# FORMERLY VOIP DEVELOPER CONFERENCE COMMUNICATIONS COMMUNICATIONS DEVELOPER CONFERENCE May 14-17, 2007 • Hyatt Regency • Santa Clara, California USA

# The World's First & Only Conference of Its Kind

- Where Developers and OEMs Meet to Build Profitable Applications and Partnerships
- Open Source

SOA

- Unified Communications
- SIP Development

- IMS Development
- Hardware
- Software

**Diamond Sponsors:** 

AVAVA

Wireless/Mobility





Avaya Developer Day Monday, May 14

Pactolus Open Source Workshop May 15-16



......

**CISCO** 



PACTOLUS

WWW.COMMDEVELOPER.COM



# **Make This Your Year**



# The World's Only Conference on Communications Development!

Dear Colleague,

Who Will Build Tomorrow's Communications Applications?

As communications evolves, one thing is for certain... The need for applications has never been greater. Microsoft has been a huge proponent of building tomorrow's unified communications applications for the enterprise while service providers are opening their networks through the likes of IMS to give application partners access to a vast audience of telecom consumers.

Some areas of communications growth have tremendous potential. For example, in the mobile space alone there is serious talk of video, music and community sites each being multibillion dollar markets. The ringtone market has been producing billions in revenue for years now, and this single application proves that consumers are willing to spend money on new and interesting forms of entertainment.

This, too, is the year Apple will release its already famous iPhone. How will the communications market adapt and what new applications may be developed to work with the iPhone? What new devices will be developed to compete with it head-on?

But consumers are only part of the equation. Businesses too will spend on new applications whether those applications converge fixed and mobile phones, or tie PBXs into vertical systems such as accounting or business automation.

We are in a world where software must work with other software; a world of mashups and Web 2.0 applications.

Communications is rapidly becoming software and, as such, communications will continue to weave itself into other applications and services.

I invite you to come spend invaluable time networking with your development peers so you can learn where your industry is headed. As you learn and share ideas, you'll have the opportunity to meet and forge relationships with OEMs in desperate need of your ideas.

There is simply no other event focused on communications for the development community. This one event is where the industry comes together to learn how to build tomorrow's billion dollar applications — whether they are software-based or consumer devices.



2

# Why Attend?



This 4th Annual **Communications Developer Conference** is the only chance you'll have this year to learn and network in an environment focused on new application development.

#### Why should you attend the Communications Developer Conference?

- To Learn how to leverage today's development tools.
- To Discover what you need to know about today's hottest technologies: SIP, IMS, Open Source, WiFi telephony, DSP development, Presence, Peer-to-Peer, Linux telephony, consumer VoIP devices, and more.
- To See hands-on demos and compare products from industry leaders like Avaya, Aculab, AudioCodes, and more!
- To Form Valuable Partnerships with OEMs, service providers, and other developers.
- To Become One of the First to develop new applications using IMS.
- To Acquire Tools for Development in the Entire Spectrum of Communications Products: Video over IP, SIP, cable telephony, open source, IMS, wireless/WiFi telephony, software development, and hardware/device development.

#### Hosted by TMC, Communications Industry Pioneers Since 1982

At TMC, we have been covering communications markets since 1982 through our *INTERNET TELEPHONY, Communications Solutions* and *Customer Interaction Solutions* magazines. This event's sister conference is INTERNET TELEPHONY Conference & EXPO, which we've been hosting since 1999, and which has grown into the largest IP communications event in the world.

Back in 2003, developers and vendors told us that a focused developer's conference is a clear necessity for the IP communications market. It is our pleasure to provide for the fourth year in a row this opportunity for the development community to gather, learn, and network.

I look forward to personally greeting you at the event.

Best Regards Rich Jehen

Rich Tehrani, TMC President & Conference Chairman

P.S. There are special 'early-bird' savings available on your conference plan. You must register before April 13th to take advantage (see registration form on page 19).



#### COMMUNICATIONS DEVELOPER CONFERENCE Learning & Networking

# What is COMMUNICATIONS 2

TMC's Communications Developer Conference is the ONLY EVENT 100% focused on educating the pioneers who are building the next generation of IP-based communications products and services.

VoIP is clearly the world's most important communications technology right now. IP-based voice, video and data applications are revolutionizing the way businesses, consumers, and government agencies communicate on a daily basis. And the best part is, we are only at the beginning. The opportunities in IP telephony and Unified Communications continue to multiply as VoIP applications permeate service provider networks, offices, mobile devices, and homes at an astounding rate.



#### Come Find the Building Blocks - and Cultivate the Relationships - You Need to Change the Way the World Communicates

Communications has never been so open, so flexible, and so customizable. SIP and open source have emerged as leading protocols and platforms for application development.

Developers in the communications space need to attend the **Communications Developer Conference™** to keep up with the evolving standards and protocols, and to understand how to use today's tools to build truly unique, highly sought-after VoIP applications.

**Communications Developer Conference**<sup>™</sup> is the only place where developers can see live demos of actual development tools of which they need to be aware. This event is the perfect forum to meet and network with like-minded developers and manufacturers building the future of telecommunications.

# Why Attend COMMUNICATIONS PREVENCE

#### To Learn Firsthand How to Take Today's IP Telephony Development Tools and Turn Them Into Feature-Rich, In-Demand Communications Applications

- Understand how to best leverage the available development tools on the market.
- Learn what you need to know about today's hottest technologies: SIP, IMS, Open Source, WiFi telephony, DSP development, Presence, Peer-to-Peer, Linux telephony, etc.
- See hands-on product demos from industry leaders\* like Avaya, Aculab, AudioCodes, Texas Instruments, Sangoma, and more!
- Take advantage of unmatched networking opportunities with peers, OEMs, and service providers in the development community.



\*Please go to www.commdeveloper.com for latest exhibitor and speaker lists.

# **Benefits of Attending**



# What's In It For You?

Invaluable Time Spent Learning, Networking, & Forging Relationships with Industry Leaders

#### 1. Commercial-Free Conference Sessions Keep You Ahead of a Fast-Moving Market

At all TMC events, presenters in sessions are strictly forbidden from delivering company pitches or 'industry perspectives'. Any who do, are not invited back to future events. This ensures you get an unbiased education about emerging trends and markets, like IMS, SIP, open source, SOA, Unified Communications, new consumer electronics applications and devices, and other technologies creating huge opportunities.

