BSS/OSS
INTERNET TELEPHONY
2009
Excellence Award

SIP Print Addresses
Market Needs in
Record Time

Positron Telecom Expands
Horizons with Turnkey Solutions

M2M Shows Momentum
in Consumer, Business
Vertical Applications

**Service Providers
Take TEM** in
New Directions

*SIP Print President and CEO Donald C. Palmer
and CTO Jonathan Fuld*

Millions of phone numbers, over 10,000 telecom companies, over 50 Countries, One Place

DIDXchange
DIDX.NET

World's Largest DID Phone Number Trading Platform

A Service of

SUPER TECHNOLOGIES

By Paula Bernier

Are We There Yet? Are We There Yet?

Could November include the magical moment in which the National Telecommunications and Information Administration and Rural Utilities Service announce the winners of the first round broadband stimulus process? All signs point to maybe.

The NTIA recently told me that it and RUS expect to disclose the winners between November and the end of the year. At stake in this round is $4 billion, although the agencies recently revealed they had received requests for grants and loans totaling nearly $28 billion.

Whenever free money is involved, people pay attention. And with all the buildup around the broadband stimulus, it's really been kind of exciting. But it's also caused a great degree of frustration.

First people were anxious because they wanted to make sure they got a piece of the pie, but it took a while for the FCC, the NTIA and RUS to lay out the definitions, requirements and point criteria around this first round of stimulus funding. Of course, when those rules finally were released, various groups didn't like different aspects of them. At the same time many who were entertaining the idea of participating in the first round, particularly smaller and often rural operators with very limited budgets and human resources, felt the time and work required just to put together an application would be too much of a drain on their businesses. But even those organizations that were able to get to the finish line with completed applications then struggled to submit their applications online due to server problems at the agencies.

But that's all in the past. What's happening now is we're getting ever-closer to the federal government naming the winners and finally doling out this much-sought-after money. And when it does it will give everybody involved in the first round, as well as those waiting on the sidelines, a much better idea about what regulators are looking for in their efforts to make broadband more widely available to a more diverse selection of the population while creating jobs and enabling important applications.

Lest that makes anyone too comfortable, plans for future broadband stimulus funding rounds (or round) may change. The initial word out of Washington was that there would be a total of three rounds of broadband stimulus funding and the NTIA told me recently the FCC would issue a second Notice of Funds Availability document laying out the rules for the second round of funding this quarter, with the second round application process opening shortly after that. However, since that conversation NTIA executive Lawrence E. Strickling publicly said that the agencies are now considering merging the second and third broadband stimulus rounds into a single and final round.

"This more consolidated approach may have the potential of yielding benefits for all stakeholders," he said. "First, it would enable us to complete the entire grant-making process in the summer of 2010, as opposed to next September, thus expediting the stimulative benefits for the economy and job creation that the Recovery Act promises.

"Combining the second and third rounds into a single funding round, and adjusting the application deadline, could afford additional time – both to stakeholders, to provide us with well-informed views on how the first round worked for applicants, and to NTIA and RUS, to learn from our experience and adjust those aspects of the process that need to be improved. Also, parties who wish to collaborate on an application, such as through consortia or public-private partnerships, could have additional time to work out the details of those arrangements. Finally, combining the final two rounds may also economize on administrative expenses."

The idea of expediting the distribution of stimulus funds seems reasonable. But I'm not clear on how merging the two rounds and moving thing up to the summer of 2010 affords anyone additional time.   **IT**

By Rich Tehrani

xG Technology xMax Works as Advertised

xG Technology proclaimed in 2005 that they had a revolutionary technology that allows wireless broadband using unlicensed and licensed frequencies. They said they could build the equivalent to a WiMAX network without the need to spend a massive amount on spectrum auctions and, moreover, that their technology had better range than WiMAX.

It seemed too good to be true and after some years of waiting, the communications industry got impatient. After all, this revolutionary technology had the potential to change the way wireless networks are deployed. If it was real, where was it?

So I asked the company to show us the technology so we could set the record straight. xG responded with an invitation for a visit a short while later.

I drove to xG Technology's Florida headquarters where I met the management team and drilled them with questions. Here's what I found out:

The company bit off more than it could chew in 1995 and should have waited before talking. It is obvious they underestimated the complexity of what they were trying to accomplish.

xG had to develop a wireless technology in a noisy spectrum from scratch. This is far more difficult than developing technology in a licensed spectrum where interference is a relative afterthought. They had to build base stations, chips, test gear and even a phone. In the world of WiMAX, meanwhile, you can purchase chips from one vendor, test systems from another and phones from other companies. Time to market in WiMAX is much shorter as an entire ecosystem is developing products that interoperate and interconnect with one another. Imagine building it all yourself in spectrum that most engineers will tell you is not usable.

When you realize the size, scope and you might even add lunacy of the undertaking, it makes sense that the company spent $100 million developing it all. Moreover, while they have about 50 engineers today, they averaged about 30 during their corporate history. It does seem impossible when you think about it.

As for specifics about the solution, it currently runs on 902-928 MHz, but it is software definable, meaning it could potentially be used in white space as well. They estimate that 700 MHz spectrum costs about 12 times more than equivalent xMax coverage when you factor in the cost of the frequency auctions.

I was told that one of the company's customers, Townes Tele-Communications Inc., has a few towers and their 100-foot tower has a range of 2.5 miles while one at 350 feet has a six- to eight-mile range and is superior in coverage area to the nearby GSM equipment.

Voice is transmitted over the network via SIP with header compression and other techniques that minimize latency, bandwidth use, etc.

I had a chance to see the digital and RF boards that end-user devices would incorporate. At this point they are two to eight times as large as a comparable WiMAX

GoTo: GoTo:
Table of Contents • Ad Index

chipset. but I would expect them to come down in size over time and as they are produced in volume.

The company's first handset, the TX60, has integrated Wi-Fi.

President and CTO Joe Bobier handed me a TX60 phone and told me they are still working on their battery management technology. This phone had none I was told.

With that we made a call and I started talking to the command center from a few feet away. The voice was good – as good as any cell phone for sure.

> **When you realize that this company may have found a way to take a frequency riddled with wireless garbage and turn it into a fully functioning wireless voice and data network, you start to see how much of a game changer this could be for the wireless industry.**

We then went into the test vehicle, which had a massive power inverter for laptops that ran diagnostics on the phone. The quality was still great.

We drove for 30 to 45 minutes and the voice quality never diminished except in one spot where everyone warned me voice quality would be a bit choppy.

Generally there was no latency or anything unusual. I kept asking the people on the other end to count to 10 when we were near overhead wires or in areas in which I suspected there would be poor reception. Other than the spot mentioned above, the quality never diminished.

As the test ran on, the phone got "fry an egg on me" hot and at some point the sound stopped working. The phone was still connected according to the laptop, but I couldn't

converse. We called once more, and after a while the voice couldn't be heard again.

It is worth pointing out that the phone was plugged into the laptop, which graphed its diagnostics and indicated the phone was charging and subsequently running hotter than it would have on batteries alone. It was as hot as early Wi-Fi phones I had tested some years back. Joe suspected the heat was the issue with the phone. I have no reason to doubt this assertion.

In summary, it works. Was it a perfect demo? No. But they never are, and when I compare this to what the wireless carriers have had years to perfect, I came away very impressed.

There are lots of discussions we can have about noise floors in the 900 MHz spectrum and how the company deals with interference, but they are beyond the scope of this article. Moreover, we drove around enough residential and commercial areas that I am satisfied that I experienced a real-world test.

So, who is the target for this technology? Incumbents (playing in other areas), CLECs, cable companies, mobile operators, OEMs, content providers such as Google, MVNOs, etc.

What does it cost? Well for a cool $2 billion you could have 70 percent PoP coverage for 452 metros, or about 90 percent of the population of the U.S. This would include at least a megabit of bandwidth per channel.

I know what you are thinking. Can it scale? The answer, of course, is I don't know. But any customer is going to test it out before they buy, and the company knows this. In addition, the description of how xG lays out its channels leads me to believe they have thought this issue through well.

So was it worth the trip? Yes.

Can xMax from xG Technology change the wireless world? Quite possibly.

But before we go too far down this path it is worth mentioning that areas of coverage are exclusive, meaning only one carrier can pick up each city or metro area. This is an important consideration for companies looking to become next-gen wireless carriers.

For now I believe the question has been answered. At least for my demo, xMax worked well and is real.

When you realize that this company may have found a way to take a frequency riddled with wireless garbage and turn it into a fully functioning wireless voice and data network, you start to see how much of a game changer this could be for the wireless industry. **IT**

Contents

20

56

GoTo:
Table of Contents • Ad Index

Subscribe FREE online at www.itmag.com

By Brough Turner

Municipal Wi-Fi Telephony Poised for Improvement

Municipal Wi-Fi and Wi-Fi telephony are each set for dramatic improvements as new Wi-Fi technology gets deployed. Where they overlap, the effect will be profound.

It's commonly believed most muni-wireless systems went bust, ostensibly because there was no business model and the technology didn't work. While there were some highly visible failures, metro-Wi-Fi systems are successfully deployed in a variety of cities, towns and neighborhoods. Brookline and Harvard Square in Cambridge, Mass.; Minneapolis, Minn.; Riverside, Calif.; Toronto, Ontario; and Ypsilanti, Mich., are examples.

What's more, a recent study by Novarum of systems in Minneapolis and Toronto showed municipal Wi-Fi coverage and broadband data rates matched or exceeded that of the cellular operators. Municipal Wi-Fi can work. And this is without 802.11n technology.

IEEE 802.11n is a newly completed Wi-Fi standard. Pre-standard commercial products have been shipping for several years, but now the flood gates are open. Tests on early 11n equipment show significant performance gains, both indoors and outdoors. What's more, there are performance gains, even when only one end has 11n technology.

For example, with earlier Wi-Fi clients in my living room I could barely detect (1-bar signal strength) two Wi-Fi signals from a nearby school. Now I can see 12 different Wi-Fi signals from that school, all with usable signal strength. More professional measurements, by Novarum and others, report significant performance gains using 802.11n technology outdoors – 2x throughput when connecting to older Wi-Fi systems and 3x when connecting 11n to 11n. Additionally, system capacity is up and latencies are down – well below those of the cellular data services. That's good news for VoIP over Wi-Fi.

Naturally mobile operators will cling to voice revenues as long as they can. The recent flap over Google Voice on the iPhone is one example. In the U.K., mobile operator "3" actually offers unlimited Skype usage on its X-series mobile phones, but you have to download a 3-specific version of Skype – a version that only allows Skype-to-Skype calls. You can't use SkypeOut or receive calls to your SkypeIn number. In other words, you can't use Skype to avoid the need for a conventional voice calling plan.

