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About INTERNET TELEPHONY®

Internet telephony is revolutionizing telecommunications through the convergence of voice, video, fax, and data, creating unprecedented opportunities for res and service providers alike. **INTERNET TELEPHONY®** focuses on providing readers with the information necessary to learn about and purchase the equipment, software, and services necessary to take advantage of this technology. **INTERNET TELEPHONY**® readers include resellers. developers, MIS/networking departments, telecom departments, datacom departments, telcos/LECs, wireless/PCS providers, ISPs, and cable companies.

Miami is Calling



Next month is ITEXPO, the big show put on by Technology Market-

ing Corp., the parent company of this magazine. It's consistently been a strong show about which I hear nothing but good reviews. And it's in sunny Miami, which is a pretty attractive spot to many folks, particularly in early February. So we hope to see you there.

As discussed in our marketing materials for the show, ITEXPO is the event with an educational program that teaches resellers, enterprises, SMBs, and government agencies how to select IP-based voice, video, fax, and unified communications to purchase or resell. It's where service providers learn how to roll out services their subscribers are clamoring for - and to do so profitably. And ITEXPO is a forum at which buyers, sellers, resellers, and manufacturers converge to forge and strengthen relationships, and to close deals.

ITEXPO will take place from Feb. 2 through 4 at the Miami Beach Convention Center, although you might want to consider arriving a bit earlier to catch some of our pre-conference programs, such as the event Ingate is sponsoring Feb. 1 to educate service providers about how they can leverage E-SBC solutions to support SIP trunking as well as expand their market penetration and revenue opportunities by offering services tied to other applications such as videoconferencing. (For more information about this, see the E-SBCs feature in this magazine, and check out this link: http://www. tmcnet.com/voip/conference/east-11/.)

Of course, this is just one of the many ITEXPO-affiliated events at this show, which is packed with education, training and networking opportunities related to several hot topics. ITEXPO East will feature nearly a dozen collocated conferences, including:

- 4GWE
- Business Video Expo
- Cloud Communications Summit

- CVx ChannelVision Expo
- Digium Asterisk World
- M2M Evolution Conference
- SIP Tutorial
- Smart Grid Summit
- SocialCRM Expo
- StartupCamp
- SuperWiFi Summit
- VIPeering

For more about what to expect at these collocated events, check out the columns starting on page xx by some of the collocated event organizers.

ITEXPO, and all that goes along with it, never fails to satisfy those that attend, exhibit and organize events around it. Indeed, our most recent event, ITEXPO in Los Angeles, broke every previous attendance record for the West Coast version of ITEXPO - with more than 215 exhibiting companies, 366 speakers, 5,800 conference and expo attendees, and almost 100 members of the media participating.

As Rich Tehrani, TMC's CEO and group editor in chief, said after that event: "We're thrilled with the continued growth of ITEXPO... and we'll continue to expand ITEXPO with new and relevant content areas that interest our community, and we're looking forward to bringing things to an even higher level this coming February in Miami."

We hope you'll be among the count for ITEXPO East in February. IT

To register, visit: http://www.tmcnet.com/ voip/conference/east-11/overview/e11registration.aspx

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To review the conference program, visit: http://www.tmcnet.com/voip/conference/ east-11/attendees/e11-conferences.aspx

See you there!

Publisher's Outlook



Growing Data Requirements Point to Success for **Cloud-Based Storage**

My digital life is a mess, and I'm not afraid to admit it.

I have videos on a few sites, and photos on a few others. I've got numerous hard disks with photos, and I am not 100 percent sure they are all synced with the online vendor I use - actually, I am pretty sure they aren't synced.

I am currently not backing up to the cloud but selectively back up important folders and documents. Then there are important websites and voicemails, which I would love to keep an eye on for all eternity - but where to store them? Should I put links in a WORD file? Excel? Then what happens if I lose that?

And then how do I search for the WORD file? Does it live in the cloud? On a netbook? A tablet?

Enter Gogobeans – a company whose mission it is to manage your digital life in a simplified way. A cloud-based vendor, the company also has core competence in the IP communications space with execs who once worked at Clarus Systems and Quintum.

The company provides a free service to everyone who wants to organize their data – as they say, forever. Users receive their own locker and can choose how they share information – if at all.

Each asset – which can be a photo, web page, voicemail or just about anything else becomes what the company calls a BEAN, which stands for business-enabled authorized network services. But all users need to know is that each item can have searchable metatags (for instance, "Brian's wedding") applied to them and can be marked private; friends; members, for anyone who has a Gogobeans account; or public.

The company actively is trying to get people to understand that if you share information with a social network site you are likely relinquishing your rights to

content, meaning you may never be able to fully delete it. It says, however, that if you were to first upload your content to Gogobeans and then share it on Facebook, you could always mark it as private later and it will not be accessible. Of course someone could make a copy, but you get the idea.

The service is in the process of getting many new features allowing you to import your address book from virtually any popular source, drag-and-drop files, IM and more.

One of the pricing models is to charge users for uploading large files and/or more storage. They hope to partner with VoIP vendors to white label the service to their customers. This is a logical idea; just look at what Cbeyond has done. It went from providing broadband and VoIP to backup and marketing services.

As Paula Bernier recently wrote, offering, and more actively promoting, the ability to store data in the cloud seems like a great opportunity for both newer companies and others, like facility-based operators, which are looking at new ways to grow revenue. As she mentioned, she and her family keep investing in new storage devices as their media library grows. And her husband got an ION Audio PROFILE LP Vinyl-archiving USB turntable for Christmas, which will create an even great need for storage now for all the music from her family's record collection.

Businesses and other organizations also have snowballing storage requirements in light of new regulations and even technology innovation, as Paula mentioned. For example, she said that Dr. O'Neal Smitherman from the HudsonAlpha Institute for Biotechnology recently noted that lower costs to do human genome sequencing are driving vastly larger data storage and networking needs for the non-profit organization. And that's just one example of how the storage needs of organizations are growing and creating new demand for both broadband connectivity and storage solutions. IT

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Innovating Your Desktop Communication Experience With Grandstream HD and Multimedia IP Phones



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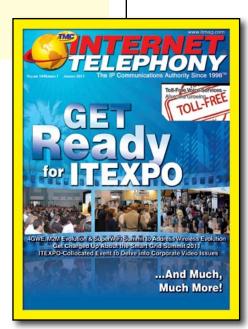
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Non-Profit Organization Simplifies Its Communications with ShoreTel

ommunications solutions are supposed to be about making out lives simpler. But in many cases they can be the source of complexity and management headaches. At one point not too long ago, that was the situation at The Evangelical Lutheran Good Samaritan Society – but no longer.

Rustan Williams, vice president and CIO of The Evangelical Lutheran Good Samaritan Society, says the charitable, non-profit longterm care organization - which provides more than 243 locations and 20,000 residents in 24 states with a variety of assistance including skilled nursing, assisted living, senior housing and home health - used to have a legacy telecommunications platform. But the telephone sets were not user friendly, and staff had a hard time transferring calls. Remote moves, adds and changes were slow due to modem download speeds. There was an inability to monitor users, stations, trunks, etc. The legacy platform also lacked interoperability - there was no five-digital dialing between locations, no toll bypass, and no global directory. And VoIP and UC were very difficult.

After testing a newer solution, The Evangelical Lutheran Good Samaritan Society found that it was too complex to install and maintain, and it would've required the addition of personnel to support. So it dropped that idea.

Then The Evangelical Lutheran Good Samaritan Society took a look at Shore Tel, which Williams says came into consideration later in the process. Williams indicated he pretty much had his mind made up that the other remaining contender would get the business, but after one of his people was able to install the Shore Tel system easily

using just the directions in the box in which it came, he started to pay attention.

Today, the organization is a satisfied user of the ShoreTel solution.

Williams says the company's telephones are user friendly and intuitive to use. The system is easy to administer for the entire enterprise using a single web-based browser application. The licensing model is simple to understand. It allows center locations to administer their music on hold in the same manner as in the past. And it's easy to establish video calls in a point-to-point fashion for locations with adequate WAN bandwidth.

Kevin Gavin, vice president of marketing at Shore Tel, says helping customers get the features and functions they need while keeping it simple is a key goal at Shore Tel. He adds that recent research shows that \$6 trillion worldwide is wasted each year due to IT complexity, so complexity is not just an IT problem, it's a social issue.

There are two common paths to complexity, says Gavin. One happens when companies modify their legacy technology over time to address customer needs, but in the process pile on the complexity. The second path involves vendors that bolt together different solutions that they acquire along the way,

which results in a mish mash of different code bases, user interfaces, and the like.

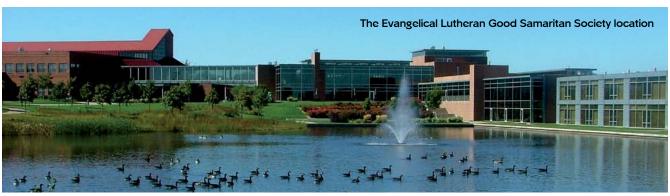
A perverse paradox of the issue is that the very vendors that create this complexity also benefit from it through vendor lock in, and the ability to generate new fees for stuff like additional customer support and training, says Gavin. Meanwhile, businesses buying their solutions suffer with gear that is expensive to install and maintain, and difficult to scale.

"It's time to put an end to this complexity," Gavin says. "It's time to kick complexity to the curb."

When complexity goes away, he notes, businesses can focus on their businesses while their total cost of ownership drops significantly.

That's why ShoreTel is all about simplicity. And because it didn't have legacy to bring forward, Gavin adds, ShoreTel doesn't deliver kludged together solutions. Gavin challenges other vendors in the communications arena to make their solutions easier to deploy and easier to manage as well, and he urges buyers to demand simple and elegant solutions.

This case study was discussed at the last ITEXPO event. TMC and INTERNET TELEPHONY welcome you to join us at the next ITEXPO, which will take place Feb. 2-4 at the Miami Beach Convention Center in Miami. For more information, visit http://www.tmcnet.com/voip/conference/east-11/.



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IP Possibilities, Booth #311	4/12-4/14



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By Frank Lauria



Toll-Free Voice Services Are Alive and Growing

With the growth of broadband e-commerce, mobile data, and flat-rate VoIP

calling plans, many have expected that the toll-free voice industry simply would fade away into the sunset. Nothing could be further from the truth.

The toll-free voice and vanity number business is alive and growing, with new advertising models, personal enhanced services, and unified messaging helping to drive renewed growth in the industry. Popular toll-free numbers such as 1-800-FLOWERS, 1-800-THE-CARD, and the popular jingle from 1-877-KARS-FOR-KIDS have proven to be both effective, and even wildly viral. Using the right combination of technology and best practices, toll-free services providers today can provision, route, and manage their numbers more effectively, and offer their customers more competitive and innovative services.

When first introduced in 1967, toll-free voice services, commonly called 800 services by our parents, were an instant hit with businesses using catchy vanity phrases and "free" calling to attract new and existing customers. As a successful business, providing an easy to remember toll-free number for sales and support was good practice, and many landmark businesses through the years have made these numbers the center of their branding, and advertising strategies.

With toll free firmly established and de-regulation a strong motivator, the FCC made toll-free numbers portable in 1993. This change established the SMS/800 national toll-free database, and enabled customers to switch service providers while retaining ownership of their toll-free numbers. Between 1993 and 2000, the quantity of working toll-free numbers grew rapidly, from 3.2 million in 1993 to more than 20 million in 2000. New toll-free codes were opened to meet this demand, including the 888 code in 1996, the 877 code in 1998, and the 866 code in 2000.

Toll free is still growing today, and in the past four years the number of working toll-free numbers has grown more than 26 percent from 22.7 million in December of 2006 to over 28.8 million in November of 2010. With the pool of available toll-free numbers dangerously low, the FCC recently opened the new 855 code in October of 2010, further energizing the toll-free industry by making new numbers available.

Why the accelerated growth? Throughout the past 40 years the toll-free industry has evolved, and with the convergence of wireline, wireless, and enhanced VoIP services, additional technologies now complement each other to drive additional growth. As an example, new web-based e-commerce sites often use toll-free vanity numbers for customer care and as

an alternate ordering process for those who desire the live interaction of an attendant. Unified messaging, conference bridging, automatic attendant and find-me/follow-me services also use toll-free numbers, and with reduced toll-free carrier costs have made it possible for individuals to have their own personal toll-free numbers in a cost-effective manner. For a carrier, having a competitive toll-free voice offering complements their VoIP, broadband data, unified messaging, wireless, and hosted services portfolios. End customers need this capability, and providers that have bundled toll free effectively with other services enjoy outstanding competitive differentiation.

With this growth in toll-free numbers, the number of responsible organizations, or resp orgs, that are licensed to acquire and manage toll-free numbers through the SMS/800 national database also has increased from 377 in September of 2007 to 409 in November of 2010. Resp orgs can be carriers, enhanced services providers, call centers, those in the vanity number business, or even large enterprise customers. Resp orgs must acquire and manage toll-free numbers in an effective manner, provision services through the SMS/800 national database, and route those numbers through the dedicated toll-free SCP network to long-distance carriers that carry their toll-free traffic.

Being an effective resp org requires having the ability and technology to acquire, manage, and route toll-free numbers with confidence. Integrating and automating these processes with existing carrier billing and operations support systems, providing end customer portal control for searching and reserving numbers, having the ability to provision rapidly during an emergency, being able to analyze and select routes intelligently to optimize costs, and having the tools for mining business intelligence from the SMS/800 national database are all important capabilities needed to be competitive. Resp orgs that implement best practices by adding automation and technology to their operations typically are able to reduce their toll-free provisioning costs by 20 percent to 50 percent, increase their toll-free revenues 5 percent to 10 percent, and decrease their external carrier costs using least-cost routing by 10 percent to 30 percent. Such results translate directly to market leadership and increased profitability.

Today's toll-free carriers and resp orgs enjoy favorable toll-free industry trends through a combination of existing and new business models that help drive growth. Toll free is alive and evolving, and with a combination of technology and best practices can be made into a very profitable and growing business for any carrier or industry player.

Frank Lauria is vice president of CSF Corp. (www.csfcorp.com), a provider of toll-free number management, provisioning and least-cost routing solutions.

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Consumer 2.0, Meet Unified Communications and Collaboration

Chances are that from the time that I finish writing this column and you begin to read it, you will have participated in at least one more social network, checked out the latest smartphone, or have been nonplussed as

you've utilized a new mobile application or boarded a plane with your digital device. As consumers, we have been conditioned to get what we want, when we want it, and how we want it. As you look in the mirror, say hello to Consumer 2.0.

