledge of Linux is required. Without it, you will likely not gain much value from the class, as we start day one from the Linux command line interface and build from there. In particular, the hands-on laboratory exercises will require a comfort with basic CLI commands, simple scripting, and the ability to quickly scan and analyze system and application logs.

Questions? Call 310-861-4300 *8300

EXPLORING IP / ETHERNET BACKHAUL

Wireless Broadband Training - Course 1: Exploring IP / Ethernet Backhaul

*Instructor Led / Duration: 2 Days
Tuesday-Wednesday, September 1-2, 2009*

The 4th generation (4G) of wireless technologies promises a much higher air interface data rate (over 100 Mbps) to users while reducing the cost per bit for wireless service providers. The current T1/E1 backhaul will not be able to support the high data rate with reasonable costs. The backhaul is already becoming the bottleneck in the existing 3G networks and will continue to be a challenge for emerging 4G networks. These networks require IP based broadband backhaul solutions.

This course provides the background and solutions for IP backhaul planning for 3G/4G radio networks, starting with a review of the trends in 3G/4G wireless data services and related backhaul challenges. An overview of IP/MPLS is given since it is seen as an emerging technology for backhaul operation. Finally, deployment considerations and a backhaul migration path are discussed along with an exercise to calculate the backhaul requirements.

This course is designed for those involved in planning, design and engineering of 3G/4G backhaul systems. It is suitable for backhaul network engineers and managers involved in deployment and operation of 3G/4G networks.

Learning Objectives

After completing this course, the student will be able to:

- List the requirements for 3G/4G backhaul
- Describe the challenges for 3G/4G backhaul
- List wireless network backhaul options
- Discuss the role of IP in cellular networks
- Explain ATM/TDM benefits, operations and QoS support
- Explain IP/MPLS benefits, operations and QoS support
- Explain Carrier/Metro Ethernet benefits, operations and QoS support
- Describe benefits, challenges and applications of wireless backhaul solutions such as microwave and WiMAX
- Compare different backhaul facilities and explain the pros and cons of the available solutions
- Apply the QoS concepts in IP backhaul
- Sketch the 3G/4G IP backhaul deployment architecture
- Apply traffic models to forecast backhaul requirements and calculate link bandwidths
- Calculate protocol overhead for various backhaul options for voice, Web, video etc.

Suggested Prerequisites

- ATM and IP Fundamentals (Instructor Led)
- Basic knowledge of telecommunications (T1, SONET,..)

1. The "Big Picture"

- 1.1. 3G/4G data services requirements
- 1.2. 3G/4G wireless network architectures
- 1.3. 3G/4G backhaul requirements and challenges
- 1.4. IP in wireless networks

2. Wireless Networks Backhaul Options

- 2.1. Transport technologies landscape
 - 2.1.1. Various L1 & L2 protocols
- 2.2. TDM – T1/E1
- 2.3. ATM
- 2.4. IP/MPLS
- 2.5. Metro/Carrier ethernet
- 2.6. Wireless backhaul – Microwave/WiMAX

3. IP/MPLS Technology and Operations

- 3.1. Motivation and benefits
- 3.2. Network architecture
- 3.3. Key concepts
- 3.4. IP network routing & operation scenarios
- 3.5. MPLS AToM/Pseudowire
- 3.6. VPWS/VPLS
- 3.7. QoS support
- 3.8. Protocol overhead calculations

4. Metro/Carrier Ethernet Technology & Operations

- 4.1. Motivation and benefits
- 4.2. Network architecture
- 4.3. Key concepts
- 4.4. IP Network routing and operation scenarios
- 4.5. CoE
- 4.6. QoS support
- 4.7. Protocol overhead calculations

5. Wireless Backhaul Technology and Operations

- 5.1. Motivation and benefits
- 5.2. Network architecture
- 5.3. Key concepts
- 5.4. IP network routing & operation scenarios
- 5.5. QoS support
- 5.6. Protocol overhead calculations

6. IP Backhaul Deployment and Planning

- 6.1. Deployment and migration
- 6.2. Traffic forecast and modeling
- 6.3. Capacity planning considerations for 3G/4G RAN
- 6.4. Bandwidth and capacity computation
- 6.5. Exercise

MASTERING LTE

Wireless Broadband Training - Course 2: Mastering LTE

Instructor Led / Duration: 2 Days

Tuesday-Wednesday, September 1-2, 2009

Long Term Evolution (LTE) is a radio technology based on OFDM and MIMO technologies. LTE provides much higher data rates (over 100 Mbps) to users while reducing cost-per-bit for service providers. This is very exciting to wireless operators who are eager to deploy multimedia rich Internet content over a wireless medium with seamless access anywhere, anytime. This course describes the simplified architecture of LTE and moves on to OFDM and MIMO. The course also covers the downlink and uplink frame structure, OFDM operations at the physical layer, and resource management and scheduling considerations at the MAC layer. It steps through the system acquisition, call setup, traffic operations and handover. The deployment and interworking issues with UMTS/GSM and 1x/1xEV-DO networks are also explored. In summary, this course provides a comprehensive overview of LTE technology. Course 2 Outline: Mastering LTE

This course provides a comprehensive overview and a technical introduction for LTE.

It is suitable for engineers in network planning and design, product design and development, network deployment, network performance, and network operations.