ABI Research estimates 144 million Wi-Fi enabled mobile phones will ship this year, rising to more than 300 million per year by 2011. Many of these are smart phones. The latest iPhone includes an 802.11n radio, and by next year all Wi-Fi enabled mobiles are likely to support 802.11n. Expect high-performance mobile VoIP over the Wi-Fi path, even if the operator blocks VoIP over 3G. **IT**

Brough Turner is chief strategy officer of Dialogic (www.dialogic).

By Max Schroeder

A Reseller Educational Series: Getting Ready for 2010

Large corporations generally have their 2010 business plans in place by early December. Resellers and small- to medium-sized vendors are usually too busy closing year-end business to finalize their plans before January. However, there are some tasks that should be started now.

Begin with a quick assessment of 2009. Revenue numbers through the third quarter should provide an adequate year-end projection. Purchasing patterns have changed from 2008 as companies still have a recession mindset. Nonetheless, your company can be a 2010 winner with a first-rate strategy in place to overcome this challenge.

Next, identify which product lines had increased or decreased revenue in 2009 and endeavor to ascertain the reasons. For example, were customers shifting from legacy products to newer technologies such as moving to Dialogic Brooktrout SR140 fax software from traditional fax boards? This type of assessment is critical to determining where to allocate your resources for 2010. If you need to replace weak product lines begin the research now by going to www.tmcnet.com for the latest product reviews and trends.

Retaining customers is imperative and selling add-on products or migrating customers to the latest technology (as in the SR140 example) is a first-rate retention strategy. Support is a high-margin profit center so renewing agreements is critical. Track these trends for 2009 and make adjustments accordingly. Sometimes giving a small commission to your support engineers is a more efficient method than limiting renewals and upgrades to your sales team. Support calls provide an easy transition for an engineer to say: "Your support agreement is about to expire, would you like to renew now?"

Landing on your feet running in January is imperative, so put ITEXPO East from Jan. 20 to 22 in Miami on your calendar. Attendance for this year's conference was 8,309, a 15.5 percent increase over 2008, which makes this event a proven winner. Check out the exhibitors list in advance and schedule times to see the new products you are evaluating. And don't forget Reseller Day for the free reseller conference sessions. **IT**

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

Subscribe FREE online at www.itmag.com

By Mike Sheridan

SIP Trunking: Lessons Learned and ROI Realized

Last month, somewhere between sharing my PC desktop and clicking to bring another colleague into an ad hoc conference call, I came to a realization.

My staff updates that used to take an entire day of emails, voicemails, and returning calls now take just 15 minutes – thanks to unified communications.

In fact, I've been noticing that communications across the company are faster and more productive now that that our 1,700-plus employees across 20 offices are leveraging Microsoft's 's UC technology for all voice and conferencing calls. Many of these improvements fall under the category of "soft benefits," but we have seen many hard benefits as well.

One CFO-friendly benefit from our UC implementation is the ROI from SIP trunking – after all, it's contributing to helping us save more than $1.2 million. In a recent conversation with Bill Lynch, our senior director of IT, he discussed the benefits of SIP trunking.

He explained that a SIP trunk located at Aspect headquarters in Massachusetts provides UC voice and conferencing services to offices throughout the U.S. SIP trunking enables distributed access without the involvement of dozens of localized circuits.

When our Chelmsford, Mass., office gets going in the morning, our Irvine, Calif., office is still sleeping. But when Irvine is still going in the late afternoon, Chelmsford's usage has long passed peak. The Chelmsford-based SIP trunk handles all of this voice traffic and our employees get to keep their local numbers!

Realizing cost savings from SIP trunking was just one of the lessons learned from implementing UC. Sharing these best practices has been critical to demonstrating the value of UC, so we've pulled together insights from Bill and other IT experts into an interactive online community, www.ucworld.com.

After all, learning from other deployments is the first step to understanding the soft and hard benefits of UC, and ultimately understanding why unified communications is going to be a requirement to conduct business globally in the near future. **IT**

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

By Michael Stanford

All Egg, No Chicken

HD voice seems like a chicken and egg problem: why would anybody get it when they can't use it because nobody else has it?

Actually there are at least five dynamics at work that mean HD voice will deploy relatively quickly – probably within the next three years.

First, all the major business phone system manufacturers are adding wideband to their IP phones. This means that internal calls in enterprises will increasingly be in HD.

Second, enterprise-grade cell phones are increasingly being equipped with Wi-Fi, and (with software from companies like DiVitas Networks and Varaha Systems) used on-premises as extensions to the PBX. Wideband voice on these phones is a simple software upgrade, so even enterprises that don't replace their phone systems within the next three years will gain a substantial proportion of wideband-capable endpoints.

Third, with the advent of VoIP trunking, there is a compelling financial incentive for enterprises to directly peer or federate with each other to eliminate completely per-minute call charges.

This is facilitated by services like XConnect. Once enterprises are linked in this way, calls between them can be in wideband.

Fourth, the enterprise islands of HD voice are not just linking by federating; they are subscribing to voice service providers like Alteva that permit wideband calls between their corporate subscribers (just like federation does), and these service providers federate between each other through services like the Voice Peering Fabric.

The fifth factor is the codec. Because it is royalty-free, the commonest wideband codec in enterprises is G.722, but it runs at a fixed bit-rate, so it is unsuited to variable-bandwidth connections like wireless and the Internet. Standard variable bit-rate codecs like AMR-WB normally have complicated royalty schemes. Skype recently opened up its SILK wideband codec to third parties, yielding a modern variable bit rate super-wideband codec that is royalty-free. Within 3 years it will be on all the endpoints mentioned above, providing clear-sounding wideband connections with no transcoding in the network. (Disclosure: I am working with Skype to speed up this process.)

The egg is about to hatch. **IT**

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

Subscribe FREE online at www.itmag.com

Transforming your communications begins with keeping up to date with the **latest communications trends** and breaking industry news.

Visit the Next Generation Communications Global Online Community and engage with industry leaders on how to extend applications and services to drive higher levels of functionality, usage, interaction and end user stickiness.

Engage with industry leaders to explore:
- How to leverage a high value network and web 2.0 capabilities
- Optimum ways to provide differentiated end user experience
- Best practices for developing new business models and strategies
- Opportunities to generate revenue while reducing OPEX

Learn more at
http://next-generation-communications.tmcnet.com
and follow us at http://twitter.com/NextGenCom

Alcatel·Lucent

alcatel-lucent.com

©2009 Alcatel-Lucent

By Ward Andersen

Reaping Value through Unified Communications Cost Optimization

How can a company save money and optimize spending on its unified communications system?

One area that doesn't get enough attention is service and maintenance contracts. If you haven't reviewed your contracts in the last year, pull these out. Compare what you purchased against your organization's needs. Make your solution provider work for you. Educate them on your needs and then challenge them to craft an optimized support plan. Really understand what you've purchased and how this might change at next renewal.

Also, what is your software upgrade status? Does your support contract include major and minor upgrades? Major software revisions seem to be released every year. Getting too far behind can result in significant consulting expense to bring the system up to current specifications.

Many vendors have multiple licensing schemes optimized for certain mixes of users and applications. Understand your licensing options and determine if a change would be to your advantage.

An educated and trained staff can be a great cost saver. Beyond the obvious, staff that knows the business can match up needs with system capabilities. To do this, staff needs to be knowledgeable on features and functions of the existing applications. Be sure to bundle training credits into any upcoming purchases.

Do you have a test and development environment? Traditionally this has been a very expensive proposition, but with server virtualization technology and software demo licenses, a full telephony test environment can be installed and run on pair of inexpensive multi-core workstation class machines. You won't be able to do system load testing, but you can validate configuration, new features and test upgrades.

For hard dollar savings immediately, align your support and maintenance contracts with business needs. If maintenance includes application upgrades, keep your environment up-to-date. Look at the different licensing options that may fit the business. Longer term, invest in staff training, along with building a test environment. With care and attention, current and future costs can be controlled and optimized. **IT**

Ward Andersen is a principal consultant for Forsythe Solutions Group (www.forsythe.com). He has worked in the network and voice industries for 20 years. After working on large company toll bypass projects in the 1990s, he graduated to server-based VoIP telephony for enterprises. He is currently in search of the perfect communication application.

By Steven Johnson

UC Begins with a Converged Network

At first glance, some may think that having separate networks for voice and data is a natural extension of the way we have received telephony services for 100 years and data services for the past 25. But in reality, the promise of SIP, and of SIP trunking, is the ability to use a variety of devices to communicate – the ultimate goal of unified communications, where people can be reached anywhere, anytime, using the method that's most convenient for them.

Of course, a desktop SIP phone can be deployed on a separate LAN and voice calls will work. But what about the laptop and desktop PCs that have built-in cameras and often pre-installed SIP clients? If those devices are not on the same LAN as the SIP trunks, they cannot be used to place calls, which may eventually turn into video sessions. And as time goes on, more clients will have SIP capability, whether in a mobile device or in devices yet to be invented. Hence there's a need, a necessity, for one converged network in order to implement truly effective unified communications.

When implementing SIP the service provider and the enterprise should look ahead to how all of the tools on the desktop can be used together to result in truly converged communications. With the introduction of an enterprise session border controller (E-SBC) this is easily accomplished. Now both data and voice access can be shared on a single LAN, resulting in efficiencies and preparing the enterprise for the next step in the future of communications, while allowing the enterprise to maintain control and security over all services.

While today there is still confusion in the market as to what UC is, or how to best utilize UC applications, one thing is clear: unified communications begins with a converged network. It is only by architecting the network for success in this way that enterprises, IP-PBX vendors, carriers and even new entrants such as cable companies/MSOs will leverage the full potential of SIP today and in the future. **IT**

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

GoTo:
GoTo:
Table of Contents • Ad Index

Subscribe FREE online at www.itmag.com

By Asif Naseem

COTS Platforms are All Fired Up and Ready to Go

Recently, I spent a few hours with the CTO of a tier 1 telecom equipment manufacturer to discuss the state of the commercial off-the-shelf industry.

Going into the meeting, I knew that he was concerned about his research and development cost structure – especially when it came to platform development. To minimize time and resources spent on building the platforms in house, he was actively looking into acquiring as many of the components as he could from the industry. He had also told me earlier that he wished to create a common platform for the diverse applications and services his company developed and sold to service providers.

"We have had six different groups with a total of several hundred engineers developing platforms using different hardware, different operating systems, and six different middleware implementations," he said.

He went on to say that he was committed to reducing this duplication by creating a common application platform that different groups within the company could use. He also said he was open to using as many COTS building blocks as made sense.