#### 2. Most Knowledgeable Speakers

Each session topic and presenter is hand-selected by Greg Galitzine, TMC's group editorial director of IP communications since 1998, and Rich Tehrani, president and editor-in-chief for TMC. Only the most relevant sessions presented by speakers they know deliver critical, technical information in an understandable manner make it on to the program at Communications Developer Conference.

#### 3. Top-Level Keynotes

Each keynoter has extensive experience — and brings a unique perspective to the development community. Learn from each of them why the opportunities today may be bigger than any in the history of communications.

#### 4. More Than 50 Exhibiting Companies

Between sessions, you can meet with vendors and partners you need to build successful applications. The program is designed to give you ample time to stop by each booth to discuss how each exhibitor's offerings can help you.

#### 5. Invaluable Time With Other Developers

Since this is the only conference in 2007 focused solely on communications development, it is your only opportunity to meet and talk with other developers to share ideas, exchange business cards, and discuss the virtues of one solution over another.

#### 6. Product Showcases

In addition to the non-commercial conference sessions, you can attend 'Product Showcases' where vendors are permitted to convey the specific benefits of their development tools. Each 20-minute demonstration explains why a specific product is your best choice when designing a specific application.

#### 7. Your Conference Fee is Guaranteed

If you do not feel the sessions you attend made you better prepared to tackle your development 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 TMC conference. (No requests will be honored after the conference ends.)

# 8. Perfect Venue to Compare Lucrative Developer Programs

Serious developers must come to this show to see what sorts of developer programs exhibitors are pushing and what incentives there are to develop on various platforms. This is the perfect place to evaluate the tremendous opportunities available today.

# 9. Win the Race to Develop the Next Great Consumer Application

WiFi telephony and dual-mode phones are becoming ubiquitous. Come gather the tools you need to be the first to develop applications that enterprise customers and consumers will spend good money for.

#### 10. Convenient, Easily Accessible Location

The Hyatt Regency Santa Clara is conveniently located in the heart of Silicon Valley, just a few miles from San Jose International Airport.

### Monday - May 14: Avaya Developer Day. Details at www.commdeveloper.com

### Tuesday - May 15

Day One	IMS Development	Hardware	Software	Open Source Workshop
	Conference Fee Required	Conference Fee Required	Conference Fee Required	Free For All Attendees
12:00 - 1:00	IMS Architecture: Past, Present and Future	ATCA vs. Blade Servers - Battle Rages for Your Next- Gen Hardware Platform	Integrating Voice Capabilities into .NET	PACTOLUS Maing P Voice Services a Carter Reality
1:15 - 2:15	Media and ISUP Signaling Transition for IMS and other Next-Gen Networks	Regarding High Availability	Creating Resource-Efficient V2oIP Applications For Low- MHz Mobile Processors	Creating Better Telecom Services: Building Advanced,
2:30 - 3:30	Semiconductor Design Solutions for IMS	Designing Next-Gen Phone-Ready PCs	Achieving Superior VolP Sound Quality With Software Echo Cancellation	Scalable, Customizable Applications Using New Object-based
3:45 - 4:45	Nortel IMS Development Community	Session TBA	Peer-to-Peer's Role in Enterprise IP Telephony Networks	Open Source Solutions Details on page 20
4:45 - 5:20	FREE Keynote Address by Sharone Ben-Levi, AudioCodes			
5:25 - 6:00	FREE Keynote Address by Lawrence Byrd, Avaya			
6:00 - 7:00	FREE Welcome Reception, Sponsored by Avaya			

### Wednesday - May 16

6

Day Two	SIP Development	Wireless/Mobility	Developing Unified Communications Applications	Pactolus' Open Source Workshop
	Conference Fee Required	Conference Fee Required	Conference Fee Required	Free For All Attendees
7:30 - 8:30		Conference Breakfast		
8:30 - 9:15	SIP Or API — How Will You Be Developing Your Next Application?	Voice SMS - Merging VoIP & Mobile to Create A Compelling Service	Developing Unified Communications Apps	PACTOLUS Making IP Voice Services a Carrier Reality
9:30 - 10:15	Implementing SIP	Apps for Dual Mode Phones		
10:20-10:55	FREE Keynote Address by Chris Gravett, Aculab			
11:00-11:35	FREE Keynote Address by Paul Amery, Skype			
11:45-12:45	Conference Luncheon			
12:45 - 1:45	FREE Keynote Address by Sita Lowman, Nortel; Additional Speaker TBA			
2:00 - 2:45	Session TBA	Wideband Codecs for Enhanced Voice Quality	Value of VoIP & UC Standardization	Creating Better Telecom Services:
3:00 - 3:45	Get Connected with SIP Encryption	Delivering IP-Based Video Solutions for Mobiles	Rapid Application Development for UC	Building Advanced, Scalable, Customizable Applications Using
4:00 - 4:45	Connecting Your SIP-Based Hosted Contact Center to the Rest of the World	Experience 2.0	New Rules for Dynamic Service Creation	New Object-based Open Source Solutions Details on page 20
4:45 - 5:45	FREE Product Showcases			
5:45 - 8:00	FREE Exhibit Hall Open / Networking Reception Sponsored by Aculab			

# **Complete Agenda**



### Thursday - May 17

Day Three	Testing	Open Source	Service Oriented Architecture
	Conference Fee Required	Conference Fee Required	Conference Fee Required
8:00 - 8:30	Conference Breakfast		
8:30 - 9:15	VoIP Testing – A How-To Session for Performance and Functional Test Methodologies	Modular Telephony Hardware Design	VolP for SOA: Creating Your Own Killer Web Service
9:30 - 10:15	Developing for Optimal VoIP Service Quality	The Shift Toward New VoIP System Models	Voice Service Mashups
10:20 - 10:50	FREE Keynote Address by Parvesh Sethi, Cisco		
10:55 - 11:25	FREE Keynote Address by Kevin Fleming, Digium		
11:30	Box Lunches		
11:30 - 4:00	FREE Exhibit Hall Open		
1:30 - 2:15	How to Guarantee Optimum Performance for Collaborative Applications over the WAN	SIPfoundry: Developing SIP IP PBX and Presence Applications in Open Source	Next Steps: Evolving from Collaboration to Service Oriented Architecture
2:30 - 3:15	The Importance Of Continued Interoperability Testing In A Standardized IMS Network		Integrating Speech Applications with Enterprise IT Assets Using Web Services