In the blink of an eye, consumer access to information, services and each other has gone through a massive transition. And, with the next blink, that innovation that was born in the consumer space has found its way to the enterprise in the form of unified communications and collaboration. And that is where things get interesting: at the intersection of Consumer 2.0 and what I'll call Enterprise 2.0.

I'm defining Enterprise 2.0 as an environment that leverages real-time communications and Web 2.0 technologies. It is built on unified communications and collaboration capabilities such as rich presence, multimedia conferencing, desktop sharing, web portals and social communities. The environment provides a foundation for companies to better engage consumers, who've been playing with cool communications and Web 2.0 technologies for years. After all, who among us has not used consumer ratings sites to check out a hotel before booking, or read reviews on new digital devices before taking the plunge?

This consumer/enterprise intersection has the promise to allow really great company-customer communications to happen. We have the ability to embed experts into social spaces, to provide mobile-based applications for customer self-service, to use multimedia to enhance communications and, yes, even to let customers know more precisely when the cable guy will arrive.

So why aren't we, the ranks of Consumer 2.0, experiencing some of these advances when we contact the cable company, or the credit card company, or the bank, or the manufacturer of the laptop that I spilled water on? But I digress. The reason is age old. The technologies of yesterday don't serve us today. Most contact centers are running legacy hardware-based technologies that simply don't leverage Enterprise 2.0. And changing customer-facing business processes is risky and painful, yet resisting change could prove worse.

Unified communications has paved the way for integrated, rich presence-powered voice, instant messaging, e-mail, SMS and more. Combine these real-time capabilities with customer facing collaboration tools that give companies the power to create engaging and informative consumer communities, and you've got the essential elements for positive change. IT

Mike Sheridan is executive vice president of worldwide sales with Aspect (www.aspect.com).

Enterprise View

By Max Schroeder



A Reseller Educational Series

Reseller Day – a TMC Tradition

It is now the start of a new decade and time for you to get moving - or is it?

There is an ongoing debate as to whether or not 2011 actually starts the new decade. A recent poll on DVD Talk Forum found that 61 percent favored 2010 and 39 percent 2011. This major divergence demonstrates that many organizations cannot even agree as to what decade it is. And you want to sell them on implementing high-tech communications solutions! Was there ever a better time to attend ITEXPO to sharpen your selling skills and knowledge?

ITEXPO offers a comprehensive mix of educational sessions and exhibitors displaying the latest innovations. For many years now, TMC has scheduled a full complement of sessions specific to resellers. This year's Reseller Day is on Thursday, Feb. 3. The sessions will take place in a pavilion on the exhibit floor. This format eliminates the travel time between exhibits and conference rooms, thus maximizing the reseller experience.

Thursday's sessions will be presented by representatives of key industry vendors that are also some of the leading experts in 21st Century communications and related technologies. The format is open, and resellers will be able to interact with the speakers.

A real bonus for ITEXPO East 2011 attendees is the extended sessions scheduled from 5:30-6:30 pm on Wednesday evening. Jeanne Leckie of The Leckie Group will cover how resellers can modify their sales and marketing techniques to adjust to the rapid pace of change resellers are experiencing. See the components required to drive awareness, customer connections, brand recognition and leads. In addition Jeanne and I will cover how to manage your time and resources to process and close more efficiently the leads you generate.

Reseller technical teams can participate in Ingate's Free SIP Trunking Workshop that runs all three days. The series incorporates step-by-step interactive sessions, basic training on SIP trunk installations, and a SIP Forum SIP connect workshop. This has been a very popular workshop at recent ITEXPOs, and with good reason – SIP trunking is hot. See you there. **IT**

Max Schroeder is senior vice president of FaxCore Inc. (www.faxcore.com).



With increased network complexity and cellular bandwidth demand, testing wireless networks is becoming more and more important for service providers.

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By Alan Murphy



Virtualizing the Network: One Step at a Time

When I begin a new conversation with someone about virtualization, the topic always goes straight to one of two topics: server virtualization - such as using VM-

ware or Microsoft for optimization, agility, or consolidation or cloud computing, virtualizing the location and computing resources required for an application or service. This is a valid course of conversation given IT's use and reliance on virtualization technologies today to achieve their particular business goals: agility and lowering capex and opex.

One topic that rarely comes up in casual conversation, however, is virtualization of the network, and more specifically how to integrate and manage a virtual network as part of an entire virtual server and/or cloud computing deployment. On one hand this omission makes sense: The network is merely the way we access services. But on the other hand, this lack of attention is somewhat puzzling because the network is an absolutely critical component of any virtualization deployment - and it can be argued that it is the most fundamental component of cloud computing. There is really no point in virtualizing computing resources, or moving applications off premises to the cloud, if users can't access those dynamic and scalable resources.

Fully virtualizing the network isn't a requirement for virtual infrastructure or cloud deployments; there is nothing prohibiting a cloud provider from stopping at VLAN allocations for new cloud customers. Offering more advanced and sophisticated options, however, will give both the enterprise customer and the cloud provider more flexibility down the road. First off, virtual platform solutions from VMware and Microsoft rely heavily on virtualized network resources. In fact many advanced platform virtualization solutions require virtual switching to even function. At that level, virtual networking resources become part of the computing fabric.

Networking and server virtualization typically are managed by different groups within IT, which may contribute to the disparity between virtualized computing resources and networking resources. Support staff deploying virtual servers are already on the front lines of merging the network with virtual servers: Virtual servers need to have an IP address and be part of a specific VLAN. This is a task that typically is configured in the virtual platforms as part of the server configuration, yet IP addresses, VLANs, routes, access to the network, and other connectivity requirements usually are managed by the networking teams. Complexity and the challenges of these groups working together become more of an issue when virtual networks extend beyond the hypervisor platform.

Beyond that, bringing the same virtualization concepts we use for sophisticated and dynamic deployments such as those for

the cloud to the network can drastically increase our ability to be agile. Virtual networking benefits can be foreign to many companies and administrators who are faced with moving to virtualization or looking at the cloud simply to add efficiency or for consolidation. But much as distributed virtual machines seemed foreign to the enterprise five years ago, building extremely sophisticated virtual, distributed networks today feels a bit "out there."

We are, however, now beginning to see a slow adoption of truly virtualized and distributed networking tools. VMware currently offers customers two options for distributed virtual switching. Citrix is following suit by building a virtual switch off of the Open vSwitch platform - a virtual switch available to other Linux-based virtual platforms as well. Uptake is slow, however, and I believe this has to do with, among other things, the level of complexity involved in virtualizing the network. The network is already a complex beast, and adding virtualization to the mix isn't a simple task.

Virtualizing at the network layer requires new expertise, new tools, and most importantly, a new paradigm in distributed virtual switching.

Adding in the cloud becomes more complex because now we're dealing with connecting multiple virtualized networks, on premises and off premises, and pushing those over the WAN (which may include traditional leased lines, dark fiber, MPLS, and any number of other upstream provider topologies and challenges). For example, we can build and deploy virtual switches in our on-premises virtual infrastructure, and replicate that architecture with our cloud provider. But how do we connect those two deployments for transparent and dynamic cloud bursting?

There's some talk about the next phase of integrated virtual computing and the cloud with fabric-based computing. So much of the concepts needed for true fabric computing, however, rely upon a highly virtualized network. And this is one of the areas where we're starting to see the real-world implementation of cloud computing catch up to (or rather, challenge) the hype. But we should be cautious: We're now at a point where talking about yet newer virtualized computing models is putting the cart before the horse. The virtual network needs to catch up to and keep pace with virtual computing today before we can move any further, and the first step is grappling the complexity of virtual networks. IT

Alan Murphy is technical marketing manager of management and virtualization solutions with F5 Networks (www.f5.com).



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By Michael Stanford



Why You Need SIP Trunks

ITEXPO East 2011 will be in Miami in February. For the past couple of years one of the dominating themes at the ITEXPO events has been SIP trunking. The message is getting through, but still too slowly.

There is no advantage whatsoever to sticking with circuitswitched connections for voice systems. Reliability and security are simpler with circuit switched, but they are easily addressed on IP voice systems, and the benefits to be gained from going all IP are vastly greater than the downside. Circuit-switched voice access is equivalent to a system that converts all your email traffic to faxes for delivery to your users.

All IP can give you a unified voice and video communications network, and it can give you HD voice at a lower cost than circuit-switched voice.

There are several ways to address the reliability issue, depending on your setup. The Internet way is redundancy rather than bomb-proofing a single system. This means for general office work the simplest way to go is to have your hosted extensions roll over to cellular numbers on no answer. This way your entire building can lose power and your phone service remains uninterrupted. For call centers this obviously doesn't work, but call centers have to have uninterruptible power and network access in any case, so the voice systems can simply piggyback on that.

For security it is hard to beat a circuit-switched access link – by costing the caller money it eliminates a large category of spam calls, and by eliminating IP it eliminates most network vulnerabilities, though circuit-switched connections are still vulnerable to service theft. But the downside to circuit-switched connections is far greater than their benefits. Conventional firewalls are inadequate for VoIP security, which demands deep packet inspection. This is done by session border controllers. According to Infonetics, the market leaders for enterprise SBCs are Acme Packet and Cisco. Vendors specializing in the enterprise market include Ingate, AudioCodes and Sipera. IT

Michael Stanford has been an entrepreneur and strategist in VoIP for more than a decade. (Visit his blog at www.wirevolution.com.)

Integrator's Corner

By David Halford



The Hidden Business Continuity Benefits of LAN/WAN Optimization

Business continuity and disaster recovery projects consist of a fairly basic process of first understanding the impacts of a potential business outage and then developing

solutions that appropriately mitigate them. In recent years, BC/DR projects have been identified by a number of CIO surveys as one of the top issues to address.

However, many organizations still struggle to justify investment in BC/DR in the short term. Therefore, to obtain BC/DR funding and compete for the information technology spend it's critical to generate value and link BC/DR with other key initiatives. Fortunately, other key projects often can be leveraged to improve the effectiveness and lower the overall cost of BC/DR projects.

A prime example is leveraging components of a LAN/WAN optimization project for their BC/DR benefits. A critical success factor of any business continuity project is considering how critical data is going to be backed up, protected and recovered. In many cases, the overall solution capability is negatively impacted by the required network bandwidth costs. LAN/WAN optimization can reduce significantly the bandwidth requirements, thus improving back-up and recovery capabilities.

LAN/WAN optimization also can support a BC/DR program from the infrastructure mapping perspective. A successful enterprise-wide BC/DR program requires that you identify and document the business-critical applications and their interdependencies. Completing this task is often a resource-intensive manual process that injects significant risk. As a result, it's common for an unidentified key interdependency of a critical application to be discovered only at time of disaster.

A network optimization project requires you to monitor the information flow across the LAN/WAN, allowing you to target specific areas of optimization. Many network optimization tools have the ability to identify the applications, infrastructure, and servers, allowing one to monitor their data flows. While the intent is to understand the volume and peak periods, the output can generate an excellent starting point for an application interdependency map. By combining the LAN/ WAN optimization and BC/DR interdependency-mapping projects, the value of each to the enterprise, and thus the likelihood of obtaining funding for both, increases. IT

David Halford is practice manager of business continuity services at Forsythe (www.forsythe.com).







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By Steven Johnson



SIP Trunk Case Studies, Tutorials and More at ITEXPO

The new year is in full swing, and many IT managers are thinking about new technologies that can help catapult

their business ahead of the competition - without breaking the bank.

Join us at the free SIP Trunk-Unified Communications Summit at ITEXPO on Feb. 2-4, 2011, for the inside track on what's new in SIP trunking and unified communications. Get the facts through case studies, independent thought leaders and some of the most innovative vendors in the field, and learn everything you need to know on the what, why and how on these important topics.

This season we're planning an exciting series:

Pre-Conference for Service Providers - On Feb, 1, addressing the business case for service providers: How to generate revenue with SIP trunking and unified communications, providing security for your customers, video as a new service.

A full day on SIP trunking, and a full day on unified communications

Video and fax-over-IP

Case Studies - With Unwired Revolution, an integrator of mobile infrastructure solutions, and several others

Town Hall Meeting – Interactive discussion led by our audience on SIP, UC and security

SIP and Lync - What you need to know

Security with Dan York, Building for ROI, SIP in Action, Hosted Solutions and more.

Live demonstrations, during which participants will set up a SIP trunk in 20 minutes on-site, will also be part of the program

We look forward to seeing you in Miami! IT

Steven Johnson is president of Ingate Systems (www.ingate.com).

E911 Watch

By Nick Maier



Adopting Microsoft Lync? Cloud-Based **E911 Services Leverage New Platform**

The launch of Microsoft Lync, the new unified communications platform from

the folks in Redmond, Wash., represents a new era in terms of how enterprise networks handle emergency calling.

Microsoft is the first company to use IP phones that store their own location information. Among other uses, emergency dispatchers at public safety answering points can use this information in the event of a 911 call. The process Microsoft Lync uses to retrieve this information is equally ground-breaking. When an IP phone plugs into the network, it registers with the Microsoft Lync call server and sends a request to a network element called a location information server, or LIS, which returns a location object that is stored on the device. In the event of a 911 call, this location object is sent out via the SIP addressing stream.

The way Microsoft Lync takes advantage of a LIS and smart SIP devices capable of storing their own location information represents a huge step forward in enterprise E911. It's the first to market with a standards-based approach that also allows

enterprises to leverage the next-generation 911 emergency networks being built by many states.

To take advantage of this revolutionary real-time location information transmission, Microsoft Lync networks need to be paired with a cloud-based E911 service that can take the location object and use the information to route the emergency call to the right PSAP. Going one step further, best-in-class hosted E911 services will not only route the 911 call and the location of the caller to emergency dispatchers, but also will send a notification back to the enterprise via SMS text message or e-mail to alert on-site security and administration that a 911 call is in progress.

This combination of quickly getting accurate location information into the hands of the right emergency responders and notifying on-site response teams of an in-progress emergency saves critical minutes and saves lives.

Nick Maier is senior vice president of RedSky Technologies (www.redskyE911.com).

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By Hunter Newby



Infrastructure Peering – The Topic for the Next Decade

In February 2005 the VoIPeering column was born. It was not long before that when the first dedicated, commercial VoIP peering service was launched in the world. For six years, I

have covered this segment of the industry, essentially since its inception. It has been an exciting time of innovation, creation and growth. Seeing a real, meaningful service created in a void and having so many established network operators move to use it in such a short period of time was amazing on many levels. The fact that the function of peering IP networks had been in existence for many years prior, but none had specified VoIP as a specific IP application to be peered, or a specific VoIP peering service created was very interesting. The point is that there is always room for improvement.