I knew I had a motivated listener. I spoke to him about what an impressive job PICMG had done defining the requirements of the xTCA systems, and subsequently, catalyzing a whole industry in which there are now several significant players providing dependable ATCA equipment including chassis, blades, etc. I also shared with him the optimistic projections about the uptake of these systems that I have been hearing about from industry-savvy journalists and analysts.

Then I shared my own personal experience with how Linux, especially Carrier Grade Linux (CGL), has so quickly become a requirement for many telecom applications within a few short years. I informed him that he could not only obtain a standards-based hardware platform running any type of Linux from one of many distributors, but he could also acquire a sophisticated set of middleware capabilities based on the Service Availability Forum specifications so that his team no longer had to develop these capabilities in house. This resonated with him.

"And you can get a vertically integrated, pre-tested and application-ready platform from your COTS ecosystem today all based on open standards," I added.

I then listed several of the system suppliers that I knew offered pre-integrated, vertical stacks – the hardware, the operating system and the middleware services – all based on the available COTS building blocks.

It took another lively half an hour before he said the story was convincing. He was pre-disposed to acquire an application-ready platform rather than having his company build it, provided it met a key set of fundamental requirements. He said that the many presentations he had sat through on this topic had not fully addressed some of his primary concerns.

Compliance with industry standards is important and necessary, but compliance alone is not sufficient. Various layers within the COTS stack must first meet key functional and non-functional requirements.

Through years of investment, telecom equipment manufacturers have developed and enhanced key software components, namely middleware, and they would like to maintain some of these components moving forward. Often, they are a part of competitive differentiation. So the COTS-based, application-ready platform must allow for that.

Significant effort may be involved when transitioning an existing application to the COTS-based platform. It is important to know specifically the cost benefit of such a transition prior to launching such a project.

And finally, it is important to clearly understand whether or not this transition can be made without introducing de-stabilization, cost overruns and schedule delays.

I believe that those of us who consider ourselves part of the COTS ecosystems can and should face the above challenges head-on. Done correctly, we can combat these challenges.

While tier 1 equipment manufacturers are now taking a hard look at open standards-based high availability middleware, tier 2 and 3 equipment manufacturers often do not have the time or bandwidth to implement high-availability middleware in house. Additionally, the desire to be first to market can make implementing high availability an afterthought; however, incorporating the functionality into a later version becomes costly and is not time efficient.

The SA Forum is educating designers and developers about the importance of implementing high availability early on during product development. **IT**

Asif Naseem is president of the Service Availability Forum. He is also president and COO of GoAhead Software (www.goahead.com).

E911 Protects Employees, Compliance Protects Employers

By Mark A. Lies

I think it's critical in this day and age that employers explore all means of technology available to protect their employees. This is particularly true with the new administration in Washington that has indicated it is going to be much more aggressive in holding employers to their legal obligation to protect employees in the workplace.

A perfect example is E911, which helps emergency responders find 9-1-1 callers faster by providing detailed information regarding their location. It is conceivable that implementing E911 would be favorably received by OSHA and other regulatory authorities as a means of protecting employees in the event of a workplace emergency. Correspondingly, the utilization of such a system would help to protect employers from liability risk in the event of a tragedy.

How to Decide on E911: A Compliance Perspective

When deciding whether or not to incorporate E911 into your corporate risk management strategy, consider first the local laws and regulations and determine whether or not E911 is mandated. If it is mandated, that ends the inquiry right there. The system must be implemented.

If it's not mandated, a risk-benefit analysis should be performed. Consider, among other factors, how an E911 system could be used and what will it cost. Then consider the risk of injury or other types of damages that could result from a failure to implement E911.

Should a lawsuit result from a workplace injury or death, the employer could face potential liability for failing to use such systems and have to argue that the economic cost of the system far outweighed the potential risk of injury to its employees or third parties such as visitors. That could be a difficult argument to make if there has been a serious accident involving injuries or death because of the natural sympathy of a judge or jury toward the family or estate or an individual who has been seriously injured.

Read more about E911 on TMCNet's E911 Channel. **IT**

Mark A. Lies is a partner in the Chicago office of Seyfarth Shaw LLP. He can be reached at (312) 460-5877 or mlies@seyfarth.com. He has extensive expertise representing employers on a national basis in cases relating to occupational safety, health and liability issues.

SoTel Brings VoIP HOOME with Siemens

<div align="right">By Paula Bernier</div>

SoTel Systems LLC is a wholesale supplier of business communications products and services. The company, which has been in business for nearly 30 years, offers traditional refurbished and unused voice and data equipment, does authorized distribution of VoIP equipment, and provides commercial SIP services for both inbound and outbound traffic.

But while SoTel has been selling VoIP gear and services for some time, it wasn't until last year that the company itself began its migration to VoIP.

The company selected the HiPath OpenOffice ME (HOOME) from Siemens Communications to replace its aging TDM-based Nortel system, which had reached the end of its lifespan. At the time SoTel was negotiating a partnership with Siemens, says John Reynolds, chief marketing officer, and Mike Sawyer, vice president of technology services, at SoTel, so tapping the vendor for its internal gear was "a natural step."

HOOME is a complete VoIP-based platform, so the SIP service that SoTel delivers to its customers fit with it. It directly connected to the SoTel network. And the features of the system itself are advantageous to the way SoTel does business, say Reynolds and Sawyer.

"In a business like ours that's 24/7/365, we've got to have total control of our incoming calls, and HOOME enables that," says Reynolds. "Plus, we really felt that if we were going to distribute the product, then we wanted to drink the juice. We wanted to be able to look our customers in the eye and tell them this is a good system."

SoTel installed HOOME at its headquarters location about a year ago. This spring the company installed the Siemens gear in its South Carolina location. The systems now are connected through the SoCal SIP network for seamless system operation.

"The good news is that we found that user training didn't require much effort," says Sawyer. "Most feature sets with HOOME are fairly intuitive and while some employees have a deeper understanding of HOOME's functionality than others, they found it simple to operate. Users have a set of soft keys on the desk phone to perform different tasks. We did normal user training, but the system took very little time and effort to integrate into our workflow."

The changeover increased speed of communications, boosted employee productivity, eased network administration tasks and

SoTel CMO John Reynolds and VP-Technology Services Mike Sawyer

saved the company money, according to SoTel. At the outset, SoTel estimates a $1,000 a month savings on telephony service and about a $1,500 per year savings on monitoring – all without increasing internal staffing.

"The greatest increases in efficiency and functionality are the pure efficiencies we're seeing by moving to a unified communications platform, quite frankly," says Sawyer. "For example, HOOME has a feature called myPortal, which is an onscreen interface that lets users control their voice communications.

"In using this, I hear employees say things like, 'I haven't dialed a telephone in three months.' [That's] because they can simply click to dial. Auto conferencing has been greatly simplified too with drag-and-drop conference calls," he says.

In addition, SoTel says call routing has become easier. When customers call, they can be routed to the most applicable available person because the representative answering the call can instantly see on his or her screen who is on hand to talk.

Beyond the unified communication feature set are the SIP service applications like call pickup groups and ring groups.

HOOME also has various reporting features that SoTel uses to its advantage. That includes data collection and presentation related to such parameters as call length and other activities.

"The biggest part of our business is sales, and a large part of that comes down to phone conversations, so this helps us," says Reynolds. **IT**

Making the Switch to Wholesale VoIP

By Erik Linask

The continued growth of the VoIP industry, both in business and residential markets, has created a natural demand for increased origination and termination, particularly for international calls, but regionally within countries as well, where VoIP providers need to provide access to markets beyond the reach of their own networks.

"After using MVTS Pro for more than a year, we can safely say that this VoIP softswitch covers all our needs. Using MERA Systems' products, we are able to offer several VoIP services that were not available to us before. The stability of MVTS Pro ensures the efficient performance of our networks."

– Mircha Grimberg, President of A&G Communication Group,

This has opened up an opportunity for service providers to become wholesale VoIP providers, because it enables them to increase their network usage, lowering unused bandwidth, and grows their customer base at the same time, creating a new revenue stream. Becoming a wholesale provider also helps build relationships with other providers as well as end users, which have the potential to turn into additional revenue opportunities in the future.

But, while the decision to sell wholesale VoIP may seem an easy one, as with any service, it must be done well, which is where many wholesale providers have faltered of late. The VoIP industry is as competitive as it has ever been, and the migration to next generation technologies is well underway, which will serve providers well. But, they must make the right investment decisions when deploying the equipment that forms the core of their operations.

The Canada-based MERA Systems has proven to be one of the pioneers of the VoIP industry, a carrier switch vendor with reliable products on the market. In 2002 the company introduced

the softswitch that was so urgent for carriers needs – its MVTS I. Then, in 2006, understanding the needs and concerns of the highly competitive telecom market, MERA Systems launched its flagship MVTS II, a unique combination of switching, billing and intelligent routing.

Now VoIP has become a reality for facilities-based carriers as well as for mobile network operators. The large volumes of traffic processed by VoIP carriers bring them to look for high-performance VoIP equipment with unlimited scalability and a high level of integration into the existing network infrastructure. That is why, in 2008, the company introduced MVTS Pro, which was designed specifically to meet the requirements of current market players.

When it comes to deployment flexibility, the MERA product stands out among its key competitors in the Class 4 switch market because it is a softswitch. The debate continues over whether a hard- or softswitch is preferable, but the undeniable general trend in communications is toward software-based products that do not require specific hardware implementations. The MVTS Pro can be installed on an existing server, cutting capital expenses and allowing customers to choose whichever servers they prefer. A software platform can easily be migrated to a new location or a new, upgraded server with greater capacity and processing power.

Released in April 2008, MVTS Pro is a combination of softswitch and session border controller. It is designed to handle a 1,000 cps per traffic entry point for carriers that process five to 10 million minutes monthly, with careful consideration given to reporting and analysis tools for network control and QoS troubleshooting, while providing all the functions wholesale carriers need to manage their VoIP networks: collection, switching, transcoding, processing signaling and media, border control, billing, etc.

"VoIP market demands have significantly changed over the past several years, requiring enhanced softswitches with more complicated technological features. MVTS Pro delivers one of the best system capacity, modular architecture and various redundancy schemes currently available on the market," says Konstantin Nikashov, CEO of MERA Systems. "For the past year, MVTS Pro has become the product that meets the up-to-date requirements of VoIP carriers allowing them to operate to the utmost of their capability."

MVTS' key differentiating features include:
- up to 1,000 cps per traffic entry point;
- multi-level redundancy schemes, including geographic redundancy;

Subscribe FREE online at www.itmag.com

- a geographically distributed architecture, where a single switch can replace many legacy switches;

- flexible routing, including quality-based routing and creation of customer-specific routing formulas;

- a high level of integration into existing network infrastructures;

- ease of maintenance and configuration;

- disconnect code mapping;

- advanced debugging tools; and

- SIP/H.323, SIGTRAN/MGCP support and codec conversion.