# FREE Keynotes

# aculab



Ian Colville Product Manager Aculab

# dıgium



Kevin Fleming Sr Software Eng., Digium, Co-Maintainer of Asterisk

# AudioCodes



Sharone Ben-Levi VP of Marketing for Enterprise Enhanced Svcs

# NØRTEL



Sita Lowman IMS Solutions Director

# AVAYA



Lawrence Byrd Director, Communication Enabled Business Processes





Dave Horton President, CTO and Founder

# cisco.



visit www.commdeveloper for updated keynote roster

Parvesh Sethi VP, Advanced Services





Paul Amery Director, Skype Developers Program



# TUESDAY, MAY 15, 2007 IMS Development Track

#### 12:00 - 1:00 pm IMS Architecture: Past, Present and Future

IMS was introduced as the industry standard for providing an open IP-based infrastructure to fixed and mobile telecom operators and service providers. In this session, the speaker will address the rollout and implementation challenges the industry faces today by charting the development of IMS since its inception to today's compatibility and multi-vendor rollout issues. He will also provide an outlook on the future of IMS detailing how current issues are to be addressed and overcome, while discussing the evolving nature of IMS architecture and the main components of the IMS core network.

#### 1:15 - 2:15 pm Media and ISUP Signaling Transition for IMS and other Next-Gen Networks

The IP Multimedia Subsystem (IMS) standard is designed to provide services which can support a variety of endpoints, including current cell phones and next-gen SIP phones. In order to accomplish this feat, there is a need for both media and signaling translation between the circuit networks and the emerging SIP/IMS networks. IMS standards are emerging from the 3GPP to enable these tasks, but they are building on years of experience and existing standards. In this discussion, the speaker will review the role of media and ISUP signaling translation in realizing the vision of IMS, and discuss current deployment experiences that are leading the way in advance of IMS.

#### **NETWORKING RECEPTIONS:**

Tuesday - May 15 ......6:00 pm Sponsored by: Wednesday - May 16 ......5:45 pm (in Exhibit Hall) Sponsored by:

#### 2:30 - 3:30 pm Semiconductor Design Solutions for IMS

IMS networking equipment requires fast and highly efficient processing in support of a complex assortment of wireline and wireless applications, IP protocols, security standards and high-quality voice technology. At the chip level, manufacturers are developing design techniques that will enable service providers to solve the challenge of transcoding wireless and wireline protocols in order to transport voice and video between legacy circuit-switched and next-generation packet-based networks.

This presentation will outline the key trends in IMS and design techniques at the hardware and software level that promise to deliver all necessary media stream processing and transport layer building blocks for seamlessly transmitting highly secure, carrier-class-quality voice and video across both wireless and wireline networks.

#### 3:45 - 4:45 pm Nortel IMS Development Community

Complete description to be announced.

Check www.commdeveloper.com for updates.

# Your Conference Fee is Guaranteed

If you do not feel the sessions you attend made you better prepared to tackle your development 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 TMC conference. (No requests will be honored after the conference ends.)



#### **TUESDAY, MAY 15, 2007**

# **Hardware Track**

#### 12:00 - 1:00 pm

#### ATCA vs. Blade Servers - A Battle Rages For Your Next Generation Hardware Platform

ATCA and other of Blade Server platforms offer a number of advantages to developers of next-generation applications. Density, simplicity of cabling and manageability all reduce the cost of ownership. But which platform to choose for your new solution? This session will take a closer look at ATCA, it's 'little brother' MicroTCA, and other Blade Server platforms — exploring their applicability for telecommunications applications.

#### 1:15 - 2:15 pm Regarding High Availability

As VoIP solutions developers make their mark in the network equipment arena, the established Tier 1 telecommunications equipment manufacturers (TEMs) are fighting back. From the traditional circuit switched legacy, we are used to ubiquitous dial tone and services availability. We happily (it's all relative) paid the price for proprietary, monolithic equipment to ensure five, six, and even seven 'nines' availability. Such characteristics are demanded of VoIP equipment today and there is a convincing argument that there should be no compromise with VoIP products. Come along to this enjoyable, entertaining session to learn (from an insider) the key attributes needed when choosing voice boards to build your resilient, high availability VoIP solutions.

#### 2:30 - 3:30 pm

#### **Designing Next-Generation Phone-Ready PCs**

The high cost of customer acquisition is the biggest hurdle independent VoIP Service Providers such as Vonage or Packet 8 are facing against incremental VoIP offerings from Telcos and MSOs. The Phone-Ready PCs would come preconfigured with VoIP (hardware and software), allowing customers to simply plug their current phone (or fax) into the PC, and thus be ready to use. The phone-ready PCs will enable easier deployment of Internet telephony services to consumers, as well as small to medium businesses (SMBs). This deployment will decrease the cost of subscriber acquisition and increase revenues across the value chain.

This session will look at the innovative silicon and software technologies as well as entire ecosystem and a viable business model for PC OEMs to start offering incremental voice services with pre-configured broadband data service.

#### 3:45 - 4:45 pm Additional Session to be Announced.



# Save \$400

Register By April 13th and Save \$400 on a Diamond Team Plan, or \$200 on an Individual Platinum Registration. See Page 19 for Details.



#### **TUESDAY, MAY 15, 2007**

# **Software Track**

#### 12:00 - 1:00 pm Integrating Voice Capabilities into .NET

This session will discuss the growing array of tools that enable developers to integrate voice capabilities, such as speech recognition, into .NET applications. Voice technology is complicated enough that even skilled .NET developers benefit from tools that hide the complexity of working with low-level APIs for automated speech technologies and media servers. A growing number of development platforms are offering controls that perform that exact function. They help.NET developers easily add speaker verification, text-to-speech and media server capabilities to their applications without excessive low-level integration work. Attendees will learn how to lower the cost and effort required for .NET developers to create voice solutions, such as interactive voice response (IVR), speechenabled self-service, contact center, alert and notification applications, as well as Unified Communication solutions.