Learning Objectives

After completing this course, the student will be able to:

- List the motivating factors for 4G
- List the LTE targets and building blocks
- Describe the use of OFDM and multiple antenna techniques in LTE
- Explain the network architecture of LTE
- Describe the key concepts in LTE air interface
- List steps for network acquisition and call setup
- Describe the traffic operation in DL&UL
- List handover procedures
- Explain LTE interworking with 1x/1xEV-DO and UMTS/HSPA
- Identify the planning aspects of deploying an LTE network

Suggested Prerequisites

- LTE Overview (eLearning)

1. Introduction

- 1.1. 4G technology and market drivers
- 1.2. Goals and requirements of LTE
- 1.3. LTE/EPC building blocks

2. LTE Networks

- 2.1. Evolved Packet Core (EPC)
- 2.2. Interfaces and protocols
- 2.3. Evolution path from current networks

3. LTE Air Interface

- 3.1. Key concepts
- 3.2. OFDMA and SC-FDMA
- 3.3. PHY frame structure
- 3.4. Physical channels
- 3.5. Physical layer operations

4. Network Acquisition and Call Setup

- 4.1. System acquisition and idle mode operations
- 4.2. Random access procedures
- 4.3. Data call setup

5. Operations – Data Transmission and Handover

- 5.1. Scheduling procedures
- 5.2. Traffic operations in DL & UL
- 5.3. Tracking area
- 5.4. Handover procedures

6. Interworking

- 6.1. Interworking with 1x/1xEV-DO
- 6.2. Interworking with UMTS and GSM
- 6.3. Interworking with other 4G systems

7. Deployment Considerations

- 7.1. Frequency planning
- 7.2. Backhaul planning
- 7.3. EPC network planning

Appendix A: OFDM Essentials

- A.1 OFDM concept and signal definition
- A.2 Cyclic prefix
- A.3 OFDMA concept
- A.4 OFDMA transmitter and receiver

Appendix B: Multiple Antenna Techniques

- B.1 Transmit diversity (SFBC, FSTD)
- B.2 MIMO (SU-MIMO, MU-MIMO)

4G WIRELESS EVOLUTION

Exploring the Opportunities and Challenges of the 4G Future

The evolution of the mobile broadband network to the Fourth Generation (4G) wireless network will provide for the delivery of high speed video, voice and data services directly to a cellular handset or handheld Internet device. 4GWE Conference will provide attendees with objective, unbiased, information on all aspects of the industry's evolution to a 4G network. The 4GWE Conference will educate carriers and

wireless industry professionals on the applications, technology alternatives, time frames, opportunities and challenges in the new age of mobile broadband.

4GWE conference explores where the impact of 4G will be most contentious, beneficial, and profitable!

KEY 4GWE CONFERENCE TOPICS

- How the history and evolution of the cellular network will in part determine the evolution to 4G
- The major differences between the competing technologies of WiMAX and LTE
- The killer 4G business and consumer applications
- 4G's effect on social networking applications
- How 4G will significantly change content distribution.
- Where venture money will be spent
- The development and progress of 4G Mobile Internet Devices.
- How 4G applications will drive future network requirements and implementations.
- The role of regulation in wireless innovation and the evolution to 4G.
- Femtocells role in the delivering 4G wireless services and applications.
- How Device manufacturers will drive demand and market share for 4G services
- New 4G business models that will take us beyond the MVNO models of the past.

CONFERENCES

The 4GWE 6-track conference program covers a wide range of critical issues – technical, financial, programming and regulatory – affecting the industry's transition to a truly broadband 4G wireless network.

Conference Tracks include:

- 4G Applications and Business Models
- WiMAX Adoption, Standards and Devices
- LTE, Time frames, technical requirements, vendor solutions, and business case issues
- Alternative 4G Delivery Strategies, White Spaces, WiFi, Dual Mode devices and Femtocells.
- Advocacy Issues, The Broadband Stimulus Plan, Carterphone 2.0, and the 4G regulatory framework
- Wireless Backhaul, 4G capacity and processing requirements and alternative solutions.

WHO SHOULD ATTEND?

The 4G Wireless evolution will be a symposium where strategists, architects and network planners will join with speakers and industry insiders leading the charge to our massively mobile future.

Companies Who Must Attend:

- Mobile Network Operators
- Fixed Carriers
- Handset Manufacturers
- Mobile Internet Device Manufacturers
- Application Providers
- Investment Banking/Venture Capital/Private Equity
- Telecom Network Infrastructure Vendor
- Network Services Provider/ISP/ILEC/CLEC/ WISP/MSO

4G WIRELESS EVOLUTION

Tuesday, September 1, 2009 - Track 1

Mobile Broadband Applications

This track will explore 4G applications as well as the required business models that will enable carriers to monetize these applications.

9:00 a.m. – 10:15 a.m.

Mobile Broadband:

New Applications and New Business Models

Brough Turner, CSO, Dialogic Corporation (Moderator)

Whether it's LTE or WiMAX or local WISPs using combinations of Wi-Fi, WiMAX and other technologies, we are on the verge of having affordable mobile broadband in the US (it's already available in Scandinavia and becoming available elsewhere in the EU). What services can be provided "over the top" and what services need or can benefit from operator capabilities (QoS, security, ...)? The iPhone store, Android store and similar initiatives suggest power is shifting away from the operators and into the hands of the end user. How can operators leverage their core capabilities (QoS, security, billing, customer relationships, call detail, ...) to provide applications and remain relevant to their customers?

10:30 a.m. – 11:45 a.m.