The key to the MVTS Pro is its flexibility. It functions as a SIP registrar, H.323 gatekeeper, H.323 RAS endpoint, RADIUS NAS port, or SIP/H.323 signaling proxy. It has been developed to provide a single point of entry into the carrier network, allowing a choice of proxy mode for individual gateways and destinations, increasing throughput and minimizing bandwidth management requirements.

Its modular architecture, consisting of two distinct functional layers, Traffic Switch and Traffic Manager, allows for a variety of redundancy arrangements and ensures fault tolerance via dynamic re-distribution of traffic loads over system components. Traffic Switch handles H.323 and SIP VoIP traffic, performs kernel level protocol translation, functions as an SBC and the source of call statistics. Traffic Manager is the system's intelligence that provides a means for authentication of VoIP endpoints, traffic balancing policies implementation, call analysis, number validation and transformation, quality of service control, and generation of all relevant session details.

MVTS Pro further supports carriers' quality control efforts by providing tools for effective network management and control and QoS assurance. Carriers have the ability to view call statistics sorted by any number of criteria: originator, dial peers, terminating equipment, gateways, or destinations. They can then identify instances of performance degradation and isolate faults, allowing them to fulfill service level agreement obligations. System monitoring can be done on-site or remotely.

While it is incumbent upon each carrier to perform the requisite research, the MERA platform provides a set of features that combine to create a reliable, feature rich switching platform to support a sustainable wholesale operation. The economic crisis, which is now said to be winding down, created an uncertainty in the market that, for many in the VoIP industry provided a growth opportunity – after all, people don't stop communicating; they just look for more effective ways of doing it. Likewise, carriers must look for the most effective ways of providing those communications services, recession or boom. **IT**

Time to Upgrade Your Business
By Konstantin Nikashov, CEO, MERA Systems

The 2008-2009 global economic slowdown quickly seized on market flaws, but it gave the strongest impetus to all market players. They awoke to the fact that it's not time to just talk about the future – it's high time to shape it. If operators want to stay afloat, they need to revitalize their networks with the industry's recent technological trends.

The incredible success of the VoIP model can be explained by its cost-effectiveness due to the prevalence of broadband connections. Despite borrowing and investment constraints forced upon operators, this year looks to be shaping up nicely for the VoIP market, and carriers are still looking for new ways to derive benefits from VoIP technology.

MERA Systems has always been in the vanguard of the VoIP industry movement, taking the lead in offering up-to-date products for VoIP carriers. The first product the company offered to the market, named MVTS, has brought MERA Systems international recognition for stability and excellent technical support. As an extremely reliable solution with a wide variety of features, MVTS I became MERA's flagship switching product and has been on the market for over five years.

But from the perspective of the past several years, the technology has dramatically improved over earlier generations. The main reason for this was higher quality service and new capabilities of VoIP equipment compared to what customers experienced with the previous generation of VoIP. MERA Systems accepted the market challenge, introducing MVTS Pro, a more functional and scalable product, that inherited the best features of a well-known MVTS I – business-critical reliability and easy system management as well as an ability to provide smooth equipment and networks interconnection – but was enhanced with a distributed architecture and unmatched productivity.

The market forced the company to announce the End of Life for MVTS I, and following the overwhelming success of MVTS Pro, we have launched MVTS I to MVTS Pro Transition Program for our existing customers with an aim to ensure a straightforward transition from MVTS I to MVTS Pro.

In pursuit for making the transition more attractive, MERA Systems offers special prices for those customers who join the program before Dec. 31, 2009. We encourage our existing clients as well as new customers to visit www.mera-systems.com or address MERA sales representative at sales@mera-systems.com

INTERNET TELEPHONY Congratulates Winners of the BSS/OSS Excellence Awards

Success in the service provider market today is about providing an exceptional customer experience. It's common wisdom that the network is becoming merely a conduit for delivering services and content. The end game for any business, and the result of being able to provide that high-quality experience, is revenue growth.

To get there, providers must be able to react quickly to industry trends and changing user requirements by developing and introducing new services, and they must be able to ensure reliable delivery of those services. To do all that they need appropriate operational and business support systems in place to support those services, and to ensure proper billing and payment for the services.

As next-generation, IP-based networking and service delivery architectures are deployed, and as new applications, content, and services that leverage the capabilities of these new technologies are developed and introduced, the implications for network operators extend well beyond simply delivering the services. While reliable and efficient service delivery is crucial, the ability to support those services with billing and support systems that are effectively integrated into the service delivery platform is equally important. The user experience, after all, is inextricably tied to the end-to-end capabilities of the provider, and there is perhaps nothing that disrupts a user's experience and satisfaction more than mismanaged billing and provisioning.

Because of the fragile nature of billing and operational support in the relationship between provider and subscriber, it is more important than ever that these capabilities be effectively integrated into providers' platforms. With the appropriate BSS/OSS solutions in place, not only will providers provide a better experience, but they will save on customer services costs as well if they are able to effectively and accurately provide back-end support for customers and reduce related calls to their call centers.

The 2009 INTERNET TELEPHONY BSS/OSS Excellence Awards serve to highlight vendors that have demonstrated an understanding of the importance of effective BSS and OSS strategies and excellence in integration of BSS and OSS solutions into end-to-end service infrastructures. The INTERNET TELEPHONY editorial team congratulates these winners on their accomplishments. **IT**

The 2009 INTERNET TELEPHONY BSS/OSS Excellence Awards

Volubill
CHARGE-IT

SAP
SAP Telecommunications

Intec Telecom Systems
Intec Inter-mediatE v6

Sigma Systems
Sigma Service Management Portfolio

Redknee
Redknee One Call Resolution

Comverse
Comverse ONE Billing & Active Customer Management

 Subscribe FREE online at www.itmag.com

Is Avaya Connect Good Fortune or Brilliant Foresight?

By Erik Linask

When word came that Nortel's enterprise unit would be bought by Avaya, one of the questions that quickly arose was how Avaya would handle bringing the Nortel installed base and channel partners under its instantly broadened wings, especially considering that Avaya has never had a global channel program.

Let's take a step back in time to June 2008, when Avaya announced Jeremy Butt would head up its worldwide channels – or at least the many independent regional channel programs Avaya had in place at the time. Not coincidentally, at about the same time, Avaya began work on a complete overhaul of its channel program to create a single, streamlined global program designed to drive more business through the channel and make it easier for partners to do business with Avaya.

The result of that overhaul of both strategy and infrastructure is the new Avaya Connect program, which, as Barat Dickman, director of worldwide channels at Avaya, told me, "is the next step in our evolution to embrace the channel and actualize our high-touch channel-centric strategy, transforming us to become channel-centric in every way we do business and drive a significantly greater portion of our business through the channel."

> **"In order to embrace the high-touch, channel-centric model, we had to have a much improved, more streamlined channel program that would entice partners to join and allow our existing partners to grow much more quickly than they have in the past."**
>
> **– Barat Dickman**

Avaya had received significant feedback from its partners around the globe, indicating that its existing channel strategy made it difficult to work effectively with the company – the pricing structures were inconsistent and complicated, training took too long and was too expensive, and generally, there wasn't a consistent system across the board, etc.

All of the issues raised by its partners have been addressed in Avaya Connect. There is a new pricing model in place that includes five pricing groups and a single global price list, as opposed to the more than 400 pricing groups under the previous structure. Training certifications have been cut from six to four, exams and courses from 100 to fewer than 15, and the time and cost of the curriculum have been cut in half. Avaya Connect also introduces a new global partner relationship management (PRM) system that will be the de facto interface between Avaya and its channel partners worldwide, adding a top layer of consistency and standardization to the program.

The new financial benefits and enhancements to technical, marketing, and sales support programs associated with Avaya Connect are scheduled to go live in February 2010, giving partners time to absorb and understand the impact of the changes, with the existing medal status (silver, gold, platinum) remaining intact through September 2010. In October, the new requirements model will go into effect, with partners being re-leveled according to those requirements.

In addition to partner feedback, Dickman noted that internally, Avaya realized its previous channel model and infrastructure wouldn't support its strategy to grow its channel business because of not only the inconsistencies of a fragmented program, but also a lack of scalability.

"In order to embrace the high-touch channel-centric model, we had to have a much improved, more streamlined channel program that would entice partners to join and allow our existing partners to grow much more quickly than they have in the past," he said.

While the overhaul was initiated well before the deal to acquire Nortel was agreed upon, Avaya Connect will have a significant role in integrating the Nortel partners into the Avaya structure. With the purchase not yet finalized, Avaya is undertaking planning efforts for the coming integration of the two programs, but one thing is certain – Avaya Connect will be the global channel program for the combined entities.

"By Day One, when the deal closes, we should be able to give quite specific guidance and direction as to where we are heading with the program," Dickman promised. "We are going to transition the Nortel partners in a structured, methodical way into Avaya Connect."

Whether the timing of the development and rollout of Avaya Connect alongside the Nortel acquisition is merely good fortune or brilliant foresight might be debated. Either way, Avaya has positioned itself well for what will be a Herculean task once Nortel officially becomes part of Avaya.

The process of bringing a large existing customer and partner base into a new program won't be an easy one to manage. But, the simplification and continuity injected into Avaya Connect will make it significantly easier to accomplish than with Avaya's old channel model and will make its partners more productive and make it easier for them to be the face of Avaya for their customers. If it all goes as Dickman explained, Avaya Connect will be a three-way winning proposition for Avaya, its partners, and its user base. **IT**

By Peter Radizeski

Interop is the Key to SIP Sales

"No trade association in IP communications is working harder to develop standards for relevant technologies than the SIP Forum," according to a TMC blog post at http://tmcnet.com/17267.1. Why is this important? Because SIP isn't a standard like ISDN-PRI is. PRI is a plug-and-play standard that works with almost every PBX and phone system in existence.

With everyone turning to SIP trunking as the new PRI replacement technology, the largest hurdle is whether the SIP provider can deliver a SIP trunk that will work correctly with the customer PBX or phone system.

SIP trunk is not yet a standard; it is a specification of about 30 RFCs, as Cbeyond puts it, "Cbeyond and this (SIP Forum) team formed a working group which authored an overall specification for SIP trunking. As a result of this collaboration, customers may interconnect leading IP PBXs and Cbeyond's BeyondVoice through a recognized standard-based approach to SIP trunking services."

"Compliance with the SIPconnect specification helps to reduce the time and resources required to achieve interoperability between an IP PBX manufacturer and a service provider. Furthermore, it helps minimize the time and effort required for an IP PBX reseller to install and maintain the solution."