In the spirit of improvement and continuing the education process of the evolving networking landscape I have chosen to update the title of my column for 2011 and beyond. VoIPeering is now Infrastructure Peering.

creation of new businesses, models, etc. There is still a lot going on in the world in this regard, but I do not want to limit editorial coverage to just that. VoIP is becoming more inherent in things like video and gaming, and as I have written many times, it is becoming much more difficult to justify voice as a standalone business. Not that the application needs to be a standalone business to get coverage, but technical and business implications of all applications should and will be considered.

4. The amount of capital being invested in physical network infrastructure on a global basis is staggering. There is a massive shift in the world to upgrade all networks, similar to new highways being built in response to and anticipation of growth demand for all things networked. Just the number of new submarine systems being built around Africa is amazing and is sure to change the continent and its countries, governments, businesses and people. The same is true for Asia, Australia, Europe, North and South America. That's the present day news story.

All of this ties in quite well to ITEXPO, as the event really has evolved to become a United Nations of applications, services, devices, etc., and their respective representatives.

There are many reasons I have chosen this as the new title.

- 1. There is quite a bit of network infrastructure that goes in to supporting VoIP and VoIP peering. I do not believe that everyone fully understands and appreciates this. One example is the relationship between Ethernet (both wired and wireless) and VoIP. There are real costs in the lower layer elements that tie in to cost, QoS and other factors of VoIP and VoIP peering.
- 2. VoIP is not the only application for IP that gets peered. As INTERNET TELEPHONY parent company TMC itself opens up to covering more layers including dark fiber, wireless backhaul, cloud computing, etc., it makes logical sense to address many IP applications – video, HPC, financial trading, media, etc., and not just VoIP.
- 3. I have been involved in VoIP since its commercial inception at ITXC and VoIP peering since the creation of the Voice Peering Fabric and have tracked the growth,

5. I like the name Infrastructure Peering for two reasons. First, you can't really peer infrastructure, so it will make people wonder. After they read they'll get it and appreciate it and hopefully stop taking it for granted. Second, it still highlights peering, which at its root implies cooperation and specifically cooperation between various networks, applications and ultimately the people and machines behind them. This universal standardization is critical if we as a planet are to evolve.

All of this ties in quite well to ITEXPO, as the event really has evolved to become a United Nations of applications, services, devices, etc., and their respective representatives. Underpinning it all is network infrastructure. No matter where you go, you need layer one for things to function properly, or at all. So, welcome to Infrastructure Peering.

As always your comments, input and story ideas are welcome. **IT**

Hunter Newby is CEO of Allied Fiber (www.alliedfiber.com).



Introducing the

Asterisk Global Online Community

Open Source Telephony is taking the world by storm.

The Asterisk Global Online Community — sponsored by Digium and powered by TMCnet — is designed to serve as the information hub for the exciting world of Open Source Telephony based on Asterisk.

This online community features the latest information concerning Asterisk and Open Source Telephony and how it applies to enterprise communications.

The community showcases daily content updates highlighting:

* Feature stories

* Breaking news * Whitepapers

* Case studies

* Tutorials

* Asterisk Developer Blog

Participants in this community will be better prepared to make the proper decisions when it comes to selecting enterprise communications solutions based on Asterisk.





By Peter Radizeski



Things That Make Me Go 'Huh'

Letting more and more people go. All the telcos are doing it. To their detriment. It continues to be a struggle to use the AT&T portals to order anything. It's chal-

lenging to get an update, to get circuits installed and turned up properly.

What makes me go "huh" is no one at AT&T sees it or cares.

What else makes me go "huh"? It's the perfect opportunity for CLECs to take business away, but they can't articulate what their value proposition is or figure out who they are targeting.

Cablecos are ready to launch hosted PBX in multiple markets. (I'm writing this in November 2010). Windstream already has launched hosted UC in its many markets. Owning the network means better control, which leads to improved quality of the service. What makes me go "huh"? That the ITSP companies have not grabbed more market share and now will be in the fight of their lives with cablecos, some of whom are the underlying transport for their services.

What else makes me go "huh"? How is an ILEC or a large MSO going to install and support hosted PBX sales? This isn't like T1 or a data pipe. This is to the desktop of each user. So many moving parts; it will be a challenge.

Telco TV makes me go "huh" too. Cablecos moved from TV to Internet to voice, getting higher profits with each new service. Telcos went the other way: voice to Internet to TV – from high profits to small profits, while outlaying huge piles of cash. In a zero sum game. In a depressed economy. While OTT video is starting to take off. Huh?

Clearwire has burned through much of its cash and still doesn't have a nationwide 4G network built yet. Along comes Harbinger Capital Partners to dump \$5 billion into SkyTerra/LightSquared for a nationwide 4G wholesale network. Put that against the \$5 billion and \$7 billion capex that AT&T and Verizon Wireless spend annually to maintain their network and you have to wonder, huh? IT

Peter Radizeski is head of telecom consulting agency RAD-INFO Inc. (http://rad-info.net/).



http://tmcnet.com/58027.1

Aptela Revamps its Agent Referral Program

VoIP phone service provider Aptela has revamped its agent referral program. As part of the improvements, Aptela has made it easier to refer business, track referrals and compensate referral agent partners. There are no minimum commitments, no certification requirements and no resources required to get started. Agents will receive a payout for each referral that becomes a customer - \$50/unlimited extension, up to \$250/account. www.aptela.com

http://tmcnet.com/58028.1

Mobile Agent Enables WAN Optimization

Ipanema Technologies has introduced its Ipanema Mobile Agent. It is a software agent for Windows desktops and laptops that delivers the performance benefits of Ipanema's Autonomic Network System to mobile and small office/home office users. Mobile Agent gives enterprises full control and optimization of all users and all applications over their global networks. www.ipanematech.com

http://tmcnet.com/58029.1

Telecom Lawyer Discusses Channel Issues

Ben Bronston, a telecom lawyer who's been practicing law for 21 years, recently spoke about agent-related legal matters with TMCnet, the online site owned and operated by INTERNET TELEPHONY's parent company, TMC. He says his recent cases have focused on the rights and contractual agreements among freelance communication service resellers. Continual commission streams after a sales contract has been terminated have become probably the biggest issues in this regard, he says. http://telecomlawyer.net

http://tmcnet.com/58030.1

KBZ Distributes Cisco TelePresence to Resellers

A primary U.S. distributor of TAND-BERG, KBZ Communications Inc. has become a certified Cisco TelePresence specialty distributor to Cisco reseller partners. KBZ has been developing solutions for increasing partner collaboration, efficiency, and ultimately, customer satisfaction, according to the company. Among its

programs are Zcare Premiere, the 24/7 technical support solution; Zpro Installation & Advanced services; financing from GE Capital and Castle Pines; partner incentives through Zbucks Rewards; and a new program for partner collaboration, currently under development.

www.kbz.com

http://tmcnet.com/58031.1

PrimeNet Sells Hughes

Hughes do Brasil, Hughes Network Systems' Brazilian operating unit, has signed a contract with PrimeNet valued at more than \$13 million over 60 months. As a result, PrimeNet will be a master agent of Hughes broadband satellite Internet access service in Brazil. PrimeNet is one of Brazil's value-added master agents of satellite services and anticipates activating 1,000 new business customer sites by next March. PrimeNet will resell the company's high-speed satellite Internet access service to small- and mediumsized businesses across the Brazilian territory with a special focus on the Center-West, North, and Northeast regions. www.hughes.com/International/Brazil

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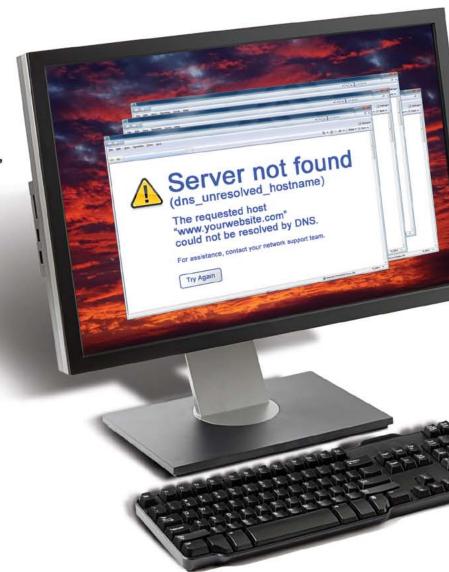
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Got ITEXPO News?

TMC Staff Wants to Hear About It

TEXPO – one of the communications industry's biggest and most important events of 2011 – is taking place next month in Miami. If you'll be at ITEXPO East and have news and/or other interesting commentary to share, Technology Marketing Corp. and INTERNET TELEPHONY want to know about it.

To arrange an on-camera or sit down interview with one of our editors at ITEXPO, please contact Jaime Hernaez at jhernaez@ tmcnet.com.

Our editors will leverage these interviews on the TMCnet site and/or in one of TMC's magazines. TMC publishes in print and digital forms INTERNET TELEPHONY, Customer Interaction Solutions, InfoTech Spotlight, Next Generation Networks and Unified Communications magazines. The company also puts out a wide variety of digital magazines and electronic newsletters on such topics as 4G, M2M, satellite solutions, smart grid, and much more.

ITEXPO, a TMC event, teaches resellers, enterprises, SMBs, and government agencies how to select IP-based voice, video, fax, and unified communications to purchase or resell. It's where service providers learn how to roll out services their subscribers are clamoring for - and to do so profitably. And ITEXPO is a forum at which buyers, sellers, resellers, and manufacturers convergence to forge and strengthen relationships, and to close deals.

The event will take place from Feb. 2 through 4 at the Miami Beach Convention Center.

ITEXPO East also will feature nearly a dozen collocated conferences, including:

- 4GWE
- Business Video Expo
- Cloud Communications Summit
- CVx ChannelVision Expo
- Digium Asterisk World
- M2M Evolution Conference
- SIP Tutorial
- Smart Grid Summit
- SocialCRM Expo

- StartupCamp
- SuperWiFi Summit
- VIPeering

To register, visit: http://www.tmcnet.com/voip/conference/ east-11/overview/e11-registration.aspx

For information about exhibiting, visit: http://www.tmcnet. com/voip/conference/east-11/e11-contact-us.htm

To review the conference program, visit: http://www.tmcnet.com/ voip/conference/east-11/attendees/e11-conferences.aspx IT



Is Your Physical Infrastructure Ready to Meet the Changing Needs of Your Data Center?

As consolidation, virtualization and automation become more widely adopted to increase data center efficiency and agility, the elements of power, cooling, resource utilization, and transmission speed become a very important part of the processes to operate data centers.

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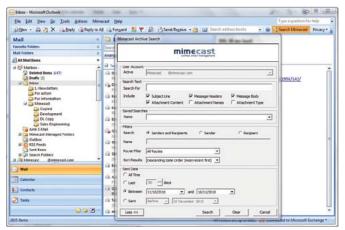


building a smarter, unified business foundation Connect. Manage. Automate.

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http://tmcnet.com/58041.1

Microsoft BPOS Gets Mimecast Support



Mimecast has extended services to Microsoft Business Productivity Online Standard Suite. The Mimecast services will help Microsoft to ease the migration process and enhance the business benefits of messaging and collaboration tools. With the integration of Mimecast's services, Microsoft hosted e-mail platform assures 100 percent service availability, powerful e-mail archiving, granular eDiscovery and legal hold capabilities, according to the companies. Commenting on the launch of the new services Peter Bauer, co-founder and CEO of Mimecast, says: "Momentum is building behind BPOS as businesses look to move applications to the cloud and run leaner IT departments."

www.mimecast.com

http://tmcnet.com/58038.1

Infonetics Says Companies Are **Embracing UC**

According to Matthias Machowinski, directing analyst for enterprise voice and data at Infonetics, 96 percent of companies that use multi-modal communications plan to integrated the various modes into a single user experience. This is in spite of the fact that vendors had sowed confusion in the minds of users, he says. The top reasons that were cited for deploying UC were improved employee productivity, reduced operational costs and executive demand. Among North American medium and large enterprises, Cisco emerged as the leading IP telephony provider, while Microsoft dominated the e-mail and IM sector with Google not very far behind. For the survey, 106 U.S. and Canadian companies with a minimum of

100 employees that were using multiple types of communication were interviewed.

www.infonetics.com

http://tmcnet. com/58039.1

Northeast Service Provider Gets Cisco Master UC Designation

Total Communications Inc. has achieved Master Unified Communications, or UC Specializations, from Cisco Systems Inc. To get this designa-

tion, resale channel partners must first attain the Advanced Unified Communications Specialization. Stringent requirements that demonstrate master-level sales, technical and service capabilities must be also met by the partners. Richard Lennon, president and CEO of Total Communications, says: "This credential demonstrates to our customers the investment we have made in technology, staff and resources, to deliver a successful solution for their business."

www.totalcomm.com

http://tmcnet.com/58042.1

New E-Mail Security Service Leverages the Cloud



Barracuda Networks has launched a cloud computing-based e-mail security service. Customers will get various benefits from using the Barracuda Networks' new e-mail security service as a pure cloud offering or

with the Barracuda Spam and Virus Firewall in hybrid mode. These benefits include e-mail continuity, e-mail encryption, dual protection points, and e-mail burst handling. The Barracuda Spam and Virus Firewall filters e-mail according to more granular policies, recipient verification, quarantining and more once e-mail passes through the cloud protection layer. Dean Drako, president and CEO of Barracuda Networks, says: "The new Barracuda Email Security Service provides customers with a relevant option to block threats before they reach the network and save on bandwidth and continuity."

www.barracudanetworks.com

http://tmcnet.com/58043.1

Adobe to Open London-Area **Data Center**

Due to a demanding data processing market, Adobe is opening a data center in a colocation facility outside of London that will serve its Omniture Business Unit customers in Europe, the Middle East and Africa. With the help of this data center, Omniture will be able to offer online business optimization to its customers. This new data center will be available to new Omniture Business Unit customers in the first quarter of 2011. Adobe's Omniture acquisition provides hosted Internet analytic software and services to corporations for measuring website traffic, visitor activity, advertising effectiveness, e-commerce transactions and optimization.