Social Applications: The Mobile Imperative

Timothy Jasionowski, Director and Sr. Technologist, Nokia

Social networking applications are a huge area of interest among mobile web users. The broadband consumer's desire for social networking is related to the features and functions available through their network operator. Network operators, in their quest to attract more subscribers, will "bundle" mobile Internet Devices with their network offerings. What new service opportunities does this provide for the carrier? Should we consider this the new world of the virtual operator?

12:40 p.m. – 2:00 p.m.

Giving Voice to 4G

Don Troshynski, Technical Director, Acme Packet

Akshay Sharma, Research Director, Gartner Dataquest

Mobile operators face a double challenge: Evolving their core to 4G LTE or WiMAX for blazing broadband access speeds AND transitioning the core service network to IMS for voice and interactive communication services. Defined by the 3rd Generation Partnership Program (3GPP) researchers, IMS is the next gen architecture for mobile communication services, and while it represents the interests of the operators, it is not the only option for delivering voice over 4G RANs. Greenfield operators, while starting from a clean slate, also face a myriad of architectural choices for voice services. This session will explore the following questions and issues:

- What are the architecture and infrastructure choices for incumbent and greenfield mobile operators for voice services?
- Where should service providers locate session-oriented service delivery intelligence and control— in the core or the edge? What's right and wrong about each approach?
- What are the requirements for secure and interoperable wireless services? Does IMS deliver all that's necessary? What additional issues must be considered for FMC and blended wireless-wireline access networks?

2:00 p.m. – 3:15 p.m.

The Ecosystem of Application Developers

MODERATOR: Alan Quayle, Founder, Alan Quayle, Business & Service Dev.

What draws developers together to work on a specific phone, or a specific platform? Is the land grab for carriers limited to the environments they support? Or will applications continue to be driven by Internet strategies. Does the Open Source movement represent the future for us all?

3:15 p.m. – 4:30 p.m.

Enabling the App Store:

The Network Operators Perspective

Liliane Ofredo (Moderator), CEO, The Sannine Group, LLC

Eric Rosenfield

Bill Goodman, Director, Verizon

The iPhone is a lesson in hardware and software optimization, but can the network add even greater value, what is the role of a network operator in delivering features and functions. How should these solutions be optimized. Does the network develop widgets? Are their APIs for the network that allow the carrier to differentiate beyond the device/ As LTE comes to the US and the phones become available with any carrier, what can the carrier do to make their APP store solution more valuable?

Tuesday, September 1, 2009 - Track 2

WiMAX Adoption, Standards and Devices

This track examines WiMAX opportunities as well as its' limitations. These sessions will provide attendees with a clear picture of the role that WiMAX will play as a 4G evolutionary technology

9:00 a.m. - 10:15 a.m.

Beyond the Phone: Mobile Internet Devices

Patrick Scannell, Director, Market Development, Clearwire

Mobile Internet Devices will enable exciting new applications for the broadband consumer. How will smartphones and netbooks change the way we work and play. What are the major differences between these two categories of devices and will they eventually blend into one type of device? What unique services will MID's provide access to? How will "WiMAX ready" MID's accelerate mobile broadband demand? How quickly will these devices be adopted and what impact will they have on demand for 4G Wireless Services?

10:30 a.m. - 11:45 a.m.

Does your 4G Device Communicate or Compute?

MODERATOR: David Yedwab, Partner, Market Strategy and Analytics Partners

Graham Celine, Azimuth

Paul Vroomen, CEO, Sandbridge Technologies

Cell phones provide texting, email, browsing and picture taking capabilities. Many consumers think of their phone as a computer while the computer manufacturers see computing opportunities for mobile internet devices. What leading applications will drive manufacturers to build a cell phone that computes or a computer to communicate? In a 4G world, how many devices is the consumer willing to own?

4G WIRELESS EVOLUTION

12:45 p.m. – 2:00 p.m.

The IEEE's Wireless Ethernet Keeps Growing and Going

Fanny Milinarski, President octoscope

The 802. Specifications have become part of our daily life but often do not get credit for their ability to deliver product that is both interoperable and service independent. This session will look at both WiFi and WiMAX as potential 4G evolution technologies and will examine the history of spectrum licensing and the impact of "old" design issues on the 4G network of the future.

2:00 p.m. – 3:15 p.m.

LTE vs. WiMAX

MODERATOR: Joe Mazzeo, Founder, Crossfire Consulting

The migration to LTE and WiMAX may not be an "either / or" discussion, but a story of blending. Service Providers must be ready to adopt an approach that will support the speeds and data throughput requirements that wireless customers will expect. This session will look at the real differences in these technologies and show how both carriers and consumers will adopt them. The session will examine the alternative technologies as well the migration issues that service providers must take into consideration when transitioning to a WiMAX or LTE platform. The session will also discuss how these two technologies will co-exist.

- Are the speeds of WiMAX going to differentiate applications?
- Will 4G applications require more throughput?
- When will Interoperability be achieved for WiMAX?
- How will legal and commercial issues impact this evolution?

3:15 p.m. – 4:30 p.m.

Stimulating Rural WiMAX

Bob Mazer, ACP

WiMAX solutions are viewed as an alternative service strategy for Rural and remote access areas. What aspect of WiMAX technology makes that long last mile cost effective? Why has the use of the Fixed WiMAX made an effective service for greenfields and rurals? What devices are installed at the customer's

Wednesday Sept. 2, 2009 - Track 3

LTE From Cradle to Grave: Time Frames, Technical Requirements, Vendor Solutions, and Business Case Issues

This track will focus on LTE technologies and will provide attendees with an understanding of how LTE will be delivered, what applications it will support, and how it will co-exist with WiMAX. The track will also address the critical business case issues that must be addressed to ensure profitability.