SIP providers announce interoperability tests regularly, but you should notice that it usually is very specific – for example, "certified with Toshiba's family of Strata CIX IP business communication systems." Likely, that means your customer better have a Strata CIX IP system with an IP card or it may not work right.

Most of the work is done from the softswitch. So in the case of BroadSoft, once it certifies a brand or model of PBX, all 300-plus of its customers are able to interop with it.

As an agent, when you are proposing a SIP trunk solution, be certain that the customer's PBX has been certified as interoperable with the SIP carrier. A work-around is to add a box at the customer premises that will convert the SIP trunk to PRI signaling. But you will lose some of the SIP features that helped you differentiate your service from a telco PRI. **IT**

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

The Channel & AGENT NEWS

Imago to Bring ATX 300 to the U.K.
http://tmcnet.com/16977.1

Imago, one of Polycom's newly promoted channel development distributors, will be the first distributor of the Polycom ATX 300 in the U.K. The company also will provide its channel of specialist resellers with a range of furniture and display technologies within the Polycom blueprint. Polycom ATX solutions interoperate with Polycom's line of immersive, room and personal telepresence solutions, as well as the estimated 2 million standards-based video conferencing systems in use today, officials said.
www.imagogroup-benelux.com/web/
www.polycom.com

Verizon, Office Depot Help Small Businesses Save
http://tmcnet.com/16919.1

Verizon Small Business Center has teamed with Office Depot on an affinity program targeting small businesses. Under the initiative, businesses that are enrolled in the Verizon Alliance Discount Program can receive discounts of up to 12 percent when purchasing a vast assortment of products from Office Depot, including office supplies, furniture, janitorial and printing products. When customers order supplies from Office Depot through the Verizon Small Business Center, they receive free next-business-day delivery on orders of more than $50. Customers also can request an Office Depot Store Purchasing Card to obtain the same savings when shopping at any of the more than 1,000 Office Depot retail locations.
http://business.verizon.net/SMBPortalWeb
www.officedepot.com

Buvelo Uses Force to Deliver Forecasting Tool
http://tmcnet.com/16966.1

Texas-based Salesforce.com partner Buvelo Solutions has designed and developed a forecasting tool on the Force.com cloud computing platform for dermatology product supplier SkinCeuticals. The Force.com platform powers the Salesforce CRM applications, over 800 ISV partner applications and more than 120,000 custom applications used by Salesforce.com's customers. According to Buvelo officials, they were able to design, develop and deploy a Visualforce-based forecasting tool within a week of initial discussion with the SkinCeuticals team.
www.buvelo.com
www.salesforce.com
www.skinceuticals.com

GoTo: **Table of Contents** • GoTo: **Ad Index**

Subscribe FREE online at www.itmag.com

By Don Witt

Agent Commissions: Are You Selling Yourself Short?

When I started cyLogistics Inc. a long time ago, it was started as a representative company. We built national distribution and national reseller sales channels for companies in the U.S. We worked with many companies from Europe, Australia, China, etc.

We would sign five-year contracts or contracts that auto-renewed after the initial three years. There was a no termination without cause clause. We did it this way because we earned our money as commission on the sales we generated.

> **One nice thing about the five-year agreement is it helps you weed out the serious vendors from those that are just trying to take advantage of you.**

As you know, there is a long lead time to getting channel sales started. Depending upon the product, the sales cycle may vary in the amount of time, but the product or technology being introduced will have to go through the following steps:
- agent training;
- marketing development;
- product launch;
- customer introduction;
- customer evaluation;
- customer negotiation;
- customer purchase;
- customer marketing;
- customer sales; and
- customer repurchase.

The payback starts three months to a year-and-a-half after the sales cycle has started. If you are getting paid a monthly retainer, this may minimize your exposure, but it does not eliminate all of the costs and time you and your firm are investing.

One nice thing about the five-year agreement is it helps you weed out the serious vendors from those that are just trying to take advantage of you. Any effort to enter the U.S. market must be made with long-term intentions. If it is not long term, you are not interested. You need vendor commitment and buy-in. I have provided a chart that I used to demonstrate why the five-year contract was required.

It takes two to three quarters to get sales started in the channel. In the meantime you're going through the following sequence: contacting the prospect, getting the prospect interested, going through an evaluation period and signing the agreements. You do not start making money back until the second or third year. A retainer helps, but you are still out the money, time and energy until well into the contract.

You would want to put in the numbers that reflect your actual investment per product based on the individual product.

If the product does not move, you will let the vendor out of the contract early. You do not need to waste your time or theirs. If it does start moving, you do not want them to hire a direct sales force right away and leave you after you have made the investment. If they do, then they need to buy out the contract. You negotiate this based on how successful you were and where you think the product sales/commissions will be by the end of the five years and into the future.

In order for this program to work, product quality is the most important product attribute. If the quality is not there, your sales efforts will be futile and you will never recover your investment. It is imperative that you listen to the customer feedback and pass it back to the vendor for corrective action.

So how does this apply to VoIP sales?

If you are considering the sale of VoIP telephony, make sure you chose the right partner. Why sell for a company that is not committed to long-term partnering. If the provider is only going to pay for the initial sale, or they are only willing to provide commissions for a year, or commissions are decreased after each year, the provider is only looking out for themselves and not allowing you to recover the investment you have made.

If you want to be successful, let the people selling for you be successful. **IT**

Don Witt is president of cyLogistics (www.cylogistics.com).

NEWS ANALYSIS

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

Genachowski Presses the Net Neutrality Hot Button

By Paula Bernier

FCC Chairman Julius Genachowski in late September set heads spinning when he said in a speech at the Brookings Institution that the four principles the commission had put forth to date on net neutrality – plus two new ones he announced that day – would apply not only to broadband wireline, but also to wireless.

As Tom Keating, CTO and vice president of TMC (INTERNET TELEPHONY's parent company), noted in a blog on this revelation: "This has huge implications for the VoIP industry, since as I wrote last week, AT&T blocks port 5060 (SIP) on their 3G data network, thus blocking VoIP applications.

FCC Chairman Julius Genachowski

> While Genachowski said wireless as well as wireline broadband operators would be beholden to the six open Internet principles and that he expects to "codify" all of this, it will probably be a long time before we see any more specifics around this.

"If the FCC mandates that the wireless carriers can no longer block applications on their data network, this opens up the entire 3G/4G wireless network to game-changing VoIP applications!" Keating opined.

While that's clearly great news for VoIP, and developers, equipment suppliers and service providers targeting that application, the wireless industry naturally is not pleased with this new development. In a press release responding to the chairman's comments, the CTIA said, in part:
"As we have said before, we are concerned about the unintended consequences Internet regulation would have on consumers considering that competition within the industry has spurred innovation, investment, and growth for the U.S. economy."

The wireless association went on to say:
"As a justification for the adoption of rules, the chairman

suggested that one reason for concern 'has to do with limited competition among service providers.' This is at the core of our concerns. Unlike the other platforms that would be subject to the rules, the wireless industry is extremely competitive, extremely innovative, and extremely personal. How do the rules apply to the single-purpose Amazon Kindle? How does it apply to Google's efforts to cache content to provide a better consumer experience? How about the efforts from Apple and Android, Blackberry and Nokia, Firefly and others to differentiate the products and services they develop for consumers? Should all product and service offerings be the same?"

Time will tell.

But while Genachowski said wireless as well as wireline broadband operators would be beholden to the six open Internet principles and that he expects to "codify" all of this, it will probably be a long time before we see any more specifics around this. And it doesn't sound like there are plans for any actual legislation around this.

The FCC last month was expected to issue a Notice of Proposed Rulemaking asking interested parties for their input on how best to create regulations around these ideas. (If you want to put your two cents in, go to the Web site, www.openinternet.gov.) But it sounds as if the FCC still plans on addressing net neutrality complaints on a case-by-case basis rather than through rule of law.

"I will propose that the FCC evaluate alleged violations of the non-discrimination principle as they arise, on a case-by-case basis, recognizing that the Internet is an extraordinarily complex and dynamic system," Genachowski said. "This approach, within the framework I am proposing today, will allow the Commission to make reasoned, fact-based determinations based on the Internet before it – not based on the Internet of years past or guesses about how the Internet will evolve." **IT**

Tom Keating, CTO and vice president of TMC, contributed to this article.

GoTo: **Table of Contents** • GoTo: **Ad Index**

Subscribe FREE online at www.itmag.com

By Rami Hadar

Net Neutrality or Net Reality? That is the Question

Editor's Note: The following opinion piece is in response to FCC Chairman Julius Genachowski's recently stated pledge to support net neutrality and apply it not only to wireline but also wireless networks. (Details and analysis on the chairman's comments can be found in the story "Genachowski Presses the Net Neutrality Hot Button" on page 26 of this issue.)

The term "net neutrality" is an oxymoron – the net is not neutral nor is it free.

Taking a hands-off approach to the network is like taking a hands-off approach to the roads. Get rid of traffic lights, roundabouts, stop signs and pedestrian crossings and all you're left with is chaos.

No proactive traffic management means a free-for-all where pedestrians, cyclists and semi-trailers are all sharing the same lane. The same is true with the Internet.

The Internet infrastructure was built by commercial companies that have every right to be profitable, and there is no justification in preventing them from realizing a reasonable return on that investment as long as the needs of Internet users are met. That's net reality.

The demand for bandwidth will always exceed the supply of bandwidth. The sheer abundance and accessibility of applications is staggering, and in order to ensure fair access for all, the network has to be managed. We have customers who, when operating at full capacity, 90 percent of their network is being used by less than 10 percent of their subscribers. If, for example, operators cannot optimize VoIP traffic over P2P traffic in times of congestion, the VoIP quality will be so degraded that it becomes unusable.

There's no need for a crystal ball to see what a successful Internet business model should look like. We only need to look at mobile voice networks where subscribers pay for the services that they use, from ringtones to email, from wallpaper to instant messaging. Our vision for the Internet is very similar. Tiered service levels such as gold, silver and bronze based on throughput and volume are an obvious way to go, and to be honest not a new idea. Many service providers around the world have successfully implemented tiering as a solution to both optimizing their own pipes and providing their subscribers choice.

The idea of providing choice to subscribers makes sense. If we take the idea one step further we can give subscribers choices in how they use and pay for Internet access – what sort of applications they really want access to: a premium VoIP package; a video package that guarantees the quality of the video stream; a dedicated gaming package that makes sure the action doesn't slow down when the network does. If your operator offers these services at a price that suits you, great. If not, there's bound to be an operator that will meet your budget. That's competition, which is also not a new idea.