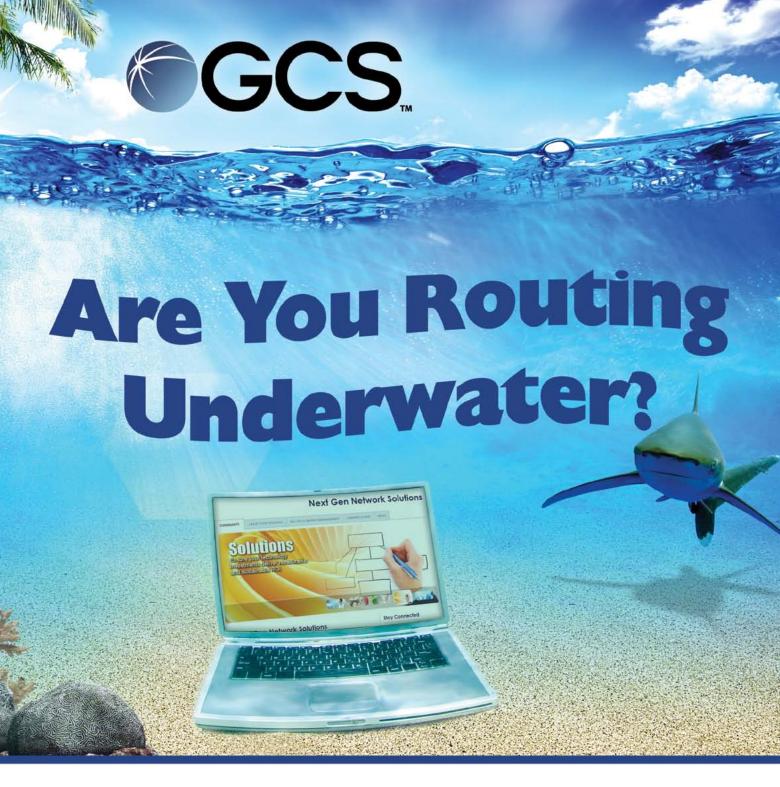
www.adobe.com

http://tmcnet.com/58044.1

Intermedia Scores Ingram Micro Services Award of Excellence

Ingram Micro Inc. recently awarded Intermedia, a hosted Exchange provider, the Ingram Micro Services Award of Excellence for 2010 at the distributor's annual Marketing Symposium in Anaheim, Calif. The award recognizes top-performing technology manufacturers and software developers for outstanding IT channel performance and partnership, as well as achievements against measurable objectives, such as growth, revenue, profitability, marketing programs, solution provider support and services.

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Cableco Unveils Premium Offer

Time Warner Cable, the U.S.'s secondlargest cable operator, is set to begin offering customers a new premium cable package for the eyebrow-raising price of \$189.95. The gilt-wrapped plan, called Signature Home, will be first tested in the Charlotte, N.C., market and, if successful, will be rolled out nationally. It will include two whole-home digital video recorders, wideband Internet and higher-end service. Customers who opt for the new premium package will have access to a personal service adviser 24 hours a day, and specially trained technicians will make house calls at set appointment times.

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http://tmcnet.com/58047.1

Cable is Best Bet for Big U.S. HD Voice

U.S. telecom carriers are clearly behind the curve when it comes to rolling out consumer HD voice services over broadband. BT has about 2 million G.722 "Hub" endpoints deployed across its network while France Telecom/Orange has about a half a million broadband endpoints deployed today. If anyone is going to drive HD voice into the consumer arena, it's going to be the cable companies. That's because over the past 18 to 24 months, CableLabs – the cable industry's technical standards group - has been quietly publishing and refining specifications for SIP peering, ENUM, and CAT-iq.

www.cablelabs.com

http://tmcnet.com/58046.1

CommScope Delivers Fiber **Optic Cable for Broadband** Stimulus Project Merit Network has

tapped Comm-Scope for its broadband stimulus project,

> REACH-3MC. The REACH-3MC project will include 1,017 miles of open-access, advanced fiber optic network through

rural and underserved communities in Michigan's Lower Peninsula. "We believe that CommScope will manufacture and deliver a superior fiber optic cable at a very competitive cost," says Bob Stovall, vice president of network engineering and operations for Merit Network. "There are a number of factors that we examined to reach this conclusion, from the quality of fiber optic cable produced to the delivery methods and cleanup."

www.commscope.com

http://tmcnet.com/58048.1

Mobile, U.S. Service Providers Getting Serious Over HD Voice

HD voice is gaining traction around the globe, as evidenced by a report the Global Mobile Suppliers Association cataloging mobile HD voice deployments to date and the US Telecom's recent interest in starting a dialogue about "voice innovation." GSA's "HD Voice: Global Update" report is a quick two-pager with a nice chart listing the in-service dates for mobile HD voice networks currently in operation, along with a smaller one listing expected future network turn-ups. We're up to 10 networks in 9 countries. Also of note is that the mostly tier 1 telco-focused association known as US Telecom re-

> Innovation Summit" featuring presentations from Polycom CTO Jeff Rodman, Skype Chief Technology Strategist Jonathan Rosenberg and Google Voice Manager Vincent Paquet, and was moderated by

cently held a "Voice

Verizon Technology Policy Vice President Link Hoewing.

www.gsacom.com www.ustelecom.org

http://tmcnet.com/58049.1

Telco Shows Missouri FTTH

Granby Telephone Co. Broadband has launched a multi-phase fiber-tothe-home initiative in southwestern Missouri. Fiber management for the effort is supported by Clearfield, which has designed the FieldSmart fiber management platform. The work on this project has already

begun and the first phase of the active Ethernet deployment is scheduled to be completed next summer. The entire project is expected to be completed in 2014.

www.clearfieldconnection.com http://gtcbroadband.net

http://tmcnet.com/58050.1

NTELOS Acquires FiberNet **Business Unit**

NTELOS Holdings Corp., a provider of wireless and wireline communications services, has completed the acquisition of the FiberNet unit from One Communications Corp. The company serves Virginia, West Virginia, Pennsylvania, Kentucky, Ohio, Tennessee, Maryland and North Carolina regions. NTELOS purchased approximately 30,000 customer accounts in West Virginia, Ohio, Maryland, Pennsylvania, Virginia and Kentucky. Frank L. Berry, NTELOS executive vice president and president of wireline operations, says that the FiberNet purchase is another significant step for NTELOS as it continues to position its wireline business as the preferred provider of high-bandwidth data products in the Mid-Atlantic region.

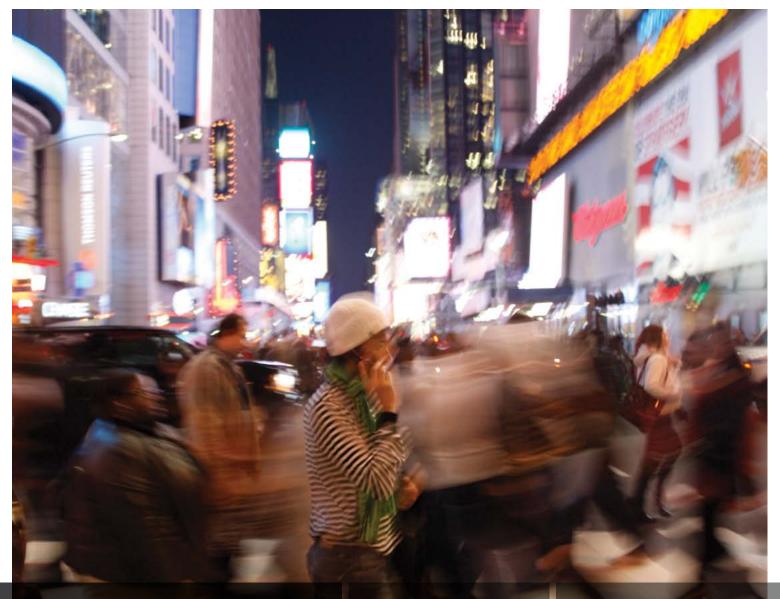
www.ntelos.com

http://tmcnet.com/58052.1

The Switch, Verizon Sign Digital Fiber **Expansion Deal**

Beers Enterprises Inc., the operator of The Switch, signed a deal with Verizon to expand its national digital fiber transport services. With this agreement, it can offer high-definition video services to all 31 states and Washington, D.C. The deal has opened the door for Switch customers to use metro fiber optic services, including Verizon High Definition 1.485gbps, HD/SDI and Standard Definition 270mbps SDI local fiber circuits in New York, New Jersey, Massachusetts, Rhode Island, Virginia, Pennsylvania, Maryland, and Delaware. The Switch provides fiber-based services in the New York metropolitan area, and advanced video switching services in London, Los Angeles, Miami, Toronto and Washington, D.C.

www.theswitch.tv www.verizon.com



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WIRELESS



http://tmcnet.com/58040.1

Siemens Enterprise Launches OpenScape UC Suite 2011



Some unified communications are aimed for business use, but they tend to be complex, expensive and proprietary, says Chris Hummel, CMO for Siemens Enterprise Communications. Consumer UC and collaboration solutions from companies like Google and Skype, meanwhile, are easy to use and affordable, but may lack the reliability, scalability and security that businesses need, he adds. **But Siemens Enterprise Communications** is bridging the gap between these two sides with the introduction of OpenScape UC Suite 2011, which Hummel says is an affordable, open, and business-grade solution. Building on, and adding to, the capabilities of the OpenScape UC server it announced several months ago, the OpenScape UC Suite 2011 now

brings collaboration everywhere; offers enhancements in the areas of applications, interface, mobility and video; and adds Web collaboration and OpenScape phone application, says Hummel.

www.siemens-enterprise.com

http://tmcnet.com/58054.1

Texting, Video Could Be Added to **Emergency Response**

Seventy percent of 911 calls from mobile phones, all of which have texting capabili-

ties, according to the FCC. And streaming video and texting have become part of many of our everyday lives. Eventually these technologies could become part of the nation's emergency response systems as well. The FCC plans to issue a notice of inquiry asking interested parties for their input on how text and video could be integrated in to the nation's emergency response systems.

www.fcc.gov

http://tmcnet.com/58056.1

Novatel to Buy M2M Company Enfora Novatel Wireless plans to acquire M2M outfit Enfora for approximately \$64.5 million in cash. The deal is intended to diversify Novatel's customer base and product lines in M2M markets, including health care, security, transportation and logistics. The acquirer sells 3G wireless PC cards, ExpressCards, USB modems, embedded modules, fixed and mobile terminal solutions and communication software to wireless network operators, distributors, OEMs, and vertical markets worldwide. Enfora, a privately-held company that delivers intelligent asset management solutions that leverage machine-to-machine communications, sells embedded platforms, integrated platforms, and embedded software to enterprises, applications

http://tmcnet.com/58055.1

www.novatelwireless.com

F5 Addresses Mobile Data Boom

New service delivery networking solutions from F5 Networks provide mobile operators with a unified way to deliver converged services involving voice, data and video. Specifical-

service providers, OEMs and distributors.

Having contextual user and traffic awareness will enable service providers to make dynamic, policy-based traffic steering decisions and, as a result, offer premium services and more flexible pricing models. It can also be beneficial by allowing carriers to provision infrastructure as needed, so gear is more optimally used; this can reduce by a third server requirements, for example, according to F5.

www.f5.com

http://tmcnet.com/58059.1

Study Connotes Mobile Broadband Availability

ABI Research in its latest report announced that there are currently more than 500 3G network commitments, and over 300 WiMAX and LTE announcements worldwide. This equates to more than two billion of the world's population being covered by high-speed data networks. Nearly 82 percent of the population in Western Europe is currently covered by 3G networks, while only about 12 percent of Asia-Pacific's population has access to 3G services. In addition, network sharing has become more common in a number of mature markets. www.abiresearch.com

http://tmcnet.com/58058.1

Sprint Expands 4G

Sprint Nextel, a provider of wireless and wireline communications services to more than 48.8 million customers, has introduced its 4G services in Los Angeles, Miami, Washington D.C., Cleveland, Cincinnati and Columbus, Ohio. With the new launch, users of the Sprint 4G network in these areas will be able to enjoy fast mobile

> downloads, wireless video chat and faster mobile web browsing. The company also expected to introduce its 4G services in the San Francisco market last month. Initially, the company introduced its 4G services

in Baltimore in September 2008, and offers a portfolio of devices that comprises phones, USB aircards, notebook/netbook products, mobile hotspots and routers. www.sprint.com



ly, the solutions from

F5, which leverage the Diameter protocol, offer intelligent traffic steering, large-scale IPv4 to IPv6 translation, secure DNS traffic management, traffic optimization and acceleration, and policy enforcement.



Today's competitive landscape necessitates that businesses do whatever is within their power to improve performance, while complying with state and federal mandates and regulations. That's why many businesses have already deployed company-wide call recording technology. Call recording helps ensure regulatory compliance, enhance training and development capabilities, increase customer satisfaction, limit legal liability, and provides a record of audio transactions for clarity and continuity of operations.

The Call Recording Community is your resource for call recording solutions for businesses of all sizes, including SIP Print's SIP-based call recording appliance, a system-level call recording solution for today's VoIP phone systems.

- ~ Breaking News
- ~ Feature Articles
- ~ Call Recording Blog
- ~ Real-world Use Cases
- Product Demos
- ~ Partner Spotlights
- Expert Commentary

http://call-recording.tmcnet.com



Each NEWS snippet is more in-depth on our Web site. Point your browser to the URL above the story you wish to read.

http://tmcnet.com/58021.1

SETAR Deploys Acision Charging Engine

Acision Charging Engine has been deployed by SETAR, the national telecommunications provider of Aruba, as its mobile charging platform. SETAR seeks to gain a competitive advantage in the region by deploying a hybrid post-paid/ pre-paid plan based on the platform.

www.acision.com

www.setar.aw

http://tmcnet.com/58022.1

TTI Gets Listing on GSA Schedule

TeleManagement Technologies Inc. recently was awarded its US General Services Administration schedule, and is now an official Multiple Award Schedule vendor. As a result, TTI will be able to help government agencies seeking telecom expense management and call accounting solutions. TTI's product offerings include WinBill TEM (for wireline and wireless telecommunications expense management); WinBill Order Desk; Wireless Help Desk; WinCall (en-

terprise call accounting); and professional services that include audit, consulting, and contract negotiations for both landline and wireless communications services.

www.telemantec.com

http://tmcnet.com/58024.1

Model N Takes Revenue Management to the Cloud

Revenue management solutions provider Model N has unleashed the Revenue Management Cloud, a revenue management software-as-a-service offering for life science and high-tech manufacturers. Richard Fitchen, senior vice president for marketing and business development at Model N, says that RM Cloud, Model N's tools, services, and domain-specific expertise are now available in the cloud, allowing large businesses to lower revenue management total cost of ownership and improve efficiency without sacrificing the ability to manage complex deal, data, process, or reporting requirements. Additionally, the company announced

RM Cloud for Emerging Leaders, an accelerated implementation program. www.modeln.com

http://tmcnet.com/58026.1

CTI Group's Proteus Slashes Wireless Expenditures

A provider of enterprise communications management software and services, carrierclass voice over IP management applications, enterprise and carrier-class call recording solutions and electronic invoice processing and management, CTI Group has launched Proteus Mobile. It's a call accounting tool engineered to monitor and report on SMS, MMS, data usage and standard voice traffic on any mobile handset or 3G device. Its series of standard and bespoke reports are designed to highlight specific usage patterns, allowing businesses to identify their highest data, voice and roaming users. The Proteus call accounting solution centralizes and consolidates all mobile and fixed line communications on a single platform.