8:30 a.m. – 9:45 a.m.

Development Tools for 4G Hardware and Software, Part 1

Frank Schirrmeister, Director, Product Marketing, System-Level Solutions, Synopsys, Inc

The mathematical theory often associated with wireless and mobile physical layer algorithms are complex and require a lot of thought when looking for new solutions in the wireless network. OFDM and MIMO are at the base of these algorithms. These sessions provides an intuitive and straightforward view beneficial to a wide audience of engineers and project managers.

10:00 a.m. – 11:15 a.m.

Development Tools for 4G Hardware and Software, Part 2

Frank Schirrmeister, Director, Product Marketing, System-Level Solutions, Synopsys, Inc

Designing for LTE Upstream and Downstream needs to be considered when discussing devices and the services they will support. This session panel will share their experience in building solutions with the network of the future in mind.

11:15 a.m. – 11:40 a.m.

Using Design to Compel the User Experiences

Ari Virtanen, Eltrobit Software

As the market heads toward the broadband wireless network, the issues facing manufacturers and services providers relate to the question "how do you deliver in form factors that match the expectation of the user? These days the bar has been raised not only in the hardware but in the software integration.

11:40 a.m. – 12:15 p.m.

If You Build It, Will They Come?

Bassamm Hajhamad, Practice Lead, InCode

Migrating to the 4G is not as simple as one would like, and many questions remain as to what makes the most sense to offer as services. What services can be added to the mix that will increase ARPU, or should we expect that the enabling third parties is the best option to increase revenue? When should Voice be considered as an application and not managed as it is today? These are the types of questions facing the service provider and the device manufacturer.

4G WIRELESS EVOLUTION

1:10 p.m. – 1:35 p.m.

Wireless Security: The Other CIA

Joe Mazzeo, Founder, Crossfire Consulting

James Marcus, Crossfire Consulting

Robert Klerer, Crossfire Consulting

When it comes to security issues the concerns are about Confidentiality, Integrity and Availability [CIA]. When the 4G backbone is in place the same troubles that plague the Internet will be extended to the core of the wireless network and will be present a new untested point of attack. Looking at the common problems being addressed with security solutions, we will look at the risks and probabilities of attacks on 4G networks.

1:35 p.m. – 2:00 p.m.

While We Are Waiting! WiFi Dual Mode

Anton Wahlman, Analyst

Dual mode phones are delivering services to the customer on the best available network. What is the opportunity for carriers to make this part of the broadband strategy for service deployments? Are the systems using these services tightly integrated to federation strategies? Does it rely on the good will of open networks?

Wednesday Sept. 2, 2009 - Track 4

Alternative 4G Delivery Strategies: White Spaces, WiFi, Dual Mode Devices, Femtocells

8:30 a.m. – 9:45 a.m.

Our G-enealogy

Brough Turner, CSO, Dialogic Corporation (Moderator)

The Generations do not flash cut from one version to another so a 4G network infrastructure should not be considered an end point, but a process. Looking at the history of cellular technology helps us gain an understanding of the converging 4G model of the world. Based on cellular technology, and the progress to date, how long will it take for Long Term Evolution (LTE) to be delivered? Where do we stand in the process of delivering wireless broadband services?

10:00 a.m. – 11:15 a.m.

FemtoCell Solutions

Femtocell solutions blend the home network with the carrier's service enabling seamless connectivity and offering an alternative mobile broadband solution. Femtocells improve indoor coverage while easing the capacity and backhaul costs in a carrier's network. The question is what should we expect a femtocell to do? Is it simply another device behind the wireline broadband equipment? Does it represent an opportunity for tighter integration between the services. How do Femtocell devices fit into triple play offerings?

11:15 a.m. – 11:40 a.m.

Self Organizing Networks

Mike Seymour, Vice President, Alcatel Lucent

As the network evolves, smarter ways to optimize become available. Self Organizing networks improve network efficiency, network reliability and performance. Best of all it has a direct impact on Opex. What is the impact of Capex and Opex with LTE? How SON and converged RAN reduce the costs of LTE? What are Self-Optimizing Networks and how will SON benefit the service provider?

11:40 a.m. – 12:15 p.m.

Wireless Video Strategies

Joe Mele, Dialogic Media Labs

The world of codecs keeps expanding, but the goal is ubiquity is still in the minds of every video advocate. Rather than expecting standards to force convergence, what can technology do to blend the video? What are the implications as we move toward a totally IP environment.

1:10 p.m. - 1:35 p.m.

AT&T Industry Perspective:

Enabling the Network of the Future

Siroos Afshar, AT&T, Asst VP, Services Core & Premises Architecture

ATT has developed a Common Architecture for Real Time Services over IP called (CARTS). As they manage the service models for their converged network offerings what should we expect service delivery to look like in a 4G environment.

1:35 p.m. - 2:00 p.m.

LTE When Worlds Collide

Steve Snyder, CEO and President | Decision Strategies Int'l

The promise of LTE is not just bandwidth its a cohesive IP backbone that enables the carrier to support a variety of services. What should we expect the model of services in the future. What new markets open up with mobility, machine to machine and functions like presence and location. Will the carrier be the benefactor or will applications emerge independent of them?