The net reality is that in a competitive environment the laws of supply and demand are incredibly effective in regulating what companies can and cannot do as long as consumers have alternatives. Regulation for any purpose other than to level the playing field and outlaw extreme practices is simply unnecessary. The bottom line is we need to create an environment where service providers can operate with a successful business model and at the same time provide subscribers with the choice of when, how and what they use the Internet for. That's net reality. IT

Rami Hadar is president and CEO of Allot Communications (www.allot.com).

ENTERPRISE NEWS

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

Flu Program Facilitates Communication, Education

http://tmcnet.com/16950.1

TeleVox, a provider of communication solutions for the healthcare industry, has started a Flu Preparedness Program that will assist healthcare officials to offer the latest information and methods to counter the Swine Flu and the H1N1 virus. According to TeleVox, the program was designed to help health officials quickly communicate with patients and offer multiple outreach tools to make sure their messages reach their intended recipients. The campaign also includes sample automated messages and scripts, patient education materials and e-mails.

www.televox.com

OpenScapeVoice Earns High Marks

http://tmcnet.com/16952.1

Analyst firm Current Analysis has rated Siemens Enterprise Communications Group's flagship software-based product, OpenScapeVoice, high in its latest product assessment report. According to the report, OpenScapeVoice earns a "5 out of 5" rating in scalability and performance for its ability to support up to 100,000 IP lines with just two industry-standard servers. It also earned high ratings in terms of pricing, security and reliability.

www.currentanalysis.com

www.enterprise-communications.siemens.com

Aspect Saves with Microsoft OCS

http://tmcnet.com/16953.1

Unified communications solutions provider Aspect has announced its global UC implementation is now complete. The last step in the process was the successful deployment of Microsoft Office Communications Server 2007 R2 to support the company's Asia Pacific regional headquarters in Singapore. All voice and voicemail services, audio and Web conferencing, instant messaging and presence for Aspect offices in Beijing and Dalian, China; Tokyo; and Bangalore and New Delhi, India, will be managed with the Office Communications Server 2007 R2 and Microsoft Exchange Server 2007. Since the company started using Office Communications Server 2007 R2, Aspect has enjoyed a number of financial benefits, including $1 million in savings on annual conferencing costs; the elimination of multiple PBXs to produce support savings of $300,000; and the deployment of SIP trunking to create a savings of more than $250,000 annually in telecommunication charges.

www.aspect.com

www.microsoft.com

Otellini: PC Market Beginning Recovery

http://tmcnet.com/16979.1

Intel Corp. CEO Paul Otellini said recently that the global PC market is "pulling out of its slump" and could actually defy industry forecasts by growing this year. Otellini's comments at an industry conference in San Francisco were surprisingly bullish. Intel said the personal-computer market "bottomed out" in the first quarter.

www.intel.com

Aastra Enhances the 5000

http://tmcnet.com/16984.1

Aastra has announced improvements to the Aastra 5000, a software-based IP telephony solution for large, multisite enterprises. The solution is based on open standards such as SIP and the Linux operating system and supports scalability from 500 to 150,000 users, or 15,000 per server, throughout up to 2,000 sites. Service providers can offer the solution as a managed service. Centralized administration makes it easy to install, configure and manage system data from multiple locations. And, the system supports several levels of security, including spatial duplication, as in a second local or remote server, with automatic switchover, anti-virus and firewall capabilities.

www.aastra.com

Strata CIX VoIP Certified with nTelos

http://tmcnet.com/16980.1

Toshiba's Strata CIX VoIP business communication systems are now certified interoperable with nTelos' SIP trunking service. The nTelos SIP trunking solutions allow for dynamic bandwidth allocation between Internet access, WAN connectivity and voice, with a reduced number of trunks required. It offers numerous advanced features and capabilities that distinguish it from traditional channelized trunking, including a primary rate interface that allows multiple voice sessions on a broadband pipe using an IP-enabled PBX or key system; expanded local calling and; integrated trunking scalability, which combines voice and data on one pipe with room for growth.

www.ntelos.com

www.telecom.toshiba.com

Software Advice Offers Prescription for IP PBX, EHR Combos

http://tmcnet.com/16978.1
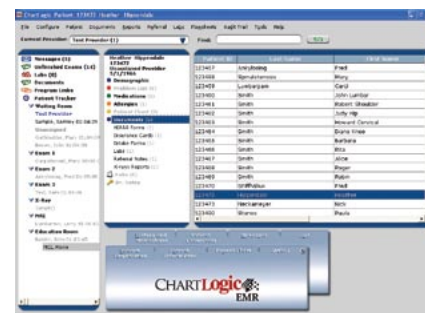
There's an opportunity to merge IP PBXs with electronic health records, but to date minimal developments of medical-specific applications have been made. Software Advice is aiming to change that by compiling a list of how IP PBX and EHR technology can be combined. With the high volume of patient calls, a patient screen popup could help the receiver identify who the patient is and his or her medical history. With IP faxing, digital information such as EHR data could be sent through the IP PBX and over the telephone network, decreasing paper usage and the time it takes to feed the fax through a standard fax machine. Other possibilities include automated appointment reminders, automated payment reminders, automated prescription refills, customized record answers tailored to the patient calling and find me/follow me so patients with recent medical emergencies can more easily reach their doctors.

www.softwareadvice.com

Subscribe FREE online at www.itmag.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.

SERVICE PROVIDER NEWS

Frontier Pushes Product Via School Fundraiser

http://tmcnet.com/16922.1

Frontier Communications Corp., a provider of communications services to rural areas and small and medium-sized towns and cities, dedicated the months of September and October to raise funds to improve the technology at schools. As part of the program Frontier donated $25 to any participating local school every time a residential or commercial customer signed up for Frontier High Speed Internet. In order to raise funds, faculty and students distributed flyers for the promotion.

www.frontier.com

AT&T Ups the Ante for Wholesale

http://tmcnet.com/16929.1

AT&T has unveiled a new access option for its Voice of IP Connect Service and a new user-based Web enhancement for AT&T Global Hubbing IP Access. The company also is offering its wholesale customers additional options for business VoIP services. AVOICS, AT&T's flagship wholesale VoIP platform, caters to U.S. service providers that need an IP-based connection to AT&T's network and termination of IP voice traffic over the PSTN. Customers can connect to AVOICS using Transport Independent Access, which AT&T says is a cost-effective way to access the service by way of the public Internet, or on the AT&T network using the provider's Managed Internet Service.

www.att.com

Amino Gets Tele2 STB Business

http://tmcnet.com/16935.1

Tele2 Netherlands has selected Amino Communications to supply it with MPEG-4 set-top boxes for the provision of IPTV services. The deal involves Amino's A132 and A532 MPEG-4 dual SD/HD compatible and Personal Video Recorder models, which the vendor will deliver over an 18-month period. Amino CEO Andrew Burke said this is a strategically important win given Tele2 is a large, established Western European operator.

www.aminocom.com

www.tele2.nl

Logista Brings Smoothstone Services into the Fold

http://tmcnet.com/16948.1

Smoothstone IP Communications, a provider of cloud-based unified IP communications services, has announced a partnership with Logista for the supply of its complete suite of hosted services and on-demand applications to Logista's clients. Smoothstone's suite of managed services and cloud-based applications include VoIP solutions, IP trunking services, unified threat management, MPLS networking, messaging and advanced collaboration tools. Logista provides technology management solutions.

www.logistasolutions.com

www.smoothstone.com

Telesat's Nimiq Effort Flying High

http://tmcnet.com/16949.1

Space Systems/Loral has successfully performed post-launch maneuvers on Nimiq 5, a direct-to-home television satellite built for Telesat, a fixed satellite services operator. Telesat had selected International Launch Services (ILS) to put Nimiq 5 into orbit for them. The satellite, built by Space Systems/Loral, will provide coverage of North America and supports growing demand for direct-to-home television services.

www.ssloral.com

www.telesat.ca

MegaPath Expands Business Ethernet Offer

http://tmcnet.com/16954.1

Costa Mesa, Calif.-based provider of managed IP data, voice, and security services, MegaPath Inc., has expanded its Business Ethernet service (Ethernet over Copper) throughout 32 markets and more than 300 central offices. It also has added 3 and 5 Mbps options to its offering. The solution is now available in three speeds – the other being 10 Mbps.

www.megapath.com

GE, NURI Telecom Work to Advance Smart Grid in Korea

http://tmcnet.com/16970.1

GE Energy officials will work with Korea's NURI Telecom Ltd. to build an advanced smart grid infrastructure in Korea. NURI has expertise in designing, developing and manufacturing hardware, software, solutions and systems offering next-generation AMI to the utilities.

www.aimir.com

www.ge-energy.com

Motorola's GPON to Power Middleburg Tel Network

http://tmcnet.com/16967.1

Middleburgh Telephone Co. has selected Motorola's gigabit passive optical network to enable the delivery of rich personalized media experiences to its subscribers. Middleburgh will deploy a Motorola-based GPON network throughout its serving area, updating its current HFC network to this high-capacity, all-fiber architecture.

www.midtel.com

www.motorola.com

Portugal Gets IPTV from Vodafone

http://tmcnet.com/16965.1

Vodafone Portugal has launched an IPTV service called Vodafone Casa TV. The service, developed with Alcatel-Lucent technology, provides access to more than 100 TV channels, including eight HD channels and hundreds of movies available via video on demand.

www.vodafone.pt

Optus Selects MDI's eyeD 360

http://tmcnet.com/16939.1

Monitoring Division Inc. has landed orders for its eyeD 360 network monitor from Optus, the division of SingTel in Australia. Scott Robertson, technical specialist for data services engineering at Optus, led the evaluation of mdi's eyeD 360. He said he found the device to be the only one capable of easily and accurately measuring in-band OSNR. The tool also provides visibility into the network by monitoring fiber characteristics in-service.

www.monitoringdivision.com

www.optus.au

WIRELESS NEWS

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

GSMA Unveils Release 2

http://tmcnet.com/16941.1

The GSMA's RCS Release 2 is now available and its RCS DevChallenge has begun. RCS Release 2 is a set of Rich Communication Suite service specifications. RCS DevChallenge is a competition for developers to encourage new and innovative ideas for future RCS-based services. Release 2 includes key enhancements to the core feature set included in RCS Release 1, such as a broadband access client. This client allows broadband access to core RCS services such as in-call multimedia sharing, conversational messaging and presence-enhanced contact management. Users now also will be able to access services and applications from both mobile and fixed terminals.

www.gsmworld.com

Indoor Location Technology Addresses Mobile 911

http://tmcnet.com/16938.1

WirelessWERX has launched SiteWERX, which the company claims is the industry's most precise indoor location technology for the mobile 911 caller. SiteWERX can locate a mobile 911 caller down to the building, floor and room. Steve Artim, CEO of WirelessWERX says today that more than 50 percent of 911 calls are made on mobile phones and half of those are made indoors.