www.ctigroup.com



http://tmcnet.com/58036.1

AsterUVX Lets Open Source Address the Call Center

SoftSyl, a provider of interactive voice response solutions for small- and mediumsized call centers and businesses, has released AsterUVX. It's a VoiceXML platform specifically designed to integrate with Asterisk and other open source telephony platforms. More specifically, AsterUVX enables open source platforms to work as full call center suites that are capable of handling millions of simultaneous calls. Through this launch, SoftSyl expects to provide cost-effective, enterprise-grade IVR solutions at a fraction of the cost of other providers.

www.softsyl.com

http://tmcnet.com/58034.1

VoltDelta White Paper Debunks Myths

Everyone knows by now the benefits of ondemand solutions for the contact center: the ability to get up and running quickly with low upfront capital investment, flexible scalability for contact centers with

fluctuating needs, the ability to support home-based and remote agents, and the ability to put the IT needs of the contact center into someone else's hands. But the on-demand contact center solutions market is beginning to become a little crowded, and sometimes it's hard to hear clearly over all the chatter. A new white paper by on-demand contact center solutions provider VoltDelta called "Trust But Verify..." seeks to help clear the path by busting the 10 most common myths about on-demand contact center solutions.

www.voltdelta.com

http://tmcnet.com/58035.1

PaloSanto Solutions CEO Discusses Open Source Innovation

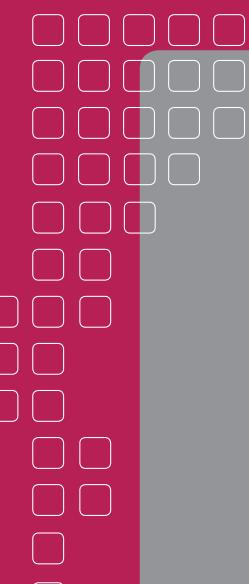
Ecuador-based PaloSanto Solutions is a provider of IT services for the Latin American and international marketplace. The company's solutions includes 24/7 support, training, consulting, software development, and more. Edgar Landivar, CEO of PaloSanto Solutions, says "open source is a vehicle to make and distribute innovation; in that sense our work is not only limited to attend a technological need for a client, our work extends to the point where it can create a tailored solution to the client, one which maybe didn't even exist before. In fact, that way of thinking is what led us to create Elastix." www.palosanto.com

http://tmcnet.com/58037.1

Inet, Vestec Partner on **Speech Recognition**

Earlier this year I6net, which specializes in sophisticated VoiceXML browsers for speech applications, and Vestec, whose forte is in devising robust affordable speech recognition engines, partnered to integrate their products for the Asterisk telephony platform. The combination of I6net VXI* VoiceXML browser and the Vestec speech engine, both firms say, "significantly reduces the cost, time, and difficulty of implementing sophisticated speech recognition solutions with Asterisk."

www.l6net.com



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BUSINESS GETS DONE

Get Ready for ITEXPO

Feb. 2 through 4 at the Miami Beach Convention Center

▼ he event offers a bustling trade show floor as well as an educational program that teaches resellers, enterprises, SMBs, and government agencies how to select IP-based voice, video, fax, and unified communications to purchase or resell. The program also helps service provides most effectively select, deliver and support new revenue-generating services. It's also a great place to network and close the deal.

To ensure you can make the most of your time in Miami, ITEXPO also has invited a wide variety of partners to join us and bring their own programs into the mix.

Events collocated with ITEXPO East include:

- 4GWE
- Business Video Expo
- Cloud Communications Summit
- CVx ChannelVision Expo
- Digium Asterisk World



- M2M Evolution Conference
- SIP Tutorial
- Smart Grid Summit
- SocialCRM Expo
- StartupCamp
- SuperWiFi Summit
- VIPeering

The pages that follow feature some of these collocated event organizers talking about what's happening in their various areas of the industry and how their individual programs will address what's happening now and in the future in these disciplines. **IT**

By Carl Ford



The SIP Tutorial – Way Beyond 2.0

I am constantly asked the question by alumni, "I went to the SIP Tutorial years

ago, has it really changed?" The answer can be seen in the marketplace today.

Based on HTML, SIP started off as an easy to read telecommunications protocol that was aimed at supporting telecomlike services. However, at its core it was about the Internet. And as the Internet changes, so has SIP.

SIP took advantage of the presence and instant messaging revolution to deliver new services and replace the signaling protocols of the legacy dial tone with the Internet model of knowing your status and availability.

Then came the early versions of Skype and BitTorrent that taught us about peer-to-peer connectivity, the further modification of the web, and the move away from client/server technologies.

Then came the unified communication vision where rich media started to integrate all these media formats into a complete communication suite. While strongly connected to the enterprise side of the business, it represented new adoption of SIP by major players.

Recently, the use of over-the top video and end-to-end communication has given rise to mobile video communication that we see on the iPhone and Android implementations. And this is foreshadowing what is possible when the new video standard codecs are implemented.

All of these changes represent leaps forward on the Internet and progress that has then been integrated into the standards. SIP continues to explode with innovation like the rest of the web, and as the new solutions arrive they add to the mix of SIP.

This history is in the SIP Tutorial, but more important are the teachers. Henry Sinnreich and Alan Johnston worked together on the first commercial SIP implementation for MCI back when Vint Cerf was pushing to make everything work over IP. Vint was their boss.

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Vidyo has changed the way video conferencing works - providing natural, HD-quality communication that works where you do - in the office, on the road, at home - over the Internet, even wirelessly. Stay connected globally with natural face-to-face communication. Learn more about this revolution in video conferencing at www.vidyo.com and follow us on Twitter: @vidyo.

They not only represent the original implementation but current authorship of the SIP RFCs.

They provide in each SIP Tutorial an update of how the standard is being impacted by the innovation of the Internet.

Then you have to ask the question: Who should go to the SIP Tutorial? The answer is rarely the beginner but often the person looking to take his or her development plans beyond what exists and toward what can be.

And now we are at the next phase of the web and cloud computing where the soon to be released version of HTML5 will bring a new era of rich communication. The voice of the web will be SIP, the device you carry will integrate SIP, and in many cases the devices that talk to other machines will find SIP a solution that makes sense in the future.

If you are looking to be current, the SIP Tutorial will take you way beyond 2.0. IT

Carl Ford is co-founder of Crossfire Media and leads the effort that stages the ITEXPO-collocated event SIP Tutorial.

By Hugh Goldstein



The global mass migration from PSTN to IP architectures is well under way. On the carrier and mobile side, engineers are replacing increasingly obsolete Class 4/5 circuit switches with smaller and faster softswitches and sophisticated session border controllers. Enterprises are replacing old PBXs with unified communications systems. The rewards will be networks and businesses prepared for the future, ready to achieve capex/opex efficiencies while simultaneously supporting customer demand for new and innovative services. And peering and IP interconnection are essential for realizing the full benefits of this massive industry transformation.

Peering and interconnect strategies must address a complicated set of functions, including signaling, media, transcoding, transport, numbering, registries, commercials and security. Not all equipment implements SIP the same way. Codecs must be negotiated and transcoded. Number portability challenges may be resolved via ENUM queries to authoritative registries. Commercial terms may be established via traditional or bill and keep modes. Finally, the entire set of variables can be approached in a serial bilateral fashion or via aggregated federation models.

While voice interconnects have one complicated set of technical and

VIPeering Conference Preview

commercial variables, video telephony interconnects are an even more interesting challenge on the horizon. As video-enabled enterprise IP phone sets appear on desks around the world and 4G smartphones proliferate in mobile consumer hands, the requirement to establish sessions that reach both over-the-top IP communications applications as well as the high-end telepresence systems will emerge.

Planned sessions will include:

- Corporate and enterprise peering and UC - models and strategies
- Peering in Latin America unique regional challenges and opportunities
- Cable telephony peering update from the MSOs
- Video telephony over-the-top, mobile and corporate interoperability
- Mobile carrier interconnection scenarios
- Successful business models for peering

The VIPeering conference explores the enabling elements, technologies, practices and standards that serve as the basis for this industry shift toward IP voice interconnects and peering.

Finally when planning an effective peering and IP interconnection strategy, there is an impressive ecosystem of vendors, federations, working groups and standards bodies that have contributed important components, systems and methodologies that should be considered and evaluated.

The VIPeering conference explores the enabling elements, technologies, practices and standards that serve as the basis for this industry shift toward IP voice interconnects and peering.

- · The role of ENUM in LNP and interconnection
- Numbering and identifiers in peering and interconnection
- Endgames for peering: key enabler updates

Please join us on Feb. 2 in Miami for the VIPeering conference, to meet with your "Very Important Peers" in the industry, to network, share ideas and explore best practices for IP interconnection and peering. IT

Hugh Goldstein is managing director of AU24 (http://au24.net) and conference co-organizer.

Rethink Telecom



TEM WMM 2011 is for telecom professionals with responsibility for electing, reviewing, recommending or managing fixed or wireless telecom services and technology. An impressive balance of educational, networking and thought-leadership sessions covering the issues most important to you:

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February 14-16, 2011



Business Video Expo

ITEXPO Collocated Event to Delve into Corporate Video Issues

Video follows audio like day follows night. This is a maxim that we

frequently mention in our research work at Interactive Media Strategies as we try to convey the inevitability of video communications adoption in the corporate sector. After all, history clearly demonstrates that video is the natural destination for virtually any evolving medium of communications.

In mass media, television supplanted radio as the broadcast realm of choice. In the world of optical media storage, videorich DVDs emerged as the next step beyond the music delivery medium of compact discs. More recently, even iPods have rapidly graduated from their initial role in music distribution to broader aspirations of shuttling video content to end users.

And, so, as we look to the corporate communications environment, it's only natural to contemplate the next step beyond the realm of voice over IP. While no one can dispute the continued strength and vibrancy of the overall market for enterprise deployment of VoIP solutions, video looms as

a new frontier with the promise to transform the way we all communicate during our work days.

Business Video Expo will be held on a collocated basis with the ITEXPO show to be held Feb. 2 through Feb. 4, 2011 in Miami, Fla.

With this future in mind, we're creating a conference forum dedicated to raising awareness and understanding of how video can productively be implemented in the corporate environment. It's called the Business Video Expo and will be held on a collocated basis with the ITEXPO show to be held Feb. 2 through Feb. 4, 2011 in Miami, Fla.

Our goal is to bring together thought leaders from the business video sector to discuss the key issues influencing corporate decisions on how to best invest in

video-enriched communications solutions. Rather than talking in general platitudes about the promise for democratizing video for the corporate masses – as we have seen at some other trade shows - we seek to foster discussion of the real issues most relevant to executives actually in the trenches of video deployment.

Whether companies are implementing the technology to communicate more effectively behind the corporate firewall or



deploying the technology as a way to reach more customers in a more engaging way on the public web, executives do encounter a raft of issues that must be addressed as they select and roll out video communications solutions. Certainly, any company serious about leveraging video to enhance business operations cannot be cavalier in selecting solutions that enable the creation, capture, management and distribution of video content.

We're designing conference sessions at the Business Video Expo specifically to address some of the hottest topics today among the growing cadre of professionals involved in the daily task of weaving video more seamlessly into the set of technology options available to business communicators. Taking all of the sessions together, the conference program reads like a detailed primer for understanding the key trends shaping the entire workflow for adopting video solutions in the corporate sector.

One key trend to be discussed at the Business Video Expo, for instance, focuses on the proliferation of video cameras and associated video editing solutions. With the sprawl of capture and creation options for video, executives need help in sorting out the options that will be most productive for developing viable content for business use.

From this discussion of video creation, we expand into topics that emerge once companies are actively distribut-

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Operation office: 8 Pastera str, Office 2, Odessa, Ukraine, 65023 E-mail: info@speedflow.com Phone: +380 48 777 00 77 ing the content they develop. One session at the Business Video Expo will focus on innovative marketing applications for video. Other discussions later drill into this topic more deeply by focusing on best practices for integrating video with social media platforms and leveraging video to enhance search engine rankings.

Also of interest to any new student of the business video market space will be detailed discussions of considerations that should come into play when deciding how and why to deploy live video and on-demand alternatives. Still more sessions will focus on emerging software solutions categories that simplify corporate deployment of video. Key issues that will be highlighted in Business Video Expo discussions include overviews of key trends in video content management, business video analytics, and the implementation of video applications in the mobile environment.

Clearly, we have a lot to talk about at the upcoming conference. While we see the evolution of video in the corporate sector as inevitable, only companies that take the time to learn about the technology will be positioned to build competitive advantage from its implementation.

Organizations that build cost-efficient, effective platforms for video communications will be able to deliver dynamic messages to employees and outside stakeholders. And better communications translates into better business. IT

Steven Vonder Haar is research director of Interactive Media Strategies (www.interactivemediastrategies.com) and the programming chair of the Business Video Expo.

By Martin Vilaboy



Ever since the emergence of IP telephony, folks have spent considerable amounts of time deliberating and debating over which indirect channel would be in the best position once the dust of disruption had settled and legacy systems were left behind. Would it be traditional telecom agents and master agencies, born in the days of long-distance resale? Or would integrator and equipment value-added reseller types rooted in the IT department have the leg up?

As it turns out, the shift to IP communications has hit contestants on both sides of the demarc pretty squarely in the chops. From the server room to the phone closet, the evolution of IP services has led to a revolution in end user demands and experiences. As many expected, IP-based communications and networks opened the floodgates to all manner of hosted and managed services, virtualization and the ever-broadening category of cloud computing, allowing businesses to develop solutions and applications that are integrated and specialized at levels once unimaginable.

A Bridge to Convergence

More so than ever, implementations and service delivery tends to involve numerous moving parts and interconnected technologies, provided by multiple vendors across multiple devices and platforms, with the expectation of a consistent and coherent end user experience. Where once distributor sales managers looked for closers who could bring home the sale, it's now sales engineers who are often seen as the most important feet out on the street. The upshot is a situation in which providers and value-added distributors of recurring communications services must work to understand more about devices and integration, while integrators and equipment dealers need to understand more about the recurring services models.

That's not to say this new normal is inherently all challenge and no opportunity. Enabling businesses to connect with the people, applications, information and content they need is precisely how the communications industry remains relevant in an increasingly complex and fragmented environment. And voice and data services, in their real-time nature, arguably can sit at the core of a converged solution that integrates communications services with cloud capabilities.



The problem is, however, as MegaPath Executive Vice President Dan Foster states, "The channel simply is not keeping up with the move to the cloud."