#### 1:15 - 2:15 pm

#### Creating Resource-Efficient V2oIP Applications For Low-MHz Mobile Processors

The transmission of video over WiFi has become an actual trend with a huge market potential. It opens up opportunities for mobile operators to introduce innovative value-added services and helps equipment manufacturers to enrich the feature lists of their handsets for positive customer experience.

For a wide user adoption of video over WiFi, a range of technical challenges has to be overcome. The main challenge lies in resource limitations of mobile devices — their current capabilities are often insufficient for video processing.

In this presentation we will address the technical issues of building a complete software solution for voice and video over WiFi transmission, which will enable OEMs to reap advantages like improved performance, reduced time-tomarket, ease of deployment, and overall cost-effectiveness. As video encoding is the most resource consuming element of video over WiFi processing, we will concentrate on encoding optimization and dynamic control and adjustment of video codec's FPS rate to prevent CPU overload. We'll also speak about video PLC technologies, handling WiFi specific network impairments, voice-video synchronization and tweaks for multithreading environments.

#### 2:30 - 3:30 pm

# Achieving Superior VoIP Sound Quality With Software Echo Cancellation

VoIP technology is now part of a growing segment of communications around the world. To thrive, however, VoIP must at least match or better yet - outperform - the voice quality of traditional telephony. The voice quality solutions incorporated in end-point IP telephony systems must be scrupulously designed and/or chosen as they directly impact the overall sound quality. This presentation will explain audio challenges such as echo and background noise, revealing the critical nature of high-performance echo cancellation and noise reduction functionalities.

Overall, attendees will gain insight into methods for leveraging echo cancellation and voice quality enhancements available as software plug-ins to strategically enhance the sound quality delivered by their end-point voice applications — enabling advantages like reduced development time, ease of deployment, and overall cost-effectiveness.

#### 3:45 - 4:45 pm Peer-to-Peer's Role in Enterprise IP Telephony Networks

Peer-to-peer (P2P) VoIP used to be for hobbyists and the truly tech-savvy. Now it looks to be catching on: Microsoft, Google and Yahoo! all have announced voice capabilities on top of their messaging clients.

Will P2P become a significant force in enterprise voice and, if it does, how will affect network design and security? Key questions: How are manufacturers of large-scale enterprise voice systems planning to incorporate P2P technology in their products? How does P2P voice traffic affect overall network performance? Can P2P traffic be managed and controlled? Is P2P voice destined to become like IM - a client each user selects, with no ability on the part of IT to standardize and secure these clients? What are the potential legal and liability issues surrounding user-driven, ad hoc P2P usage? What potential does P2P technology have to affect the basic architecture of enterprise voice systems? Could P2P drive greater control into the endpoints and out of centralized servers?



#### WEDNESDAY, MAY 16, 2007

# **SIP Development Track**

#### 8:30 - 9:15 am SIP Or API - How Will You Be Developing Your Next Application?

The last few years have brought a major change to the way that advanced applications are developed. Developers now have the choice between using standards-based SIP or traditional APIs. No one solution is ideal for every developer as choices about time-to-market versus solution cost must be balanced. By attending this session you will learn about a number of new options developers have when creating their applications, learn about some new protocols and discuss the pros and cons of each in realworld scenarios.

#### 9:30 - 10:15 am Implementing SIP

The Session Initiation Protocol (SIP) is the fundamental signaling protocol for much of the activity we are witnessing in the communication industry. The trends for network convergence, cost reduction, IP Multimedia Subsystem (IMS) and service creation continue to sky rocket the demand for SIP development.

By sharing real-world development experiences and excluding marketing hype - this session will address how developers can implement robust SIP functionality in a wide range of products while reducing development costs and time to market. This talk will cover the types of SIP development tools, diagnostics, and support that are required and the common pitfalls to avoid in developing SIP-based solutions. Developing highly available and scalable systems will also be discussed. The intended audience for this session is developers, engineering managers, and product managers of communication products and services.

#### 2:00 - 2:45 pm Additional Session to be Announced

# **ASSOCIATION PARTNERS:**



#### 3:00 - 3:45 pm Get Connected with SIP Encryption

Sometimes you just can't fight a revolution. VoIP has become the telephone revolution of the early 21st century and, whether you've been using VoIP from the beginning or are still waiting for it to prove its benefits, cost-savings or reliability, one fact remains: regardless of your position, VoIP calls should be delivered with the same level of service and availability as traditional calls. With VoIP blocking, some VoIP calls are being connected at lower quality level; if they're being connected at all. While administering VoIP blocking, some carriers are trying to create the case that VoIP calls aren't as reliable as traditional calls. Through SIP encryption you can ensure your call gets across and you've bypassed the VoIP blockers. The speaker will discuss why VoIP calls are blocked, how SIP encryption can help your organization, and the latest on net neutrality.

#### 4:00 - 4:45 pm

#### Connecting Your SIP-Based Hosted Contact Center to the Rest of the World

VoIP has enabled a new generation of hosted contact centers to consolidate physical resources, providing powerful new features for regional business centers and dispersed employee groups. But a significant challenge arises when addressing PSTN connectivity in many parts of the world. Enterprise VoIP gateways typically lack local approvals and totally lack support for SS7 signaling (desirable in many markets, such as Latin America). Highend gateways for international markets are expensive and appropriate VoIP-PSTN services (beyond simple call termination) are typically lacking. How to proceed?

This presentation will show how media and signaling gateway resources can be configured to address global connectivity for hosted enterprise contact centers, explaining the problem and typical solutions — including SIP to ISUP signaling — and how they are adapted for different global conditions.



### WEDNESDAY, MAY 16, 2007 Wireless Track

#### 8:30 - 9:15 am Voice SMS - Merging VoIP & Mobile to Create a Compelling Service

SMS is a global hit in the mobile world as is Instant Messaging on PCs (and increasingly on mobile handsets), but on mobile handsets, these services only support text. That's fine when you're in class and have to be quiet. At any other time, voice is easier to use and conveys more emotion. Extending SMS to support voice or even video messaging has been popular in consumer surveys, so the mobile industry defined a Multimedia Message Service (MMS). But MMS adoption has been slow, due to limited availability of compatible handsets and interoperability problems.