September 3, 2009 - Track 5

Advocacy Issues, Broadband Stimulus Plan, Carterphone 2.0, 4G Regulatory Framework

8:30 a.m. – 9:45 a.m.

The Broadband Stimulus Package:

How Does it Impact You?

Todd Daubert, Partner, Kelley Drye & Warren LLP

Glenn Richards, Partner, Pillsbury Winthrop Shaw Pittman LLP

Congress and President Obama's administration have authorized \$7.2 billion in broadband infrastructure spending as a part of the 2009 Stimulus Package. The difficult question going forward is 'how do we apply these funds to create sustainable profitable business opportunities?' What business models and technology solutions will lend themselves to achieving the objectives of this stimulus program? Are these allocations for carriers only or will other companies have the opportunity to reap benefits as well. This session will seek to answer a myriad of questions surrounding this opportunity.

4G WIRELESS EVOLUTION

10:00 a.m. – 11:15 a.m.

White Space – Strategies

*MODERATOR: Azita Arvani, President, The Arvani Group
Steve Sharkey, Dir., Spectrum & Standards Strategy, Motorola
Fanny Mlinarsky, President, octoscope*

Now that the FCC allows the use of unused TV spectrum, manufacturers are developing wireless devices that enable 4G services. Who will utilize these devices and what applications will be developed? How will these devices be sold? Does white space have the potential to be a mesh network? Can head ends be redesigned to take advantage of this last mile solution? This session will examine the regulatory framework that will be applied to ensure the use of white space does not interrupt protected services such as TV and microphones. The session will also look at White Space's range of penetration and what advantages this provides over WiMAX and LTE solutions.

11:30 a.m. – 12:00 p.m.

Voice over LTE via Generic Access (VoLGA)

Steve Shaw, Kineto Wireless

The VoLGA Forum seeks to enable mobile operators to deliver mobile voice and messaging services over LTE access networks based on the existing 3GPP Generic Access Network (GAN) standard.

1:45 p.m. – 2:45 p.m.

Beyond the App Store: Smarter Applications for 4G

Mary Cronin, Professor Information Systems Department, Boston College

Why limit ourselves to smart phones when smart applications can mean smart appliances? This panel looks at the opportunities for solutions that address smart energy, automotive, smart home and Machine to Machine (M2M) apps and the advantages of 4G for smarter, ambient or high speed infrastructure applications. Speakers will discuss solutions being developed by IBM, Microsoft, Qualcomm and T-Mobile.

4GWE Conference Diamond Sponsors:



Thursday, September 3, 2009 - Track 6

Wireless Backhaul, 4G Capacity & Processing Requirements and Alternative Solutions

8:30 a.m. – 9:45 a.m.

Testing 4G Ahead of the Curve

*Graham Celine, Azimuth
Fred Sammartino, Empirex*

With 4G deployments in various stages, the real issues are about the applications on the broadband Internet as it supports wireless. Where will the bottlenecks be with the network, in the air, at the core, in the device? What strategies for testing the legacy wireless network no longer apply? How does OFDM and MIMO impact service delivery? Will the lessons of VoIP on wireline apply to the 4G solutions going forward?

10:00 a.m. – 11:15 a.m.

Migrating the Core: Wireless Backhaul

Joe Mocerino, Fujitsu

With the adoption of data standards for the wireless network, the existing T1s have to be augmented with new capacity and traffic management strategies. However, the history of the Internet has taught us there is a great deal of flexibility in how this traffic is managed and shaped. This session examines the possibilities of deploying solutions such as Metro-Ethernet and WiMAX and the opportunities for new services based on these solutions.

- What are the real capacity requirements for 4G networks?
- Will we always need to convert to circuit switch speeds for backhaul?

11:30 a.m. – 12:00 p.m.

Services Require Systems: OSS in the IP world

David Chambers, Solutions Manager - Mobile at Amdocs OSS Division

For the last decade the management of IP services has been a combination of legacy interface systems with web integration. As we head toward 4G networks, the opportunity to implement greenfield solutions that match our future needs is not only desirable but probably economical. Looking at the path to 4G how can the systems that support 4G be implemented with an open mind for new services?

1:45 p.m. – 2:15 p.m.

CSI: An Autopsy of Public Wireless.

Andy Abramson, CEO, Comunicano

The Autopsy of Public Wireless is about to be performed and you are invited to observe. A team of knowledgeable physicians, experienced in the care and cultivation of the Internet, give their analysis of what went wrong with Public Wireless. This talented group will provide the diagnosis and the cause of death for public wireless as well as the antidotes that must be prescribed to ensure a successful rebirth of public wireless offerings. Additionally, current public WiFi strategists will be invited to talk about their plans for the future.

2:15 p.m. – 2:45 p.m.

Huawei Presentation

RESELLER SOLUTIONS DAY

Wednesday, September 2, 2009 – FREE Workshop for Resellers and Agents

Making Money in IP Communications

Rich Tehrani, President, TMC

Don Gant, VP Bus Dev & Channel Mktg, Iwatsu Voice Networks

Robert Messer, President & CEO, ABP Technology, Inc.

The communications market is filled with opportunity and pitfalls and navigating the field is something which requires experience and collaboration with your peers. In this session, expect an in-depth discussion of everything you need to become successful when selling communications products and services. We will explore unified communications, open source, FMC, WiFi telephony, mashups and CEBP. If you are unfamiliar with any of these acronyms (even if you are) you need to be at this free conference so you can learn what is happening, what is coming and how to benefit from it all.