Equally important, though expressed much less often, is the fact that cloud and managed services providers also have a lot to learn about selling through indirect channels, and this matter cannot be taken too lightly. Much the same as channel partners, business IT managers likewise are finding it difficult to keep up with the formation of cloud services,

Visit the Voice Quality Community

While the cost-saving benefits of VoIP are well documented, voice quality has emerged as one barrier to adoption, for businesses and consumers alike. Now, consumers have access to a device from Ooma that provides free U.S.-based telephone calls and advanced telephony features for superb voice quality.

Ooma's appliance offers exceptional voice quality and the reliability of a traditional phone service, but at a fraction of the cost. You don't need a headset. You simply connect the device to your high-speed Internet and your existing phone, and that's it. You're ready to start calling and experience Ooma's great voice quality.



Community Features:

- Listen to recorded samples and compare voice quality with Ooma vs. a leading VoIP provider.
- · Track breaking news about voice quality in VoIP appliances and services.
- · Read white papers relating to IP telephony.
- Get access to case studies detailing successful deployments of Ooma's products.



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http://voice-quality.tmcnet.com/

and in many cases getting there will require the type of personalized and specialized assistance that traditionally has been available only through indirect and independent distributors.

These new and ever-present realities within our continually transforming business environment were a primary impetus behind the creation of the CVx collocated within ITEXPO. Making its second appearance at ITEXPO East this February at the Miami Beach Convention Center, CVx within ITEXPO brings together onto one show floor the richest assortment found anywhere of industry participants from all across the communications ecosystems (from voice and date services providers to managed and cloud services providers to telecom agents and distributors to system inte-

grators and equipment resellers) all with the same goal: expansion of distributors' service portfolios to gain a greater share of the customers' wallets.

For agents and value-added distributors, it's a chance to establish fluency with cloud and managed services providers, get into their flow of leads, possibly initiate co-marketing dollars, and gain a better grasp of follow-up sales and services. For cloud and managed services providers, meanwhile, it's an opportunity to gain a better understanding of indirect channels from the true experts in areas such as commission structure, end user education, portal construction, customer acquisition and partner support.

Indeed, CVx coming to ITEXPO, along with the Cloud Communica-

tions Summit, M2M Evolution, 4GWE, SocialCRM Expo and the Smart Grid Summit, as well as the other pavilions that are now a part of the event, is simply a reflection of the changes that are taking place throughout indirect channels and are necessary steps to maintaining relevancy and value during these transformational times. The future brought about by IP communications is here, and industry events and gatherings in which one market segment simply talks within itself are destined for the same path as TDM and the PSTN.

Martin Vilaboy is editor of Beka Publishing, publisher of Channel Vision Magazine (www.channelvisionmagazine.com) and organizer of the CVx Channel-Vision Expo.

By Bryan Johns



2010 was a banner year for Digium, the Asterisk project and the vibrant community that supports its development. Asterisk 1.8 long term support was released with four years of support in October of 2010 and brought with it a substantial number of new features including secure real-time transport protocol support, IPv6 support, calendaring integration, enhanced call logging, and much more.

In addition to the successful completion of Asterisk 1.8, Digium, with the help of the community, continued to enhance the 1.4 and 1.6 branches of the Asterisk project, making these versions more stable, secure and functional for its more than one million implementations around the world. Digium is proud of the progress made over the course of 2010 and is charting a course for significant enhancements in 2011.

The work completed in 2010 allows Asterisk to maintain its position as the

Asterisk: Building for the Future in 2011

most stable, capable and widely adopted open source communications solution in the market. Looking forward to 2011, the Asterisk development team, inside of Digium in partnership with community contributors, is charting a course toward new and exciting functionality for inclusion in Asterisk 1.10. Following this year's Astricon conference in Washington, D.C., the core Asterisk development team met for a day's discussion dubbed AstriDevCon to develop the Asterisk 1.10 road map and established priorities for new features such as T.38 gateway support, additional codec support, RTP control protocol support and significant security enhancements, just to name a few. Work already is under way in earnest on the items taken away from this development conference, and this new version will further improve upon an already great open source software.

As Asterisk continues to mature and grows in adoption globally, Digium has reconciled that for the platform to reach its true potential it must address its fundamental shortcomings. While Asterisk is a broadly capable communications solution for a wide



variety of uses, it has inherent limitations that are not easily addressed with modifications to the existing base of code. In early 2010, Digium convened a council of core Asterisk developers and users at its headquarters in Huntsville, Ala., to discuss how Asterisk could be enhanced to improve its capabilities in a number of critical areas, specifically: performance, scalability, fault tolerance and extensibility via developer APIs. From this collaboration came the specification for a new open source



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Asterisk: Building for the Future in 2011 [cont.]

companion project called Asterisk Scalable Communications Framework, or Asterisk SCF.

Development of Asterisk SCF began shortly after the council left Huntsville and continued through to the fall of 2010. During the keynote at Astricon 2010, Digium's Director of Software Technologies Kevin Fleming did a demonstration of Asterisk SCF's capabilities by performing a live, real-time call failover without loss of media or call control. This functional demonstration showed capabilities beyond those of most any communications solution available in the market today. Even at this early phase in its evolution, Asterisk SCF demonstrated its ability to deliver upon one of its four essential missions: fault tolerance.

As 2010 comes to a close, Digium is working hard with the developer community to define a detailed road map for the development of Asterisk SCF 1.0. Asterisk SCF will provide a framework upon which large enterprises, telecommunications service providers and cloud application providers can offer highly resilient, massively scalable and uniquely extensible

communications services that integrate with the mature and well-rounded capabilities of the existing Asterisk project. Used in parallel with one another, these companion projects will expand dramatically the sphere of what is possible within the realm of open source communications. The possibilities are endless, and Digium is excited to be pioneering the future of communications in 2011.

Digium encourages developers to come learn more about the evolution of the Asterisk projects at the Asterisk website (http://www.asterisk.org) and our new development and documentation wiki (http://wiki.asterisk.org) and to join us in defining the ways that we can make the best solution in the open source communications market even better. We at Digium look forward with great excitement to delivering, in partnership with our substantial community, the next generation of communications software in the forms of Asterisk 1.10 and Asterisk SCF 1.0. IT

Bryan Johns is Asterisk community director for Digium (www.digium.com).

By Jon Arnold



Get Charged Up About the Smart Grid Summit 2011

As many of us settle deep into winter, there's another allure for Miami

besides the beach in February. Miami has become the steady site for the East edition of ITEXPO, and with that, our Smart Grid Summit. Regular TMC readers will know that ITEXPO has broadened its scope, and under that tent, the Smart Grid Summit has grown steadily into one of ITEXPO's most popular specialty events.

This is the fourth iteration of the Smart Grid Summit, which continues to grow and evolve with this fast changing space. Since our last summit in Los Angeles, several new themes have gained currency, and will be part of the program. With each passing summit, we gain a deeper understanding of the most important topics, and along with that, a broader range of industry relationships upon which we draw for our speakers.

Out of this, we have built the Miami summit around three themes - smart grid, smart home and smart ideas. Smart grid is poised to touch many aspects of our lives, and we could easily build a stand-alone event around any one of these themes. While some smart grid events focus along these lines, we have learned that most people still need to learn about the broader range of topics to get the big picture. We believe that our summit delivers this in spades and uniquely addresses the intersection of energy, telecom and communications technologies.

At the heart of our value proposition is thought-provoking content. I'll start first with the smart grid theme. We continue



to explore core issues such as transmission and distribution, machine-to-machine and advanced metering infrastructure. These areas account for a major share of capital investment, and given some of the challenges utilities face in deploying smart grid, our sessions will take a critical look at the ROI around these investments.

We're also introducing a new topic for this theme – comparing the merits of public and private networks for smart grid. This discussion has strong advocates on both sides, and reflects tensions around fundamental network-building decisions. As with IP telephony, disruption is part of the smart grid landscape, and we'll explore how public networks represent a viable al-

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Get Charged Up About the Smart Grid Summit 2011 [cont.]

ternative to the status quo, and whether it still makes sense for utilities to build their own networks.

Our second theme is smart home and addresses the ever-expanding opportunities for utilities to leverage IP-based communications networks. We'll be revisiting three familiar but vital themes - killer home energy applications, personal data privacy and electric vehicles. Each of these is very different and represents distinct entry points for utilities, either as direct providers or in partnership with others, such as telcos, cablecos, auto makers and software providers. Adding to this is a new topic, the voice of the customer. Utilities face a new challenge with smart grid, namely becoming more customer-centric, and this session will share valuable lessons learned from other industries. If you're wondering what smart grid is going to mean for you as an energy consumer, this will be the place to find out.

Finally, our third theme – smart ideas – covers topics that go beyond modernizing the energy grid. First is renewable energy, which we believe will become a dominant trend in 2011. The scope of this topic is truly vast, and one session can only provide a taste; but, at minimum, you'll come away knowing why it's so important, and possibly become inspired to become an active change agent for a greener planet. Our other smart ideas topics are

equally inspiring for different reasons, namely green IT, the rural opportunity, and global best practices.

While most of us think of smart grid in terms of home energy, the issues facing enterprises are complex in their own right, especially around the data center. IT decision makers are under constant pressure to reduce costs — as well as to become green — and this session is where you will learn how it's done. Similarly, the rural market has a very distinct set of challenges, but opportunities as well. In one regard, they have a great deal of modernization ahead of them, but you may be surprised at how advanced some rural utilities are with smart grid.

keynote presentations. Some will share their own smart grid visions, and others will provide case study examples in joint presentations with vendors and utilities. Our speaker lineup is quickly coming together, and you can review the latest roster at the summit website: http://smart-grid.tmcnet.com/conference/east-11/e-11-event-schedule.aspx.

I encourage you to check back regularly for updates, and to stay current with all our summit news, check in with our Smart Grid Portal at http://smart-grid.tmcnet.com and sign up at http://smart-grid.tmcnet.com/eNewsletterSignup.aspx for automated updates. After that, there are just two things left to do — register at http://smart-

We have built the Miami summit around three themes – smart grid, smart home and smart ideas.

Finally, we have education on global best practices, which is slated to be the closing session of the summit. Smart grid is truly a global opportunity, and you'll be hearing from experts with first-hand experience on this scale.

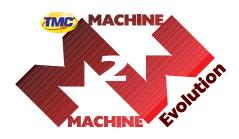
In addition to these sessions, we'll be featuring a rich mix of thought leaders in our

grid.tmcnet.com/conference/east-11/e-11-registration.aspx to join us in Miami, and make your travel plans. **IT**

Jon Arnold produces the Smart Grid Summit in partnership with TMC, and is the co-founder of Intelligent Communications Partners (www. icpstrategies.com), a strategic advisory consultancy focused on the emerging Smart Grid opportunity.

By Carl Ford







4GWE, M2M Evolution & SuperWiFi Summit Address Wireless Evolution

In Miami on Feb. 2 through 4 will be the event that brings the discussion to a new stage in the 4G wireless evolution process. 4GWE, M2M and SuperWiFi are sister events all aimed at looking at the future of communication. They are programs designed for anyone involved in rolling out services and solutions that is looking for the right partners and products for the future.

We will have the benefit of having seen everyone's initial LTE rollouts, and we

will get to see the business models and offerings of all the carriers.

Key discussions will be focused not on the theoretical but on the practical. The nationwide rollouts will be led by a series of new devices that are data savvy and designed to integrate with the consumer in all of us.

But the networks are in a rollout mode. Will the evolved packet core need to be augmented? Do the licensees of the spec-

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4GWE, M2M Evolution & SuperWiFi Summit Address Wireless Evolution [cont.]

trum before the 4G rollout find themselves needing new partnerships? Will the carriers find that new applications are exploding the demand, and they will need to change the offerings? In other words: Will customer adoption impact carrier deployment?

We will have the benefit of Sprint's Matt Carter, 4G president, sharing with us his perspective and the aggressive strategy, having been the first to roll out 4G with their WiMAX initiative.

However, in the evolution process, the ecosystem is always adapting and adopting. Every carrier will be talking about Wi-Fi as part of their strategy, leading to the discussion as to whether Wi-Fi represents a new opportunity. This part of the discussion will be augmented by the SuperWiFi Summit, where we will look at the FCC's white space announcement and consider what is ahead for that market - including an active discussion from the WISPA community about how white space will hasten quicker deployments and new models of services.

The wireless architecture we will see forming as a result of these opportunities will be one of commoditization and aggregation as the tension between data services and devices impacts the rollout plans by businesses. All of this is about the core and the service offerings, but the reality is that often it's the device that wins our hearts.

Device design is a complicated compromise between what exists and what will be, and the process of delivering all the services available within the form factors of the device will be part of the network. A key question we will ask is: Is there a strategy in deployment that delivers better form factors?

Embedded in the conversations about devices will be the discussion about the relationship between network APIs and app stores. Should the carriers seek to link their networks to solutions that enhance applications, entice customers to use them for applications selection, or

accept over-the-top options as the answer for all the applications? The answer to this question may come from the deployments of location-based services. Can the carriers provide better positioning and are their applications that need that accuracy?

In the area of devices, machine-to-machine evolution is showing us signs of what we should expect for the rest of 4G.

Telemedicine solutions are becoming more commonplace and rapidly rolling out around the world, as we will hear from various service providers.

Integrators continue to deliver a new era of delivery, and the legacy systems using 3G technologies may find they are a better fit for most of today's rollouts.

All of these events focus on the business of how technology solves our day-to-day needs.

However, the day to day should not be confused with what came before. The last day of events will have a Regulatory 2.0 discussion.

This is not just about the sister events, but all of the ITEXPO family of content. We are facing economic and advocacy pressures that, if not addressed, will hamper development and opportunity.

Voice over IP suffered a setback when old rules were applied to new solutions. The wireless world has the benefit of the new era of data services. At Regulatory 2.0 we will be looking for the models that support Apple, AT&T, Google, Skype and Verizon Wireless to enable the wireless Internet. It requires new mindsets – an evolution of thinking. **IT**

Carl Ford is co-founder of Crossfire Media and the 4G Wireless Evolution Community Developer (http://www.4GWE.com), and leads the effort that stages the ITEXPO-collocated events including 4GWE Conference, M2M Evolution and SuperWiFi Summit.

By Barlow Keener



White space is now open for business. That means free spectrum, just like Wi-Fi's 2.4gHz. After several years of furious FCC debate that included Dolly Parton and the National Association of Broadcasters going head to head with white space proponents like Google and Microsoft, the FCC has given the go ahead for white space. The next step is in the hands of the new white space equipment vendors and yet to be announced new white space wireless providers.