Recently Voice SMS services have been launched and seen very rapid success in Asia. This presentation will describe Voice SMS and explain why it's been so successful and how it can be delivered using a VoIP platform together with a combination of VoIP and conventional network services.

#### 9:30 - 10:15 am Applications for Dual Mode Phones

Nokia is calling their E-series and N-series dual-mode phones "multimedia computers." They run the Symbian OS, and other WiFi enabled smartphones run Windows Mobile or Linux, while the Apple iPhone is set to run a version of OSX. So, is the next generation of smartphones a new breed of open computing platforms? And what does this mean for developers seeking new markets and opportunities? This session will help you to separate the hope from the reality.

#### 2:00 - 2:45 pm Wideband Codecs for Enhanced Voice Quality

End-to-end digital networks make it possible to greatly improve communications voice quality through wideband speech coding, and this evolution is rapidly gaining momentum. VoIP engineers and application designers need to start formulating their strategies for implementing wideband speech solutions that will deliver the best quality while requiring the least initial and ongoing investments in networking infrastructure and end devices.

This session will address how to ensure optimum wideband speech quality in converged VoIP/mobile applications/services. It will review the challenges of realworld networks - including congestion, latency, jitter and packet losses, and the additional challenges introduced

12

when calls are made between networks. It will explain the codec characteristics that address these challenges such as bit rate, voice activity detection, robustness to packet loss, complexity; highlight the advantages of standardization and point to subjective test results. Selection criteria and an evolution scenario to wideband VoIP across converged wireline/wireless services will also be presented.

#### 3:00 - 3:45 pm Delivering IP-Based Video Solutions for Mobiles

Thanks to the availability of broadband Internet access and progress with encoding technologies, video-enabled communications are expected to experience a phenomenal expansion in the next few years. With the proliferation of IP-based video services on one side, and growth in the number of 3G mobile phones with inherent video support on the other side, the need for interconnecting to the mobile infrastructure becomes imperative. This session will provide technology overview for IP-to-mobile video gateways, like 3G-324M protocol, and discuss the best practices adopted by solutions developers developing video applications for VoIP and mobile converged environment.

#### 4:00 - 4:45 pm **Experience 2.0**

Convergence of communication networks – Internet, voice, video, mobile - has driven a sea of change in the ability for communications developers to access resources for the creation of unique applications. Today it's no longer about building point applications for the desktop or a mobile platform as mobility and bandwidth pervade - it's about understanding the user experience as a whole.

One of the key enablers for developers in all these domains has been Web services. Web services have given rise to intense activity in the area of mash-ups – applications that integrate distributed resources and applications on the Internet to deliver new hybrid applications. As creating a mash-up becomes easier, what will matter is the quality of user experience enabled by the combination of capabilities the mash-up brings together.

In this talk, Shirish will bring together his experiences from delivering speech, communication, and collaboration applications over the past decade and provide insights on how mash-up developers can move beyond "toy" applications to drive compelling user experiences that drive application adoption.



# WEDNESDAY, MAY 16, 2007 Unified Communications Track

#### 8:30 - 10:15 am - Special Double Session Developing Unified Communications Apps

It's no secret that Microsoft is placing a huge bet on Unified Communications. To that end, Microsoft has a number of platform components available to developers today, and a lot of updates and new components will be made available as part of the company's next release, including the addition of VoIP functionality that will be available for developers.

This special two-part session will offer developers a taste of what Microsoft is up to regarding development of Unified Communications applications with an eye towards applications for Live Communications Server/Office Communications Server and Office Communicator. Included is a possible sneak peek at some new tools that are soon scheduled for release.

#### 2:00 - 2:45 pm Value of VoIP & Unified Communications Standardization

In this presentation, attendees will learn about the various facets of VoIP standardization and the speaker will relate the impact of open standards-based VoIP and Unified Communications (UC) solutions on key IT and business success metrics - especially, around VoIP and UC migration, business process and office apps integration, open standards ecosystem, user experience, etc. He will exemplify open standards discussions with commercially available open standards enterprise communications solutions and associated deployment / use-case scenarios. The presentation will conclude with a discussion around the future of open standards-based VoIP and UC solutions - from both an equipment vendor and enterprise adoption perspective.

3:00 - 3:45 pm

#### Rapid Application Development for Unified Communications

This session will define a set of requirements for a rapid application development environment for unified communications and present an overview of one possible solution. In addition, a large portion of this session will be centered on a live demonstration to include rapidly developing, deploying, and running a full fledged unified communications application.

#### 4:00 - 4:45 pm New Rules for Dynamic Service Creation

Creating a unique service offering that combines the latest and most popular unified communications applications is a challenge that every service provider faces. Competitive pressures continue to drive prices downward as products and services mature and eventually commoditize. VoIP and video services are likely to maintain their premium price, but customers will expect to receive more value-added services on top of these services to justify the cost. For this reason, it is imperative that hosted providers have an easy, economical way to create and launch new complex services at higher price points or find ways to continually differentiate their offering by bringing new value-added services to the market and extend the life cycle of those offerings. Providers that are able to quickly respond to customer demands and have the ability to create and deploy new services rapidly will have the upper hand in attracting new customers, while retaining existing ones. This presentation will address time to market and extensibility: two key factors to surviving in a rapidly changing IP-driven world.







# **Conference Descriptions**

#### **THURSDAY, MAY 17, 2007**

# **Testing Track**

#### 8:30 - 9:15 am

#### VoIP Testing - A How-To Session for Performance and Functional Test Methodologies

With the accelerating proliferation of VoIP and IMS products, the need for effective pre-deployment and QA testing has never been greater. From the vantage point of CT Labs, a services-based group continually engaged in testing the latest VoIP products and technologies, each class of VoIP product brings with it a separate set of challenges.