www.wirelesswerx.com

Navy Grants $60M in Wireless Contract Extensions

http://tmcnet.com/16976.1

AT&T Inc., Sprint Nextel Corp. and Verizon Wireless have received extended U.S. Navy wireless contracts of $20 million apiece. The contracts reportedly will provide nationwide cellular phone service to Navy users at locations throughout the country.

www.att.com
www.sprint.com
www.verizonwireless.com

Finpro Takes an iPass

http://tmcnet.com/16937.1

IPass, which sells enterprise mobility services, has announced that Finpro, a consultant network promoting Finnish companies, is rolling out iPass Mobile Office to offices in more than 40 countries. The company's products are being used to "help mobilize several hundred Finpro staff," according to iPass officials, who add that they're interested in iPass's global Wi-Fi network, which "encompasses almost 140,000 Wi-Fi hotspots, including nearly 60,000 in Europe alone, as well as 3G mobile broadband coverage, Ethernet and dial-up."

www.finpro.fi
www.ipass.com

Sprint, GoKnow Use Cell Phones to Educate

http://tmcnet.com/16974.1

The Inkster Public School District is now working with Sprint and GoKnow Learning Inc., a University of Michigan spinoff that focuses on helping K-12 schools adopt mobile learning, to turn cell phones into powerful educational tools. In this trial run, students could complete and synchronize English language arts assignments using their cell phones with the Sprint/GoKnow technology programs such as Pico map, Sketchy, KWL chart, camera, video and Windows Mobile for lessons that went along with their online reading assignment of "Animal Farm" by George Orwell. As a result, students increased their achievement scores by 25 percent.

www.goknowlearning.com
www.sprint.com

Yahsat Choose ViaSat for Broadband Deal

http://tmcnet.com/17784.1

ViaSat, a Carlsbad, Calif.-based provider of satellite and other digital communication products, will be providing Ka-band networking equipment and operations support to Yahsat's yet-to-be-launched YahClick satellite broadband service. ViaSat received a $46 million contract award from Al Yah Satellite Communications Company (Yahsat)'s subsidiary Star Satellite Communications. Under the terms of the contract, ViaSat will be providing equipment and installation for a network control center, supplying a pilot-production quantity of user terminals, as well as installing four complete satellite broadband gateways – "SurfBeam 2" models – to power Yahsat's YahClick broadband service.

www.viasat.com
www.yahsat.ae

AirCard Available with Verizon

http://tmcnet.com/17786.1

The AirCard 402 2-in-1 mobile broadband is available for wireless voice and data networks in the U.S. through the Verizon Wireless open development program. Designed to work with both ExpressCard and PC Card slots, the AirCard 402 2-in-1 mobile broadband card is compact and simple to use, with Sierra Wireless TRU-Install automatic software installation. This installs Sierra Wireless Watcher connection manager software upon first insertion into the notebook. The Verizon Wireless open development program is designed to offer businesses and consumers the ability to use wireless devices, software and applications it does not offer on its nationwide wireless network. The AirCard 402 joins the Sierra Wireless USB 598, which was approved through the open development program earlier this year.

www.sierrawireless.com
www.verizonwireless.com

Survey Says: U.K. Customers Want Mobile VoIP

http://tmcnet.com/16960.1

A recent survey conducted on consumers in the United Kingdom indicated a strong preference for operator-branded and managed Wi-Fi calling service, with nearly 20 percent of respondents stating they would be interested in a mobile VoIP product from their existing mobile service provider. Analyst John Blau said that sooner or later, mobile operators will be forced to deploy their own VoIP services for customers. Analyst John Blau said that sooner or later, mobile operators will be forced to deploy their own VoIP services for customers.

Handset Sales Down, Smart Phone Sales Up

http://tmcnet.com/16958.1

Worldwide handset sales totaled 286.1 million units in the second quarter of 2009, a 6.1 percent decrease from the second quarter of 2008, according to Gartner. But smart phone sales surpassed 40 million units, a 27 percent increase from the same period last year, representing the fastest-growing segment of the mobile devices market and about 14 percent of new device sales.

www.gartner.com

GoTo:
Table of Contents • **Ad Index**

Subscribe FREE online at www.itmag.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.

TELECOM EXPENSE
MANAGEMENT
NEWS

Cellution Launches Real-time Mobile Tracking Software

http://tmcnet.com/17723.1

Financial officers and IT executives who oversee large wireless phone inventories – especially those with mobile devices deployed internationally – have long known that the biggest challenge to controlling mobile expenses is managing individual user habits. A new product from Cellution Inc. featuring patented technology can provide real-time transparency for wireless telecom expenses down to the device level. The new software, dubbed Mobile-i, is based on the patented PACE process methodology to provide comprehensive mobile device, account, policy compliance, usage management and control in real time.

www.1cellution.com

Telesoft Announces Advanced Dispute Management Capabilities with Version 9.5

http://tmcnet.com/17724.1

Telesoft, a provider of fixed and mobile telecom expense management software and services, announced the release of Telesoft Version 9.5 with advanced dispute management capabilities. According to industry analysts, up to 80 percent of telecom invoices contain billing errors. These errors equate to millions of dollars in cost recovery opportunities for large organizations. Company officials say Telesoft 9.5 provides added flexibility and detailed status tracking to speed the recovery of credits and refunds.

www.telesoft.com

Tangoe Achieves Milestone in International Telecommunications Spend Under Management

http://tmcnet.com/17725.1

Tangoe Inc., a provider of enterprise communications lifecycle management software and technology-enabled services, has achieved $1 billion in non-U.S. annual fixed and mobile telecommunications spend under management. This important milestone is the direct result of the strong global demand for telecom expense management services and the company's international operations capabilities in more than 195 countries and territories around the globe. With customers and partners across the Americas, EMEA and APAC, Tangoe is responsible for managing global telecom spend for enterprises in industries as varied as financial services and healthcare, retail, manufacturing and the military.

www.tangoe.com

Veramark Offers Free Call Accounting Software to Cisco Customers and VARs

http://tmcnet.com/17726.1

Veramark Technologies Inc.'s VeraSMART Call Accounting software licenses are available free to qualified customers and VARs using Cisco Unified Communications 500 Series solutions. VeraSMART Call Accounting helps organizations monitor users and communications network usage for compliance, security, cost management and abuse. The software, which is available through Cisco Community Central, enables qualified Cisco Unified Communications 500 Series customers or resellers holding Cisco Select Certification with designations in the U.S. to acquire a VeraSMART Call Accounting software license at no charge. The VeraSMART Call Accounting software supports up to five sites and 250 extensions.

www.veramark.com
www.cisco.com

AOTMP Establishes Industry Confidence Index

http://tmcnet.com/17727.1

AOTMP, a provider of information solutions for managing enterprise telecom and wireless environments, has issued a new report featuring results from a first-of-its-kind research initiative. The study was developed to establish an industry confidence index and assess enterprise confidence in telecom expense management and wireless mobility management programs. The report, titled "State of the Industry: Assessing Performance Levels and Confidence in Enterprise Telecom Expense Management and Wireless Mobility Management Programs," explores the drivers behind individual confidence and factors influencing overall industry confidence levels.

www.aotmp.com

Ezwim's Release 10 Increases Enterprise Control on Telecommunications and Reduces Telecom Costs

http://tmcnet.com/17728.1

Ezwim, a provider of telecom management services for operators and enterprises, announced the availability of Release 10 of its "Total Telecom Management" services. Company officials say the new release brings together all elements of a professional telecom management service and enables customers to access spend, inventory and service management information. Release 10 has a state-of-the-art user interface, is browser independent and offers unmatched performance, according to the company. Ezwim's new release provides customers instant access to detailed telecom parameters across the enterprise and enables them to optimize telecom resources and service management.

www.ezwim.com

TEMIA Offers New Educational Webcasts for Enterprises

http://tmcnet.com/17729.1

The Telecom Expense Management Industry Association, the "voice" for the telecom expense management industry, is now offering educational webcasts for enterprises, government, and other organizations. These webcasts will feature different members of the association speaking on a range of topics related to telecom expense management solutions. Among the topics are best practices for a successful TEM program; key performance indicators; standards and benchmarks; overcoming the challenges of international TEM programs; wireless and mobility management for smart phones, PDAs and mobile computing; inventory management; financial management; and other subjects that will respond to areas that enterprises want to learn about.

www.temia.org

DTCC Selects IBM Telecom Expense Management Solution

http://tmcnet.com/17730.1

The Depository Trust & Clearing Corp. has selected IBM's new Telecom Expense Management solution to help in managing its multi-million dollar telecommunications spend. IBM's Telecom Expense Management Services is designed to help clients address the complexities of managing telecommunication ordering, inventory and invoice acquisition and validation of services provided by their telecom vendors. The service includes consulting, assessments, historical audits and mobile savings analysis. By providing a centralized solution, IBM helps clients bring together diverse information, and identify and obtain telecom cost savings.

www.dtcc.com
www.ibm.com

Open Source Efforts No Longer an "Obscure Sideshow of Geeks"

Marking Tenth Anniversary, Asterisk is Firmly Planted in the Mainstream

By Paula Bernier

It's been 10 years since Asterisk's release as an open source project, and in just a decade it's moved into the mainstream in a major way.

"Long gone are the days when open source efforts were regarded as an obscure sideshow of geeks, open source software was viewed with suspicion by the general public and corporate IT departments, and entrepreneurs struggled to commercialize open source efforts," says Fakhri Karray, primary founder, president and CEO of Vestec. "Asterisk, of course, has in many ways led these changes in perception about open source telephony software and deserves to be acknowledged as a classic open source success story."

Today, not only are a large number of small and medium businesses using Asterisk-based systems, but the technology is becoming more prevalent in large enterprise and government installations as well.

"The big news hasn't really been so much of a splash as a wave," says John Todd, Asterisk Community director and the chairman for AstriCon 2009, which was held last month in the Phoenix area. "The wave has been large-scale use, and enterprise use, of Asterisk now in some fairly serious installations."

Mike Storella, director of business development at open source phone provider snom, agrees.

"I see a lot of maturing of the open source where deals are less about 'let's go try this and see if we can build something that can work,'" says Storella. Solutions now have been proven and "perfected," he says, and there are now customers of reference.

As a result, AstriCon received a flurry of session proposals relating to large-scale deployments, Todd says, so rather than

just doing a session or two, it created an entire track around this theme.

"We're seeing so many large-production systems in the enterprise and in government that are multi-hundred, multi-thousand seat platforms and we had … so many great submissions this year" that it made sense, he says.

Among the speakers slated to speak at AstriCon last month (this issue went to press prior to the event) were Jeronimo Romero, CTO for EUS Networks, who was expected to offer a synopsis on the requirements and benefits of running Asterisk on a trading room floor.