The moderator of this panel will be Rich Tehrani, ITEXPO conference chairman, TMC president and the communications expert who has helped tens of thousands of resellers worldwide over the years sell PBX, ACD, call center, CTI and VoIP products and services.

This session is a must-attend for anyone and everyone involved in any way with communications sales to SMB or enterprise customers. This includes classic interconnects, data VARs, VADs, security resellers, etc.

Say Yes!

To Unified Communications from the Beginning

Learn why you should be selling and making more money with the right solution. ININ's Software Strategy that has proven to be a better Approach to Complexity. An All-In-One open standard solution that provides the back office architecture (fabric) required for mass adoption. The options for Customers with a migration strategy (work with) or Greenfield (work without) requirements. Desktop productivity and User adoption is also a crucial component of a successful UC strategy with Multi-Media interactions no matter the device, place or user type when you need it.

AXIOM Selling Sciences Program (AXIOM SSP)

Bob Nicols, AXIOM Sales Force Development

AXIOM has over 15 years of history in this field and over that period it has become synonymous with excellence in sales performance. Bob's presentation will be based on the industry-acclaimed AXIOM Selling Sciences Program (AXIOM SSP). AXIOM SSP goes beyond "selling techniques" and illustrates how to implement a logical, repeatable, scientific process for selling. The session will include excerpts from several aspects of the process including prospecting, qualifying, presenting, negotiating, forecasting, plus complex environments and sales management. AXIOM SSP is a proven process and has been adopted by numerous Fortune 500 Companies and hundreds of small to medium-sized businesses in North America.

Best Business Practices for Resellers

Jeanne Leckie, The Leckie Group

Come draw on Jeanne's extensive channel marketing experience in the telecommunications industry. Learn how to strengthen the business outcomes of your customers by improving your selling process, your approach and positioning in a multi-solution, multi-vendor environment. Achieve improved business efficiencies and team productivity with simple business processes. Discover how to uncover the gaps and realign your business and your customer's business model proficiently. This session focuses on the internal and external business matters required to execute in today's competitive marketplace.

**Check www.itexpo.com For Complete Program Information
and Speaker Updates For Each Free Workshop**

SIPERA'S FREE UC SECURITY WORKSHOP

Project UC, Protect UC: Deploying Low-Risk, Secure VoIP & Unified Communications



Wednesday, September 2, 2009

VoIP and Unified Communications (UC) have long held the promise of dramatically reducing your communications costs. But a common stumbling-block hampering adoption is ensuring that all communications are secure and that they support your information security policies.

If your business handles consumer data, credit card information, patient records, student records, proprietary data or intellectual property, then you need to be aware of the security implications of VoIP and UC. Recent real-world deployments of VoIP and UC have demonstrated an emerging set of best practices that enable you to capture the cost benefits of VoIP and UC, while maintaining the security posture essential to your business.

Furthermore, enterprises that have embraced the principles of UC security are proving that they can securely project and extend these communications to external parties, unlocking new ways of collaborating with clients, partners, distributed employees and the supply chain.

This free, 1-day workshop will feature a series of case studies, panel discussions and practical advice for assessing and improving your security posture for VoIP and UC.

Topics to be covered include:

- **UC Security Life Cycle:**
Practical examples of how to apply security policies to VoIP and UC, including architecture analysis tips for your environment
- **Threat Mitigation:**
What types of VoIP and UC attacks are becoming prevalent?
- **Information Security Compliance:**
How mandates for consumer, student and patient record privacy and communications archiving applies in UC and VoIP environments
- **Extended Enterprise:**
UC security architectures for supporting teleworkers, remote offices, virtual enterprises, and distributed call centers
- **Encryption:** Strategies for effective deployment of encryption both inside the enterprise and with external parties
- **Toll Fraud:** Addressing security gaps that create risk of toll fraud
- **SIP Trunks:**
Terminating SIP trunks along with advanced security policy enforcement
- **Business Continuity:** Establishing a secure distributed workforce communications foundation to support Business Continuity Planning, Pandemic Planning, Disaster Recovery
- **Access Control:**
Examples of best practices for authenticating users and granting access to enterprise communications resources, including adopting two-factor authentication for VoIP and UC
- **Security Requirements:**
Evaluation and implementation of VoIP and UC security requirements specific to deployments in Financial Services, Healthcare, Education, Government, Manufacturing, Retail, Distribution/Logistics, Transportation and other industries.
- **How to determine if you are at risk;**
overview and demonstrations of open source
- **UC security assessment tools**

Who should attend? This workshop will feature practical advice and information of interest to:

- Enterprise telephony, telecom, IT and networking managers
- Enterprise information or communications security managers
- Security consultants and practitioners
- Compliance managers and consultants
- Service providers providing SIP trunks and hosted VoIP or UC services
- CTOs, CIOs and other senior executives in enterprises adopting VoIP and UC

About Sipera, Workshop Host

Sipera Systems is a worldwide leader in security solutions for Unified Communications (UC).

Companies across the globe rely on Sipera's solutions to simplify and confidently deploy their VoIP and UC over any network to any device.

Solutions available from Sipera include secure distributed call centers, remote teleworkers, information security and archiving compliance, business continuity and disaster recovery planning, secure SIP trunk termination, and many others.