During this session the speaker will share a unique perspective on the tools, automation techniques, and best practices that can directly help you to make your products better. The speaker will also present a series of test layouts and recent case studies. Test techniques will be presented that encompass both enterprise and carrier-grade products, including:

- Load and functional testing
- Voice and video quality assessment
- High availability and device integrity testing
- SIP security and attack testing
- Effective regression test frameworks
- Test plan methodology

#### 9:30 - 10:15 am Developing for Optimal VoIP Service Quality

For the last two years, research firm Keynote Systems has analyzed Best Practices and Service Quality of VoIP providers from the end-user perspective, and has prepared the comprehensive Voice Service Quality Competitive Intelligence study. The speaker will share his expertise and the research firm's unique approach to monitoring user experience of voice service quality. Attendees will get a perspective on how VoIP providers and enterprises can overcome the quality barrier that biases the consumer towards traditional phone service. They will also learn about the factors beyond network boundaries that affect user experience of the voice service quality. They will obtain recommendations on what to look for in addition to efficient software while designing a optimal VoIP system.

#### 1:30 - 2:15 pm

#### How to Guarantee Optimum Performance for Collaborative Applications over the WAN

The benefits of collaborative applications are substantial, ranging from significant money savings by reducing travel time, to increased productivity due to worldwide team collaboration. But preparing a network to handle demanding collaboration and videoconferencing applications is not as simple as adding some extra bandwidth and plugging in a few video cameras and IP phones.

This presentation will identify key steps involved in preparing the network for collaborative applications and offer attendees specific details on how to:

- Minimize network latency before installing collaborative applications;
- Guarantee performance for extremely demanding collaboration applications like videoconferencing & VoIP;
- Ensure that all applications can co-exist peacefully on the network; and
- Make certain all bandwidth is used effectively, eliminating unnecessary upgrades.

The speaker will also detail how new applications can be added without degrading performance or requiring extensive bandwidth upgrades. The discussion will conclude with a roadmap for enhancing the degree of visibility, reporting and control as real-time and interactive applications and services continue to grow in the enterprise.

#### 2:30 - 3:15 pm The Importance of Continued Interoperability Testing In a Standardized IMS Network

As we move to a more standardized IMS environment, it is easy to fall into the trap of thinking that standardization will decrease the requirement to test. The thinking goes that once the standard is set, one would only need to conduct product testing to see if the equipment meets the standard. However, a standardized IMS environment will actually increase the testing imperative. An IMS network is a distributed multivendor environment that will be delivering a converged, media-rich service offering. The need to conduct regular and continued interoperability testing will be paramount to ensuring both the successful deployment and support of the network, as well as the quality of experience (QoE) for the end users of the services that are being delivered.



### THURSDAY, MAY 17, 2007

# **Open Source Track**

#### 8:30 - 9:15 am

#### **Modular Telephony Hardware Design**

Learn about the advantages of telephony hardware designs that separate the local bus interfaces from the telephony functions. Both local bus and telephony/WAN interfaces have many different variations. The speaker will highlight the improvements in product reliability and performance that can accrue from separating the functions, and how the new architecture along with changes in the manufacturing process can help to significantly reduce cost, implement new designs, and quickly produce products of greater breadth and capability.

#### 9:30 - 10:15 am

#### The Shift Toward New VoIP System Models

Due to the availability of new tools and technology, today's next-generation VoIP service providers have the opportunity to break the traditional telecommunications business model that has been in place for almost 100 years. Instead of being dependent on system providers and vendors to create a platform, VoIP service providers can now move away from embedded systems and vendor licensing arrangements and embrace VoIP platforms that break the "seat licensing" model, allowing for faster development cycles and higher profit margins. The speaker will lead a fast-paced discussion of the old versus the new VoIP business models, touching on:

- Reasons behind the shift to "no licensing" paradigm
- The joys and headaches of unlicensed systems
- How tools such as increased server capacity and CPU power upgrades give developers new options
- Why certain companies are banking on the proprietary business model being more efficient for future growth.

#### 1:30 - 3:15 pm - Special Double Session

#### SIPfoundry: Developing SIP IP PBX and Presence Applications in Open Source

Some of the core developers and project maintainers of the sipX project will talk about how you can get engaged and leverage the technology provided by SIPfoundry for your own projects. sipX is a 100% standards compliant implementation of a modular and fully distributed enterprise communications system. This session will provide an introduction to the sipX architecture, plug-in interfaces, configuration management system, system redundancy, scalability, and feature development. We will also discuss system scalability going from very small systems on minimal hardware to high-availability clusters serving thousands of users. sipX makes extensive use of the DNS infrastructure to load-balance between distributed systems. We will provide an introduction to how this is done following the SIP standard and how a uniform dialplan can be accomplished across systems using DNS lookups and ENUM.

# Keynotes aculab



Ian Colville Product Manager Aculab

# dıgium



Kevin Fleming Sr Software Engineer, Digium, Co-Maintainer of Asterisk





Sharone Ben-Levi VP of Marketing for Enterprise Enhanced Svcs

# NORTEL



Sita Lowman IMS Solutions Director





Lawrence Byrd Director, Communication Enabled Business Processes





Dave Horton President, CTO and Founder





Parvesh Sethi VP, Advanced Services





Paul Amery Director, Skype Developers Program



# THURSDAY, MAY 17, 2007 Service Oriented Architecture (SOA) Track

#### 8:30 - 9:15 am VoIP for SOA: Creating Your Own Killer Web Service

It's no longer about creating the "killer app." Instead competitive advantage will come from harnessing the power of VoIP and SOA to evolve existing applications into rich Web services that unify communications to enhance both employee productivity and the customer experience, as well as streamline business processes.

This session will explain how to integrate business applications and processes into innovative VoIP-enabled Web services and then repurpose them in a matter of minutes independent of your existing telephony infrastructure and without CTI expertise. Best practices will be demonstrated via real-world customer examples, including a VoIP enabled realty service that gets new home updates to buyers hours before it hits the MLS. There also will be a live demonstration of how to quickly build a VoIP-enabled Web service.

#### 9:30 - 10:15 am Voice Service Mashups

How can you mash telephony into Web pages? The Web 2.0 concept is attractive to technophiles and promises to power some useful applications. VoIP is similarly "blogobuzzed," and further up the mass adoption curve. It seems natural to combine the two. Skype and AOL have both delivered mashable VoIP APIs, as have several smaller companies. What mashups are out now, and what is the potential?