White Space Is Open for Business

Will This Deliver a Broadband Alternative?

The FCC and the public have learned that making spectrum free and open creates lots of business and huge opportunities. In just 10 years, Wi-Fi went from almost being unknown to having more than 250 million Wi-Fi access devices. Wi-Fi devices and Wi-Fi service have become ubiquitous. Will the same happen with the new TV white space spectrum?

Only the largest equipment vendors have been involved in the white space debate. These include Dell, Motorola and

Samsung. The Wi-Fi equipment vendors have been sitting on the sidelines. The Wi-Fi access point vendors have the most experience with serving the market that can be addressed by white space. The Wi-Fi market includes millions of chips and products that spread from home products from such companies as Belkin, D-Link and Linksys. Enterprise and service provider solutions in this space come from companies such as Belair, Cisco, ECI Telecom, Motorola, Ruckus, Strix and Tropos. Along with these technolo-



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gies come testing solutions, management systems, and a variety of related devices.

New white space service providers will be required to purchase the white space equipment. Only a nationwide provider will create a large market for the equipment providers. Wall Street funded Clearwire as a viable broadband competitor using WiMAX equipment. But does Wall Street have the appetite for another similar provider using white space? There are many reasons for the success of a white space provider. The first reason is that unlike WiMAX, which required licensed spectrum, white space spectrum is free and open for use.

Small WISPs also will be focused on new white space mobile devices and fixed radios. There are many white space problems for the WISPs to overcome, primarily the lack of cost-effective white space equipment and mobile devices for customers. Will WISPs build new networks using white space equipment when they are already using Wi-Fi, 900Mz, and 5.8Mhz equipment?

White space also requires a database that will prevent inference. The new white space database concept could be a model for freeing up lots of other licensed spectrum in the future. Who will be the database provider? Can there be more than one provider similar to the method employed with DNS servers?

Finally there is the FCC. TV white space is a regulatory creation. The Sept. 23, 2010, spectrum order was not delivered without dispute, unlike 2.4gHz spectrum, which was meant for microwave ovens and cordless phones. What are the regulations for white space? Is the white space order final or will we see more changes?

The opening of TV white space has created some opportunities for a mixture of proprietary and several standards of technologies. The logical winner is not necessarily Wi-Fi but the most successful business model. Usually in a product space that is driven by the cost of units mass produced, however, service provider strategies may make the standard successful by the coverage achieved or interoperability achieved.

Here's a listing of some of the sessions addressing these issues at the Super-WiFi Summit:

WISPs Experience Strength and Hope

Wednesday Feb. 2 9-10:15 a.m. Bridging the gap between products and service have been the wireless Internet service providers, which have managed to deliver to customers in rural areas a variety of solutions including Wi-Fi. Are they looking at SuperWiFi as a new opportunity with new technology, or do they see the market value in delivering existing solutions with new spectrum? Will the use of Wi-Fi in this space provide better interconnection or minimize the role of a WISP?

SuperWiFi Product Plans

Wednesday, Feb. 2 11:05 a.m.-12:20 p.m. It's a new space for a lot of existing technologies, who is going to adapt and adopt TV white space to deliver extended range to the home or deliver something new and different than existing technologies? Is the opportunity for service provider products? A self-organizing peer-to-peer network? When should we expect products in the market?

Cognitive Radio – Taking Ethernet Radio to the Edge

Thursday, Feb. 3 10:40-11:55 a.m. The world forever changed when the Aloha network matured in Ethernet. Through the years we have seen Ethernet be applied to local networks, metro networks, Wi-Fi and WiMAX, and now we are seeing a new phase where self-organizing devices can cross spectrum to provide the way to find a clear path and maintain communication. This represents a great change for a series of applications that previously were too hard to implement.

Report from the Trial

Thursday, Feb. 3 1-2:15 p.m.
Google and Spectrum Bridge have been conducting a TV white space trial for more than a year. What are the lessons? What will Spectrum Bridge do with the lessons? Has the frequency mapping provided by Google been part of the trial? Will the experiment turn into a self-sustaining service?

From Wi-Fi to White Space: An Evolution or Not for Service Providers?

If white space is the new super Wi-Fi, will we see a municipal Wi-Fi evolution to white space? Can providers of municipal Wi-Fi radios make simple changes to Wi-Fi radios like larger antennas? Equipment vendors like Mo-

torola now focused on municipal Wi-Fi are moving to white space. What is the future of white space for these equipment vendors? Muni Wi-Fi equipment vendors understand well the challenges of mesh radios, roaming, antenna selection, radio place, bandwidth insertion, weather issues, and capital requirements. How will this hard-earned know-how translate to the new white space fixed radio network?

Smart Money in White Space

White space is now open for business. But will Wall Street fund new broadband national competitors similar to Clearwire that are looking to white space as a new business model? Will white space be the new municipal Wi-Fi, or will white space be used to compete with the cellcos on a nationwide basis? Without Wall Street's backing, white space will remain in the realm of small, disaggregated wireless providers. Service providers have taken a back seat with Wi-Fi, but Dell, Google, Microsoft, Motorola and Samsung are poised to support white space. Nationwide service providers will start appearing and will be knocking on Wall Street's doors.

White Space Mobile Devices: The New Smartphone

The FCC's recent white space order solidified the rules for white space mobile devices. The FCC rules limit power on the devices just like they do on Wi-Fi devices. But how will these rules limit the ability of carriers to make white space into an alternative broadband provider? Will the size of the antenna – which is longer than that used in Wi-Fi – limit the ability of device makers and fixed radios from delivering true broadband?

Companies participating should include:

Agilent Intel Belair Networks Microsoft Belkin Motorola Cisco Samsung D-Link Spectrum Dell Bridge Google Tropos Harris Xirrus

Barlow Keener is an attorney at Keener Law Group (www.keenerlawgroup.com).

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Ma Bell should be proud. After decades of complete or near monopo-

list market conditions, and years more of closed development environments, change has arrived. Entrepreneurship is indeed alive and well in telecom.

To be fair, entrepreneurship is raging across all technology sectors. It's altogether the new cool. The same university graduates that once knocked on Fortune 500 company doors in search of trainee jobs are now launching companies of their own. And, unlike earlier times, this phenomenon is not relegated to the Bay Area. New York, Boulder, Austin, Montreal and many other cities around the globe have become hotbeds for startups. The reasons behind this trend are clear:

- Starting a business, especially a technology one, has never been so cheap, thanks to open source software, API access and, of course, cloud computing.
- A new community of micro-investors has emerged, aptly named as super-angels, who defy traditional VC processes by making smaller investment decisions (\$25,000-\$500,000). Decisions come quickly, often in less than a month, if not a week.
- When jobs are scarce, creating your own can be quite inviting.

Today's communications entrepreneur is exploiting voice, SMS, and video in ways we could not have imagined one short decade ago. Falling transport costs, maturing IP networks and, of course, the pervasive cloud have allowed for unbounded creativity and with it new applications that drive collaboration and productivity for all.

StartupCamp Communications, an event founded in late 2009 by Embrase Business Consulting to expose and foster early stage innovation in the communications sector, is headed for its third installment the evening of Feb. 3 in conjunction with TMC's ITEXPO in Miami. The first two events uncovered a host of exciting young companies. Here's how a few of them are doing:



Fonolo: This Canadian company is fighting its way into the hearts of consumers unhappy with the large company call center experience. The company's cloud-based virtual queuing and deep-dialing platform makes it easy for enterprises to delight their callers by eliminating the on-hold experience and flattening out complex IVRs. With several large enterprise customers under its belt – including one of Canada's largest banks – Fonolo is well under way.

GroupMe: This group texting company was founded in the spring – over a weekend – by hacking out an application on event sponsor Twilio's platform. Since then, explosive growth has taken the company through two funding rounds, including one for \$9 million in November. Not yet past its first birthday, the company makes it dead simple for people to create groups for texting with plans for plenty more.

If the funnel of applications for the October edition of StartupCamp, held in L.A. at ITEXPO, was any indication – we had almost 40 companies vying for a pitch spot – Miami promises to be the best one yet. Startups, industry leaders, investors and the media will converge for an evening to see what's next. Hopefully you will be there too.

Larry Lisser is principal of Embrase Business Consulting (http://embrase.com).

By Thomas McCarthy-Howe



The exact definition of cloud communications is still up for debate, but a

Touch Down for The Cloud Communications Summit

general agreement is being reached on a few key points.

First, cloud communications applications use the network as their platform, instead of traditional platforms like programmable switches or SDPs. Also, cloud communications applications are heavy with Internet protocols and approaches, and are light on traditional protocols like SIP or SS7.

Finally, instead of communications being the main functional component, communications takes a back to seat and supports other functionality. A great example would be a calendar application that uses text messaging



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Touch Down for The Cloud Communications Summit [cont.]

or IVRs to confirm appointments. The communications components support the main goal of the application, but aren't the application itself. If you were to take out the communications aspect of the offering, you still have an application. Contrast this with traditional communications applications like a call center. If you were to remove communications from a call center, is there anything else to the application? Maybe so, but not much.

This fundamental fact creates a unique problem for communications engineers: the level of minimal technical competence has radically increased. Since these new applications use the Internet as a platform, the number of technology choices is much larger than was traditionally available, and from suppliers that might be unfamiliar to the average engineer.

A relatively pedestrian example would be the availability of on-demand computing resources, such as from Amazon's Elastic Computing Cloud. A traditional approach to sizing a communications application would be to measure traffic patterns, then build out hardware to accommodate peak usage. The modern approach is to marry software with on-demand servers to assign dynamically resources based on traffic, substantially reducing the capital outlays required to deploy an application. As a direct example of this approach, companies like Twitter and Twilio are providing their cloud communications services to millions of subscribers without the traditional requirements of large buildouts and capital expenditures.

As a more exotic example, inbound call centers that focus on collection of shipping addresses can automate most of that process by collecting caller IDs and matching them with address data now freely available through Internet interfaces provided by the U.S. Postal Service. I'm willing to bet that a very small number of communications engineers look toward the post office for communications components.

The situation is not much better for business people. By definition, cloud communications applications serve vertical markets where industry insight is critical for success. There are only a small handful of traditional applications: PBX, conferencing, long-distance, find-me/follow-me, prepaid calling. The number of applications that can be communications enabled is nearly without limit. To illustrate, let's pick one small segment of one vertical, like the disease management segment of health care. In this small segment, we can communications enable appointment reminders, medication reminders, post-discharge surveys, remote assessments and care transitions as patients leave facilities - and this list doesn't even include the 20 or so specific diseases like diabetes or congestive heart failure that can be addressed individually with applications. So, instead of thinking about the dynamics of the prepaid market, communications-focused business people must now understand the intricacies of thousands of vertical markets.

The Cloud Communications Summit is an opportunity for those involved in the creation of next-generation applications to meet to compare notes, debate approach and establish relationships with other practitioners. For once, we are facing a market where technology maturation is not the biggest issue: Web as platform programming is maturing rapidly. For once, we are facing a market where the business case is not the biggest issue: Cloud communications business cases have margins that put minute models to shame.

For this particular market, at this particular time, the biggest issue and rarest commodity is imagination. Once the idea is unlocked, the execution is a straightforward matter. This is why the summit exists. Through interaction and dialog, through direct example of what worked and what didn't, practitioners walk away with a larger toolbox to draw upon for their next offering.

I hope you'll join us. **IT**

Thomas McCarthy-Howe is with Light and Electric (www.lightandelectric.com).

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Interactive Intelligence Continues Vertical M&A Strategy

'nteractive Intelligence sells unified business communications solutions for contact center automation, Lenterprise IP telephony, and business process automation. This fall it purchased Global Software Services Inc., which does business under the name of Latitude Software, for approximately \$14 million. Latitude sells software and services that aid in debt collection.

INTERNET TELEPHONY recently spoke with Bill Gildea, vice president of business development at Interactive Intelligence, about this deal and how it fits into the larger strategy.

Customer Interaction Center is your key product. Tell us about it. Gildea: CIC is our underlying platform and has PBX, multichannel ACD, and modules including call recording, screen recording, workforce management, analytics tools, post-call surveys and a dialer platform. The dialer does outbound dialing – predictive, progressive, power dialing; it's a very powerful dialer.

What are you doing to leverage and expand on all of this? Gildea: I do M&A for the company, and one of our strategic initiatives is to think about ways to layer value-add applications on top of our core CIC platform.

We did a small deal in insurance last year, a company called AcroSoft. They do document management and workflow just for insurers, PNC and life companies. So that brought to us an application that, again, sits on top of CIC and integrates the CIC and also brings us domain expertise in better positioning our core platform for the insurance market, where we have over 100 customers.

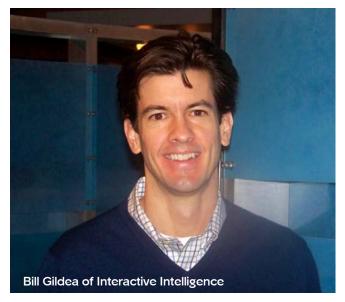
More recently you purchased Latitude. What does Latitude bring to the table?

Gildea: Latitude had a .Net platform, which was compatible with ours; they did not own a dialer, so it's incremental - a lot of the competitors own a dialer.

They had two core components of their software. The first one is basically a collector's desktop application. Think about it as CRM specifically for the collection agency. That core desktop application will pop the account so the debt collector in an agency or in a firstparty recovery operation will have the entire history of that client - everything from their outstanding balance, to the credit score, to their current employers, or if they're unemployed. So they'll have all that information pop that a collector basically needs to talk off the account and try to get a promise to pay.

Latitude's other product is called AIM, which is their agency management platform. That's software that allows first-party creditors ... to take those portfolios of written-off accounts to ... for agencies to work and then send them back reports on the resolutions of those accounts.

What's the strategy around the integrated CIC/Latitude offer? Gildea: We have 3,500 customers. We have hundreds of finance-re-



lated customers that have some form of in-house recovery, whether they're finance organizations, mortgage companies, credit unions, auto loan companies, leasing companies, things like that where we're in the customer service center but we're not in for the most part their recovery operation. So it's a good synergistic opportunity.

But why Latitude in particular, and why this deal now?

Gildea: Just because financial services is such a strong vertical for us. It's like 35 percent of revenue, and again the collections market is good for us.

The second component that gets us excited about Latitude in particular – they grew 46 percent in the last twelve months. There are two key components to their growth. In the agency space there's the trend toward hosted; Latitude is increasingly providing hosting offerings for collection agencies. Hosted really fits the bill for a lot of these agencies that are not only cost conscious, but their business has significant fluctuations as they win accounts, as they lose accounts over time. So it's really a financial deliver model that fits them well.