Sipera's VIPER Lab is the industry's premier provider of VoIP and UC security consulting services, including vulnerability assessments that protect clients from security breaches such as eavesdropping, information security gaps, toll fraud and other risks.

Learn more at <http://www.sipera.com>

INGATE'S FREE SIP TRUNKING WORKSHOP

SIP TRUNKING: EVERYTHING YOU NEED TO KNOW

September 1-3, 2009

Room 502A, Los Angeles Convention Center

Ingate® Systems has partnered with TMC, leading IP-PBX vendors, media gateway vendors, SIP trunking service providers and industry thought-leaders to offer "SIP Trunking: Everything You Need to Know" seminars at ITEXPO West 2009.

Free for all ITEXPO attendees, Ingate's SIP Trunking seminars educate end users, resellers, distributors and systems integrators about SIP trunking.

These seminars will provide a comprehensive overview of SIP trunking, with general information panels and technical insight sessions from the service provider and enterprise perspectives.

Featured this season:

- Step-by-step, interactive sessions to illustrate the what, why and how of SIP trunking architecture
- Sessions on legacy PBX/PSTN and SIP trunks
- Case studies on ROI; the value proposition of SIP trunks
- SIP Forum SIPconnect workshop
- SIP Trunk Boot Camp for "Basic Training" on SIP trunk installations
- Security sessions with VOIPSA will discuss VoIP and SIP trunk security.



Watch LIVE DEMOS of participants setting up a secure SIP trunk live, on-site will showcase how easy it can be to deploy SIP trunks.

Attendees can earn a SIP Trunking Professional Certificate by participating in the Professional Development Program on the first day of the Show.

For more information visit
www.ingate.com/SIP_Trunking_seminar.php

Tuesday, September 1
 SIP Trunking Professional Development Day

9:00 - 10:30 am - Introduction to SIP Trunking
 11:00 - 12:30 pm - The Enterprise Infrastructure
 1:30 - 3:00 pm - The Service Provider Perspective

A Professional Development Certificate will be awarded to those who attend all three Tuesday seminars.

Wednesday, September 2
 The Mechanics of SIP Trunking

8:30 - 9:45 am - Case Study:
 Benefits of Bundled SIP Trunk Solutions
 10:15 - 11:30 am - SIP Trunking & Security in an Enterprise Network
 1:15 - 2:30 pm - Case Study:
 American Idol Gets In Tune with SIP Trunking
 3:00 - 6:00 pm - SIP Forum SIPconnect Compliance Workshop

Thursday, September 18
 8:30 - 10:30 am - SIP Trunk Basic Training with Avaya and Ingate

ON-SITE REGISTRATION HOURS

Tuesday - September 17:00 am - 5:00 pm
 Wednesday - September 27:00 am - 7:00 pm
 Thursday - September 37:30 am - 5:00 pm

EXHIBIT HALL HOURS

Wednesday - September 24:00 pm - 8:00 pm
 Thursday - September 311:00 am - 5:00 pm

CONFERENCE SESSION TIMES*

Tuesday - September 19:00 am - 5:30 pm
 Wednesday - September 28:30 am - 4:00 pm
 Thursday - September 38:30 am - 2:45 pm

**Conference fees required for admission*

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Deadline for this special rate: August 15, 2009

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*Our Guarantee:

If you do not feel the sessions you attend made you better prepared to tackle your IP communications project than you were when you arrived, stop by the registration counter at the show and we'll issue you a free pass for any future ITEXPO. (No requests honored after the conference ends.)

4 Easy Ways to Register

1. **Online:** www.ITEXPO.com
2. **Fax:** (203) 866-3326
3. **Phone:** Call Frank Coppola
(203) 852-6800 ext. 131
4. **Mail:** Send your registration form to:
ITEXPO Registration
TMC
One Technology Plaza
Norwalk, CT 06854 USA

Registration Form



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<input type="checkbox"/> Conference SUPERPass – Includes 4GWE sessions	\$2,195	\$2,395*	<input checked="" type="checkbox"/> Tues <input checked="" type="checkbox"/> Weds <input checked="" type="checkbox"/> Thurs
Access to all ITEXPO and 4GWE conference events, all 3 days*			
<input type="checkbox"/> Platinum Conference Pass	\$1,595	\$1,895*	<input checked="" type="checkbox"/> Tues <input checked="" type="checkbox"/> Weds <input checked="" type="checkbox"/> Thurs
Access to all ITEXPO conference events, all 3 days*			
<input type="checkbox"/> Gold Conference Pass	\$1,295	\$1,595*	<input type="checkbox"/> Tues <input type="checkbox"/> Weds <input type="checkbox"/> Thurs
Access to all ITEXPO conference events, any 2 days*			
<input type="checkbox"/> Silver Conference Pass	\$1,095	\$1,395*	<input type="checkbox"/> Tues <input type="checkbox"/> Weds <input type="checkbox"/> Thurs
Access to all ITEXPO conference events, any single day*			
<input type="checkbox"/> Training – Exploring IP / Ethernet Backhaul	\$1,495	\$1,695*	<input checked="" type="checkbox"/> Tues <input checked="" type="checkbox"/> Weds
Access to training course and meals, plus exhibit hall, networking receptions, and keynotes			
<input type="checkbox"/> Training – Mastering LTE	\$1,495	\$1,695*	<input checked="" type="checkbox"/> Tues <input checked="" type="checkbox"/> Weds
Access to all FtOCC Tech training courses, plus exhibit hall, networking receptions, and keynotes			
<input type="checkbox"/> FREE Reseller Solutions Day VIP Pass	FREE	FREE Online	<input checked="" type="checkbox"/> Tues <input checked="" type="checkbox"/> Weds <input checked="" type="checkbox"/> Thurs
Reseller Day, Keynotes, free workshops and panel sessions, receptions, Exhibit Hall \$50 onsite fee applies			
<input type="checkbox"/> FREE VIP Exhibit Hall PLUS Pass	FREE	FREE Online	<input checked="" type="checkbox"/> Tues <input checked="" type="checkbox"/> Weds <input checked="" type="checkbox"/> Thurs
Keynotes, free workshops, free panel sessions, receptions, Exhibit Hall \$50 onsite fee applies			