#### OFFICIAL SHOW HOTEL -Hyatt Regency Santa Clara

Conveniently located in the heart of Silicon Valley, Premier meeting facilities and a full-service business center provide everything from high-speed Internet access to translation services. Enjoy the sunshine on the tennis courts, in the heated pool or in the spa.

Special Conference Attendee Rate - \$185.00 Deadline for special rates: April 22, 2007 Call (888) 627-8405 to reserve your room today!

Remember to identify yourself as a participant of the TMC Communications Developer Conference so you can take advantage of this low rate!

The Hyatt Regency Santa Clara 5101 Great America Pkwy • Santa Clara, California 95054 Phone: (408) 986.0700

#### 1:30 - 2:15 pm

# Next Steps: Evolving from Collaboration to Service Oriented Architecture

One of the more visible trends in the communications industry is the growing notion that Service Oriented Architectures will have a profound effect on Voice over IP. Within an SOA framework, businesses will have the ability to seamlessly link their communications solutions with other important business platforms, like CRM, billing, inventory management, and so on. This will radically change how departments and team members work with each other, as conferencing and technologies become automated and operate in real-time.

Come examine how collaboration could evolve in an SOA environment, and will describe the benefits to businesses both in hard dollars and in productivity and efficiency.

#### 2:30 - 3:15 pm Integrating Speech Applications with Enterprise IT Assets Using Web Services

One shortcoming of many speech applications deployed today is the lack of integration between these applications and the rest of an enterprise's IT infrastructures. As a result of this "siloing," valuable opportunities to enhance speech applications using intelligence contained in an organization's Web, CRM and other IT assets are lost and IT efficiency suffers. Web services integration between speech applications and other enterprise IT assets can remedy this situation. This presentation will begin with an overview of service-oriented architecture (SOA) technology in general and Web services in particular. Next, the application of Web services to call center and other speech-enabled environments will be discussed. A detailed example of a speech application that fully leverages CRM, BI, and other IT assets via Web services will be presented. Finally, time will be allowed for an interactive questionand-answer session.



#### **WEDNESDAY, MAY 16, 2007**

# **Product Showcases**

See today's most impressive Communications Development Tools in action. Ask tough questions of manufacturers and vendors claiming their products are best for you.

	Product Showcases - Wednesday, May 16, 2007			
Time	Cypress Room	Lafayette/San Tomas Room	Stevens Creek Room	Winchester Room
4:45 pm	Pactolus	NMS Communications	AudioCodes	SpiritDSP
5:05 pm	Avaya	CallToolBox	Aculab	MU Security
5:25 pm	Touchstone Technologies	Cisco	Inter-Tel	

# **Exhibit Hall**

The Communications Developer Conference exhibit area features companies displaying the products you need to build the next great communications application.

#### Meet Vendors with the Solutions You Need...

- Semiconductors
- Digital Signal Processors (DSPs)
- System on Chip (SOC) Solutions
- Media Gateways
- Application Development Platforms
- SOHO VoIP Devices
- Residential Gateways
- Soft Phones
- VoIP Clients
- H.323 Protocol Stacks
- SIP Software

- Wireless Devices
- IP Phone Reference Designs
- Development Tools
- DSP Resource Boards
- HMP-based Solutions
- Testing Tools
- Presence Solutions
- Service Creation Solutions
- AdvancedTCA Building Blocks
- Video over IP Solutions
- IMS

#### And Much More!

# **EXHIBIT HOURS:**

Wednesday - May 16: 5:45 - 8:00 pm —

Networking Reception in Exhibit Hall **Sponsored by Aculab** 

Thursday - May 17: 11:30 am - 4:00 pm



*Exhibit Hall activity captured at last year's Communications Developer Conference* 



www.commdeveloper.com for schedule updates & full exhibitor listings

## Monday, May 14, 2007 - Free admission, pre-registration required Avaya Developer Day Innovation Forum

Service Providers

COMMUNICATIONS

**DEVELOPER CONFEREN** 

- Independent Software/Hardware Vendors
- System Integrators End User Customers



**Avaya Developer Day** 

Are you developing integrated solutions for multi-channel contact centers?

Do you have communications enabled business applications for distributed agents or a mobile workforce?

Are you developing specialized helpdesk applications or branch office solutions for the Banking, Finance, Hospitality and Travel industries?

Avaya, a global leader in intelligent communication systems, applications and services, encourages hardware and software application developers, systems integrators, service providers and end customers to partner with us through the industry leading Avaya DeveloperConnection Program.

Come and join us at our Innovation Forum to learn more about how working with Avaya can create new business opportunities for you. There is no charge for attending the Innovation Forum, simply register at www.commdeveloper.com to confirm your attendance in advance.

#### Avaya Developer Day Innovation Forum Agenda - Monday, May 14, 2007

- 12:30 1:30pm ....Registration
- 1:30 1:45pm ...... Welcome & Introduction
- 1:45 2:15pm ......Keynote Address Industry Overview
- 2:15 3:00pm......DevConnect Program Overview & Benefits
- 3:00 3:15pm ......Refreshment Break
- 3:15 4:30pm ...... Avaya Platform Development Overview:
  - Avaya API's and Web Services
  - Avaya & Ubiquity SIP Development Opportunities
  - Developing Speech Enabled Self Service Applications
  - Developing IP Phone Applications
- 4:30 5:00pm......Questions & Closing Remarks

5:00 - 6:00pm ......Reception

#### Avaya DeveloperConnection Program:

Partnerships are an integral component for companies that want to successfully provide customers with flexible and reliable communications solution choices. In an effort to provide these choices, the Avaya DeveloperConnection Program ("DevConnect") is building relationships with companies that add value to its portfolio of products and services.