And the second key driver for us that's very exciting is all the first-party business that Latitude has gotten into in the last year. One of the trends here is that more of these first-party creditors are working these accounts, and they have all these mechanisms to score these accounts on propensity to pay. The bottom line is that more of these first-party organizations are looking for tools to try to recover more debt before they write it off and farm it out. That's a trend that we're trying to capture.

What are your plans for future acquisitions? What other verticals are of interest?

Gildea: We're absolutely continuing to look at other verticals. We're looking at a whole bunch of different opportunities. We have \$85 million in cash roughly before this acquisition. And, absolutely, we're looking to put that cash to use. IT

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The Enterprise Session Border Controller – More Than Just a SIP Trunk Solution

ession border controllers made their name by acting as gatekeepers at connection points between different service providers' networks. They're still commonly used for this application, but SBCs also increasingly are making an appearance at business customer sites to enable service providers to control SIP traffic. And E-SBCs, as this second group of solutions is known, could be used by service providers to support other business applications — namely, videoconferencing — as well, says Steven Johnson, president of Ingate Systems.

Ingate is sponsoring an ITEXPO pre-conference event on Feb. 1 in Miami to educate service providers about how they can leverage E-SBC solutions to support SIP trunking as well as expand their market penetration and revenue opportunities by offering services tied to other applications such as videoconferencing.

Of course, the current reason service providers are investing in and deploying E-SBCs from such companies as Acme Packet, AudioCodes, Cisco Systems, Edgewater Networks Inc., Ingate, Juniper Networks and Sipera is to support interoperability between various vendors' PBX solutions and SIP trunks. Indeed, Ingate has several service providers using its SIParator E-SBCs to do just that.

In fact, Johnson says that Ingate recently won E-SBC business from a major cable TV company, which plans to use the devices at the edge of its business customers' networks to normalize signals between user PBXs and the network operators' SIP trunks. The Ingate E-SBC has been certified to work with about 30 PBXs, or about 90 percent, of the private branch exchanges on the market.

As Johnson previously wrote in his Ask the SIP Expert column in INTERNET TELEPHONY an E-SBC will normalize the SIP signaling so that the IP PBX at the customer site and the service provider's network are fully compatible. Normalization of the SIP signaling allows service providers to support more IP PBXs, or those IP PBXs that are not yet certified by the ITSP to expand its business without the need for extensive interoperability certification with each IP PBX. An E-SBC also can be used to resolve NAT traversal issues to enable the adoption of SIP, SIP trunking and full unified communications by securely permitting SIP signaling and related media to traverse the firewall. Without this function, most companies will have one-way audio only. E-SBC solutions also provide security through deep packet inspection, which can be effective against buffer overflow attacks, denial of service attacks, sophisticated intrusions, and a small percentage of worms that fit within a single packet.

E-SBCs also offer control through authentication. Many service providers require authentication of the user with their network, ex-



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E-SBCs have great potential to enable service providers to deliver new services to support videoconferencing.

plains Johnson, but some IP PBXs do not support this function. This technology also enables disaster recovery in the event a customer's main office goes down. In such a scenario, the E-SBC can reroute SIP traffic to a secondary office to keep business up and running.

Enterprise session border controllers also deliver quality of service by ensuring that mission-critical voice calls have priority over other Internet traffic, and that call quality remains high; provide encryption for maximum privacy even over the public Internet; and offer intrusion detection/prevention, which enables the E-SBC to detect DoS attacks based on SIP, and to block malicious SIP signaling packets designed to attack certain SIP phones, servers or other devices on the enterprise LAN. This secures the enterprise network as the E-SBC handles the attacks while the servers and other SIP devices in the network can still be used.

That's a lot of functionality, but there's even more that E-SBCs can do. As noted above, they also have great potential to enable service providers to deliver new services to support videoconferencing, says Johnson, noting that there's a great deal of excitement about video to the desktop and that many people see video to the desktop as the next step on the path to unified communications.

The service providers that Ingate is talking to are thinking about video, he adds, but it's a completely different solution than what they are delivering relative to SIP trunking. That said, the question is how these service providers can participate in delivering video services to customers and, in the process, avoid becoming commodity pipe providers in this environment. The answer, according to Johnson, is by leveraging E-SBC technology, which can differentiate between SIP trunking traffic and video traffic. He says the Ingate E-SBC can identify and deliver SIP trunking traffic where it needs to go, and can handle video as if it were a data stream going through the service provider's cloud to another video endpoint. Not only that, but it would be able to create call detail records that would allow the service provider to treat and bill for video as an enhanced service.

While Ingate was unable to name any service provider customers that are using its E-SBC for this videoconferencing application during INTERNET TELEPHONY's interview with Johnson in late November, he said that the company has been shopping this idea to its service provider contacts and has received some positive feedback.

To hear more about the video application for E-SBCs, as well as how Telia of Sweden and various other service providers are using enterprise session border controller technology today, join Ingate and TMC next month for the Feb. 1 pre-show event noted above; for ITEXPO Feb. 2 through 4; and for the SIP Trunk-UC Summit collocated with ITEXPO Feb. 2 through 4 in Miami. IT

Ingate E-SBC Solutions Address Various Needs

Ingate Systems Inc. in the fall took the wraps off three new mid-range SIParator enterprise session border controllers and introduced a new top-end E-SBC SIParator solution.

The mid-range models address applications that require support for 50 to 800 simultaneous calls.

The top-end SIParator solution, meanwhile, can handle up to 3,000 simultaneous calls. Johnson explains that its precursor topped out at 1,800.

Ingate got its start in 2001 with the introduction of a SIPaware firewall. It came out with the SIParator a year later. Although the product wasn't initially referred to as a session border controller, as that term emerged later on, Johnson says Ingate knew that if unified communications was ever going to be available to enterprise, there would be a need for such a function, because most firewalls don't support SIP, at least not in a robust way.

Today, he says, Ingate is leading the E-SBC market in terms of price and performance.

The company is also involved in work related to interoperability in SIP trunking. Specifically, it was key player in the SIP Forum's work around SIP connect, which specifies a reference architecture for SIP trunking, narrowing implementation rules and guidelines around such implementations. That enables SIP trunking solutions to more easily be put in place to eliminate gateways and extend VoIP benefits, offer optimized quality of service, and provide security for applications.

SIPconnect 1.1, which was expected to be finalized by the end of 2010, aims to strengthen must vs. should implementations, offer call transfer expansion, address implicit vs. explicit register issues, and UM issues for 2.0.

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What is an Enterprise Session **Border Controller?**

By Erik Linask

Tor years, session border controllers have been **◄** about the need for connectivity and security in service provider networks. More recently, however, enterprise networks have begun to closely resemble service provider networks, including their need for multivendor interoperability and security, creating a parallel market for Enterprise SBCs.

The E-SBC is a scaled down version of the traditional SBC, becoming the demarcation point between SIP or TDM service providers and enterprise networks and providing interoperability, security, and survivability, while allowing businesses the freedom to choose their service providers of choice.

In fact, because enterprises typically enter into multiple service provider and peering relationships, the interoperability provided by E-SBCs has become a much more critical element than ever. A service provider can, of course provide a gatewaytype border element for connectivity to its own services but, in today's environment, where enterprises are connecting to multiple providers, an enterprise-owned SBC provides increased flexibility and scalability in a single appliance.

Similarly, because E-SBCs allow simultaneous termination of services from multiple providers, enterprises are assured of redundancy and survivability in the event one provider experiences connectivity issues.

Finally, E-SBCs provide an initial layer of security at the network edge, which, as malicious attacks continue to increase in frequency, is likely to become a key factor in its increased adoption.

But, despite the attention historically given to security, interoperability has become the primary role of E-SBCs. By a significant margin, according to audience surveys in a recent AudioCodes Webinar series, interoperability ranked highest by a large margin in importance among E-SBC features, followed by security and then survivability.

It's a sign of the times, as multivendor environments are becoming increasingly common, as businesses are seeking out the best of breed solutions to build their customized communications environments. Even with industry standards in place, vendors develop their own proprietary flavors, increasing the likelihood that two standards-compliant systems are inherently incompatible without an E-SBC to negotiate between them.

AudioCodes, which has long been known for its gateway products, critical in connecting SIP applications to the PSTN, found its experience enabling interoperability between businesses and carriers using various flavors of SIP provided a natural extension into the E-SBC market. Its acquisition of Netrake, back in 2006, brought the necessary security experience to the company that laid the groundwork for its E-SBC product line.

Since then, AudioCodes has invested heavily in ensuring interoperability with numerous service providers, including attaining SIP Connect certification and, most recently, announcing interoperability with Verizon's SIP Trunking services. AudioCodes' versatility in enabling multi-provider interoperability lies in its extensive experience with many flavors of SIP and a significant investment in its certification process. While service providers have the option to certify AudioCodes E-SBCs on their own, AudioCodes has also built its own certification lab, while also working closely with other, third-party test labs, resulting in its ability to enable connectivity between a wide range of equipment vendors and service providers.

AudioCodes initially launched its E-SBC line with its Mediant 800, 1000, and 3000 models, supporting 24, 150, and 1,000 sessions respectively, along with mediation and security capabilities. It has recently added to the line its Mediant 5000 (supporting up to 3,000 sessions) and Mediant 8000 (up to 8,000 sessions) products, creating a common product portfolio capable of serving the needs of the smallest enterprises to the largest.

While its entry into the E-SBC market was a natural migration from its gateway heritage, it has proven a strategically sound investment, as the market is seeing significant growth as enterprises continue to recognize the benefits of a product that offers more than connectivity to a single provider. AudioCodes believes the migration from gateways to E-SBCs is the future of the market. **IT**



Case Studies

ROI Networks

A California-based systems integrator, ROI Networks sought a cost-effective solution that would allow one of its multinational customers to reduce its exorbitant conferencing costs. The solution, integrating Skype Connect into the customer's existing Avaya communications system, allowed conferencing between the existing PBX and customers and employees around the world at affordable rates, while still allowing users to access PBX features, like directory dialing, messaging, and other custom applications.

Naturally, the customer had concerns about integrating Skype into its corporate communications platform. But, thanks to access control and other security measures available with AudioCodes Mediant 1000 E-SBC, ROI Networks created a secure environment that would allow flexible communications while preventing hacking and other malicious attacks.

Triton Technologies

Looking to reduce its operating expenses, Triton Technologies deployed SIP trunks from two different carriers for its inbound and outbound traffic. In addition to meeting Triton's varied needs for inbound and outbound calls, the combination allowed for redundancy as well as future flexibility, as needs and market dynamics change.

The challenge, however, was interfacing between the two SIP trunk providers and Triton's existing SIP-based Interactive Intelligence CIC platform. Triton had already deployed AudioCodes gateways for its PRI circuits, and felt comfortable deploying dual Mediant 1000 E-SBCs that would support both providers and ensure compatibility with its communications system.

Both case studies and more information on E-SBCs can be found on the Enterprise SBC channel on TMCnet, sponsored by AudioCodes.









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By Erik Linask

Mobile Overload is Android's Advantage

Smartphones, tablets, and other mobile connectivity options... they're everywhere. The explosion started with the original iPhone, grew last spring with the

introduction of the HTC EVO, the first 4G phone, and has now hit full swing, with many new devices having been introduced over the past several months. Most notable is the slew of 4G devices announced at this year's CES in Las Vegas by Verizon and AT&T, their handset partners and, of course, the slew of new tablets looking to compete with the iPad.

The one device we haven't seen yet – but has generated the most media speculation over the past year - is a Verizon iPhone, though reports yet again suggest it may be on the horizon, as early as Feb. 3, just in time for a Super Bowl weekend marketing blitz. Other reports suggest Verizon will announce its version of the iPhone even earlier, on Tuesday, Jan. 11. (We'll know whether there is truth to that by the time you read this).

The question, though, is, does it really make a difference?

With the market now inundated with Android and BlackBerry devices, along with Windows Phone 7 products from Samsung, HTC, LG, and even Dell, are the options too great for a Verizon iPhone to have a significant impact?

gaming system - so an iPod, especially given its minimal form factor, is hardly going to cause much grief. Besides, with battery life an ever-present problem, having your tunes on a separate device will only increase the total usable time of all your devices. In this case, more is, in fact, more.

What's more, anyone having had the opportunity to try out the latest Android devices can hardly be anything but impressed. Yes, we all know Apple set the bar originally, but many of these Androids have incorporated many of the best features popularized by the iPhone, including smooth UIs, simple set-up and navigation, and flexible customization, and have created their own pieces of technological art.

The App Store? Yes, another temporary advantage for Apple. But, we already know how quickly the Android Marketplace is growing and, quite frankly, with the number of apps available, you have to know exactly what you're looking for – browsing for something useful or interesting can be a nightmare. The truth is, most popular applications are or will be available on multiple operating systems - you can play Angry Birds on just about any touchscreen device today. RIM still faces challenges in this respect – most application developers I've spoken to say they make it very difficult to develop for BlackBerry devices - but Android users will have no trouble filling their phones with productivity and entertainment apps.

With the market now inundated with Android and BlackBerry devices, along with Windows Phone 7 products from Samsung, HTC, LG, and even Dell, are the options too great for a Verizon iPhone to have a significant impact?

No question, there are those loyal iPhone users who have decided it's the greatest thing since sliced bread – or at least since Motorola introduced its StarTAC back in 1996. And there will be those Verizon customers who have held out for Verizon's version of the Holy Grail of mobiles (at least that's what they think).

There is also the one big advantage the iPhone holds (along with the iPad) over other handsets - its integration with iTunes. From its earliest days, the iTunes platform has provided a user-friendly way to not only purchase music, but to manage purchased and previously owned content on iDevices, something no other vendor has yet to match. That, alone, will keep some people on the iBandwagon.

But others, like me, are perfectly content keeping their music on their iPods, maximizing choice when it comes to phones. After all, what's another device to carry along? You've already got a laptop, phone, possibly a tablet, and maybe even a portable

When I said more than a year ago at a dinner with a group of clients, that Android would overtake Apple in 12-18 months, nobody seemed particularly pleased with the comment (most of them had already been iBlinded by at least one Apple product). But, according to market research firm comScore, as of November, Android owners (26 percent of the market), for the first time, outnumber iPhone users (25 percent) in the U.S. RIM still holds the market lead with nearly 38 percent, but that lead will shrink every quarter, unless it makes major changes to its O/S and becomes more developer-friendly.

Yes, there will be defections from AT&T to iVerizon, and there will be current Verizon customers who will give up their current handsets because they have been holding out for far too long not to. Still, I hold to my original belief that Android holds the power of the mobile market in its little yellow mascot. The overload of devices from multiple vendors is simply going to be too much for Apple to handle, even with all those Verizon network guys in tow. IT



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