*Does not include access to any Training Courses. Separate fee required to attend training.
*Additional \$100 onsite fee applies.

2 ATTENDEE INFORMATION

NAME	TITLE	COMPANY
ADDRESS		
CITY	STATE	ZIP
		COUNTRY
PHONE	FAX	E-MAIL (REQUIRED)

3 PAYMENT INFORMATION

Faxed Registrations Must Include A Valid Credit Card. Total Amount Due: \$_____ (Payable in U.S. dollars drawn on a U.S. bank.)

☐ Check Enclosed (CT residents add 6% sales tax. Make checks payable to: TMC.) Charge My: ☐ AmEx ☐ MasterCard ☐ VISA

Card #: _____ Exp. Date: _____ Signature: _____ (required)

CANCELLATION POLICY:

Full payment is required prior to admittance to the conference. Registrations are transferable and non-refundable. Registrants may have a dollar-for-dollar credit towards another TMC conference. Credit must be used within two years from original registration date. Program and speakers are subject to change without notice. TMC* reserves the right to use attendee company names, titles, images, and photos for future promotions.

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4 PLEASE ANSWER ALL QUESTIONS. INCOMPLETE FORMS CANNOT BE PROCESSED.

1. BUSINESS TYPE (CHECK ONE)

NETWORK SERVICE PROVIDER/CARRIER INDUSTRY

- ☐ 1. Network/System Integrator
- ☐ 14. Next-Gen Telco/ITSP
- ☐ 15. CLEC
- ☐ 16. Integrated Comms. Provider (ICP)
- ☐ 17. Telco/RBOC/IXC/Long Distance
- ☐ 18. ISP
- ☐ 19. Wireless/PCS
- ☐ 20. Cable
- ☐ 21. Application Service Provider
- ☐ 22. PTT
- ☐ 45. BLEC/MDU LEC
- ☐ 46. ILEC
- ☐ 23. Other (specify) _____

VOIP/TELEPHONY INDUSTRY

- ☐ 8. Telecom Developer
- ☐ 9. Manufacturer
- ☐ 47. Reseller/Retailer/Wholesaler/VAR/VAD
- ☐ 10. Distributor
- ☐ 11. Interconnect
- ☐ 12. Consulting
- ☐ 13. Other (specify) _____

GENERAL INDUSTRIES

- ☐ 24. Manufacturing/Software Developer
- ☐ 25. Business Service/Consulting/ Consumer Service/Non-Profit/Trade Assn.
- ☐ 26. Government
- ☐ 27. Wholesale/Distribution/Retail/ E-commerce/E-business
- ☐ 28. Transportation/Travel/Recreation/ Entertainment

- ☐ 29. Utilities
- ☐ 30. Finance/Banking
- ☐ 31. Insurance
- ☐ 32. Hospitality
- ☐ 33. Healthcare/Medical
- ☐ 34. Real Estate
- ☐ 35. Catalog Marketing/Publishing
- ☐ 36. Marketing/Market Research
- ☐ 38. Advertising/Public Relations
- ☐ 39. Teleservices Agency
- ☐ 40. College/University/Education
- ☐ 42. Other Professional/Business Services (specify) _____
- ☐ 41. OTHER (specify) _____

2. JOB FUNCTION (CHECK ONE)

CORPORATE MANAGEMENT

- ☐ 7. Corporate Management (CFO/CEO/Pres.)
- ☐ 18. Other Corporate Management (Specify) _____

TECHNICAL MANAGEMENT

- ☐ 1. Executive IT Management (CIO/CTO/VP)
- ☐ 2.IT/IS/MIS/DP Management
- ☐ 3. Telecom/Datacom Management
- ☐ 4. Software/Engineering Management
- ☐ 5. LAN/Network Applications/ Systems Management
- ☐ 6. Internet/Intranet/Extranet/Web Management
- ☐ 10. Speech Developer
- ☐ 19. Other Technical Management (Specify) _____

BUSINESS MANAGEMENT

- ☐ 16. Research/Development/ Business Development Management
- ☐ 8. Sales/Marketing/Advertising/ Product Management
- ☐ 9. Contact Center/CRM/Telemarketing/ Credit Collection/Fundraising /Help Desk/ Technical Support Management
- ☐ 11. Consulting/Integrator Management
- ☐ 17. Project Management
- ☐ 20. Other Business Management (Specify) _____
- ☐ 12. OTHER (Specify) _____

3. TOTAL EMPLOYEES IN YOUR COMPANY ALL LOCATIONS:

- ☐ A. 10,000+ ☐ D. 11-999
- ☐ B. 5,000-9,999 ☐ E. 1-10
- ☐ C. 1,000-4,999

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- ☐ Yes ☐ No

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