Specifically, DevConnect facilitates the development, interoperability testing and co-marketing of innovative

18

third-party applications that are compatible with standards-based Avaya solutions. DevConnect members include more than 4,700 companies worldwide, including hardware and software application developers, systems integrators, service providers and end customers. Members have access to a wide range of support from Avaya, including:

- Avaya APIs, SDKs and Technical Support
- Special pricing for Avaya development platforms
- In Depth-Training and Education
- Remote Labs, Simulators, Forums

# **Important Information**



### **On-Site Registration Hours**

### **Conference Session Hours**

Monday - May 14	1:30 pm - 5:00 pm
Tuesday - May 15	12:00 pm - 6:00 pm
Wednesday - May 16	8:30 am - 5:45 pm
Thursday - May 17	8:30 am - 3:15 pm

### **Exhibit Hall Hours**

**Free** VIP Passes are available for admission to the exhibits, keynotes, product showcases & networking receptions

### Your Paid Conference Registration Includes:

- Admission to all sessions on the days for which you have registered
- All meals served on days in your plan
- Unlimited access to product showcases
- Admission to all Keynote sessions
- All networking receptions and breaks

### Your Conference Fee is Guaranteed!

If you do not feel the sessions you attend made you better prepared to tackle your IP communications development 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 Communications Developer or INTERNET TELEPHONY conference. (No requests will be honored after the conference ends.)

### 4 Easy Ways to Register

- 1. Online: www.commdeveloper.com
- 2. Phone: (203) 852-6800 ext. 131
- **3. Fax:** (203) 866-3326
- 4. Mail: Communications Developer Conference Technology Marketing Corp. One Technology Plaza Norwalk, Connecticut 06854 USA

### **DIAMOND TEAM PLAN**

# Buy 2 Platinum Passes, Get 2 More FREE Save 50%

The Diamond Plan allows four delegates from your company to have unlimited access to all:

- conference sessions
- keynotes
- meals
- VIP networking receptions

#### It's VIP Total Access! Only \$1,995\*

\*\$1,995 up to four employees from your location. Less than \$500 per delegate. This promotion is first come first served. Space is limited. \*Earlybird rate. After 4/13/07 the rate increases to \$2,395.

#### **GOVERNMENT 'TEAM' RATES AVAILABLE**

Please contact Frank Coppola to inquire about special 'team' registration packages for Government offices and agencies: (203) 852-6800, ext. 131.

# OFFICIAL SHOW HOTEL Hyatt Regency Santa Clara

Conveniently located in the heart of Silicon Valley, adjacent to the Santa Clara Convention Center



and across from Paramount's Great America Theme Park. Premier meeting facilities and a full-service business center provide everything from high-speed Internet access to translation services. Enjoy the sunshine on the tennis courts, in the heated pool or in the spa. Special Conference Attendee Rate - \$185.00 Deadline for special rates: April 22, 2007

Call 1-408-200-1234 to reserve today!

Identify yourself as a participant of the TMC Communications Developer Conference so you can take advantage of this low rate!

> The Hyatt Regency Santa Clara 5101 Great America Pkwy Santa Clara, California 95054 Phone: (408) 200-1234

19

#### Tuesday, May 15 & Wednesday, May 16 2007 - Free admission

# **Pactolus Open Source Workshop**

"Creating Better Telecom Services: Building Advanced,

Scalable and Customizable Applications Using New Object-based Open Source Solutions"

Attendees quickly learn to create telecom services that achieve massive scalability and accommodate ongoing innovation and feature flexibility – two virtually unattainable benchmarks for open source telecom.

During two 90-minute sessions, developers rapidly achieve the proficiency to create, deploy and customize IMS-extensible SIP-based services with the award-winning RapidFLEX platform and SIPdev.org Open Source Developer Community, which feature more than 400 'drag and drop' graphical objects and reference application frameworks for creating exciting, scalable IP services such as Conferencing and integration with Microsoft Live Communication Server.

Participants gain new insight to avoid the complexities of Java-based and C++ environments, and the deployment and reliability vulnerabilities that can derail initiatives. The RapidFLEX Service Creation Environment and





Dave Horton President, CTO and Founder

Dave has built several generations of network-based enhanced services platforms for the carrier market. He was instrumental in architecting the RapidFLEX Application Server and Service Creation Environment at Pactolus.

Service Delivery Platform are used by 100+ service providers such as Primus Canada, WebEx, XO Interactive, LatiNode, USA Datanet and the world's leading VoBB providers.

#### Session 1 Tuesday: 12:00 - 1:30 pm Wednesday: 2:30 - 4:00 pm

This session details the basic framework of the graphical service creation environment and service delivery platform, and establishes core competencies in using a rich pallet of objects to create and customize common telecommunications services for enterprises and telecom service providers. Participants learn to integrate rich media and create features that optimize enterprise usability and fuel subscriber demand, without sacrificing "deep dive" development capabilities. Participants also learn how to use advanced Javascript features, XTML libraries, and various resources to incorporate complex variables, dialog objects and other key service application components.

#### Session 2 Tuesday: 2:00 - 3:15 pm Wednesday: 3:00 - 4:45 pm

This session reviews the advanced principals and processes of SIP call control, media server control and database access. It also provides new insight & access to SIP application tutorials, and available reference applications based on the RapidFLEX graphical Service Creation Environment and Service Delivery Platform. It covers in-depth specifics of building scalable conferencing and collaboration services that integrate with Microsoft Live Communication Server (LCS). Also included in the session will be media server control via SIP, using SIP/MSML and SIP/MSCML. This advanced session also provides attendees with a review of many of the hundreds of tutorials, graphical objects, open source and freely-available resources, and support available via the popular SIPdev.org Developer Community Wiki, providing a the foundation for continually advancing proficiencies, and simplifying their ongoing creation of telecom applications.

#### 4<sup>TH</sup> FORMERLY VOIP DEVELOPER CONFERENCE TMC COMMUNICATIONS DEVELOPER CONFERE **Dates!**

Annual New

May 14-17, 2007 - Hyatt Regency - Santa Clara, California USA

The World's Only Conference of Its Kind

# here Developers and OEMs **t to Bui** d Profile tions and Partn

- IMS Development
- SIP Development
- Open Source
- Wireless/Mobility
- Unified Communications
- Hardware
- Software
- SOA



Hosted by TMC<sup>®</sup> 1 Technology Plaza Norwalk, Connecticut 06854 USA www.commdeveloper.com

Sponsored by The First Magazine 100% Dedicated to VoIP & IP Communications. Now in it's 10th Year.



#### **Thanks Diamond Sponsors:**



. . . . . . . . . CISCO