Todd adds that entire cities including Amsterdam and some locations in the Phillipines now are moving their networks to Asterisk as well. Arno Jolink, CEO of IsraPunt ICT, at AstriCon was scheduled to talk about some of the world's largest Asterisk implementations, which are in the Netherlands. Kelvin Chua, CTO of Nextix Inc., meanwhile, was on the lineup to make a presentation on things to consider in citywide applications of Asterisk.

"It's no longer just for the SMB market," Todd continues. "We're seeing Asterisk really starting to [get] a lot of traction in the large-scale environments – both service provider, but especially enterprise."

The past year has also seen the rise of Asterisk in cloud-based applications, continues Todd, and not just for PBX offers.

For example, Nir Simionovich, CEO of Greenfield Tech, leveraged Asterisk

Vestec's Dr. Fakhri Karray

running on EC2 for "a huge election campaign in Israeli," says Todd.

"We were so interested in what he is doing that we actually sponsored him to give a cloud computing training day" on how to do Asterisk on EC2 to scale, Todd adds.

Twilio, which leverages cloud-based computing to help developers create inbound or outbound phone applications using Asterisk over EC2, is another company in this vein, says Todd.

"We expect to see the push toward software as a service and cloud-based computing continue," says Gerd Graumann, director of business development at LumenVox. "Asterisk's low cost and flexibility make it an ideal product to build SaaS applications around. The great developer community that exists around open source projects like Asterisk ensure there are a lot of people always building experimental applications that really benefit from the low cost of entry offered by SaaS and cloud computing."

To that end, the big announcement LumenVox made to coincide with AstriCon was the availability of its subscription-based software, effectively making speech recognition available as a service. For just $7.99 per month, Asterisk users can have access to the full set of features offered

GoTo: **GoTo:**
Table of Contents • Ad Index

Subscribe FREE online at www.itmag.com

by the LumenVox Speech Engine, including support for several languages/dialects and its advanced noise reduction technology. That price includes all the software, and is available with no contracts or commitments.

Bill Miller, vice president of product management for Digium, the creator of Asterisk, adds that there's "huge movement in the speech area" within the Asterisk space. In addition to LumenVox, he says Loquendo and Vestec are among the important companies in the speech-to-text and text-to-speech space.

"We have become a Digium Software Partner recently, and we want to make our speech technology (ASR, TTS, Speaker Verification) available in this market as well," says Paolo Coppo, vice president of marketing and business development at Loquendo, which this year attended AstriCon for the first time. "With a portfolio of 27 languages and more than 65 voices, we help companies worldwide, with the best quality at the right price."

Speech recognition can significantly enhance the caller experience as well as generate new revenue streams for Asterisk-based product and service providers, says Vestec's Karry.

"Vestec intends to demystify, commoditize, and standardize sophisticated speech recognition with robust, low-cost speech products and turnkey speech applications," he adds, noting that speech recognition has become a part of daily life for many individuals as a result of 411 services and speech-based auto-attendants for directory assistance.

At AstriCon Vestec planned to announce a speech recognition engine "that significantly lowers the cost barrier for enabling sophisticated speech recognition with Asterisk," says Karray.

The snom 870 VoIP telephone plays nice with open source VoIP platforms and also boasts a high-definitiion TFT touch-screen and the ability to handle complex applications.

Asterisk Celebrates Sweet 1.6

By Paula Bernier

The latest Asterisk release, 1.6, has a bunch of new features, including integration with calendaring systems.

"We now have Outlook calendaring, Gmail or iCal calendaring, that can all be integrated inside of Asterisk so you can have your telephony system be aware of your schedule as well as insert things into your schedule," says John Todd, Asterisk Community director and the chairman for AstriCon 2009. "We think [that] is an incredibly powerful part of the UC story, really that nobody else has taken advantage of." **IT**

"Our speech recognition engine delivers among the highest recognition accuracy in the industry, allows developers to build sophisticated speech applications without reliance on external professional services, and costs a fraction of competing speech recognition products for Asterisk," he says, adding the Vestec speech engine costs only $99 per port compared to a leading competitor's price of $245 per port.

"In addition, maintenance (covering patches and upgrades) can be purchased on an optional bases for our speech engine for $15 per port per year compared to a leading competitor's price of $40 per port per year," Karray adds. "Finally, there is absolutely no minimum ports purchase requirement to take advantage of low price of the Vestec speech recognition engine."

Graumann says at AstriCon his company planned to continue its effort to get out the message that the LumenVox Speech Engine is "the most trusted and successful automatic speech recognizer on Asterisk."

Thousands of Asterisk developers use LumenVox Speech Engine, which supports the Speech Recognition Grammar Specification, the Semantic Interpretation for Speech Recognition specification, and the Media Resource Control Protocol specification, Graumann says.

"Recently a competitor of ours has been touting its speech offering on Asterisk as being comparable to LumenVox's, and it simply is not," he adds. "Without support for all of those standards, a speech recognizer really cannot be thought of as being mature or complete. It's sort of like using a Web browser that supports the HTML specification from 1997. Will it work for some pages? Sure. Is it a mature or modern application? Absolutely not."

Cloud Call Center Spreads like CallFire

By Paula Bernier

In this day and age of the mobile worker, a desire for quick response, and polarized politics, CallFire has come out with a solution called the Cloud Call Center that addresses all of the above. Cloud Call Center by CallFire can enable an organization to set up a call center with large numbers of agents in just a few hours.

It allows people to get calls at home and then get a screen pop on their PCs with a call script and choices for call outcomes. The system also offers APIs for customers who want to customize the interface. And CallFire will analyze data garnered from those calls and provide the results in real time.

The CallFire Cloud Call Center, which has seen about 15,000 users – from mom-and-pop operations to large enterprises, won the Best Call Center award at the recent ITEXPO West 2009 show. We hope this Q&A with CallFire's energetic CEO and Co-Founder Dinesh Ravishanker illustrates why.

Ravishanker, who has focused his career on VoIP integration consulting, says his passion is developing VoIP-driven startups and creating unique online growth strategies. Before starting CallFire, Dinesh served as president of Skyy Consulting Inc. and led business analysis and user interface design projects for Pfizer, Unisys Corp. and the U.S. Navy.

For those not familiar with CallFire, what does the company do?

CallFire is a telephony platform that allows businesses to create scalable outbound power dialing campaigns, build hosted IVRs, buy on-demand phone numbers and use voice broadcast on a pay-as-you-go basis.

One of our most popular services is the Cloud Call Center. This solution creates a hosted power-dialing environment in minutes and works for agents at home or the office. It can quickly scale to support hundreds of agents, on-demand. Administrators can view call details, listen silently on active calls, play recorded calls and can even run reports on campaign efficacy.

When and how did the company get started?

CallFire got started over five years ago. Our organizational vision originally focused on enterprise open source VoIP consulting. We developed hosted call centers and built significant open source frameworks that could support tens of thousands of simultaneous calls. By leveraging open source, we could build customized telephony solutions that cost a small fraction of what existing telecom companies were charging.

CallFire's Dinesh Ravishanker

Eventually, our enterprise clients demanded that our platform be highly available, redundant over multiple data centers, and that it be able to handle thousands of simultaneous calls. These requirements made the case for developing high-availability clusters, intelligent queuing systems across multiple data centers, and self-healing media servers. This platform is the present-day CallFire.

Who is your target customer?

SMBs, call centers and non-profit organizations that require outbound telecom.

Can you offer a specific name or two of companies or organizations that use your solution?

CallFire was recently used by NoOnProp8 to enable over 10,000 volunteers to work from home to help increase gay-rights awareness. Other non-profits like MoveOn.org commonly use our hosted IVR platform for political polling analytics. We also help many small businesses like Dave the Shoe Guy create success stories in a challenging economic environment.

What does CallFire have to do with the open source movement?

CallFire is proof that highly available cloud services can be cost-effectively implemented using open source. The platform is an ideal example of how open source can be used to develop profitable and sustainable (non-service based) businesses.

What's next for CallFire?

CallFire will continue to build next-generation communications tools using the latest in open source technologies. We're investing in mobile app development, Google Wave integration and much more. **IT**

Subscribe FREE online at www.itmag.com

Upcoming TMCnet Webinar Schedule

November 11, 2009 • **12:00pm ET 9:00am PT**

Platform Strategies for Software-based PBX – Part 2

Sponsored by:

SANGOMA

http://www.tmcnet.com/webinar/sangoma-series

November 12, 2009 • **2:00pm ET 11:00am PT**

Reduce Costs and Improve Efficiencies with Virtual Fax over IP

Sponsored by:

BISCOM   **Dialogic** Making Innovation Thrive

http://www.tmcnet.com/webinar/biscom-dialogic

November 18, 2009 • **10:00pm ET 7:00am PT**

SIP beyond telecom

Sponsored by:

RADVISION®
Delivering the Visual Experience®

http://www.tmcnet.com/webinar/radvision-series

Archived • **View Today!**

First Contact Resolution (FCR): Top Myths, Methods and Tips to Measure it and Improve it

Sponsored by:

Panviva
Leaders in Business Process Guidance

http://www.tmcnet.com/webinar/panviva

Archived • **View Today!**

MPLS with Voice + Security – Planning for the Future and Taking Your Network to the Next Generation of Cloud-based Communications

Sponsored by:

MegaPath™

http://www.tmcnet.com/webinar/megapath

Archived • **View Today!**

The Final Frontier: Secure Unified Communications to Any Device in Any Place

Sponsored by:

Sipera Systems

http://www.tmcnet.com/webinar/sipera4

Positron Telecom Expands Horizons with Turnkey Solutions

By Paula Bernier

Positron Telecommunication Systems Inc. got its start providing PCI cards and gateways that others can use to create complete products. The company still does that, but now it's expanding its portfolio to include turnkey solutions.

But not just any turnkey solutions.

The company's new initiative, launched last month at Astri-Con, allows customers to choose from a variety of software-based applications and related hardware options, and Positron Telecommunication Systems will deliver those solutions in a made-to-order fashion.

The new solutions address call center, conference bridge, PBX, and PBX extender applications, says Richard McGravie, president of Positron Telecommunication Systems. Customers can elect to have these applications delivered via card or appliance form factors, and can specify the number of ports and other hardware features they require, he adds. So it'll be something of a customized solution every time.

"All the software solutions that we do work on all the hardware solutions that we do," says McGravie, explaining how the company is leveraging its existing platforms with this new effort.

When Positron Telecommunication Systems was established in January 2008 it set out to improve upon the existing telephony designs of such companies as Dialogic, Digium and Sangoma Technologies, says McGravie. But along the way, he says, management decided instead to move in a different direction.

"That was really making a PCI card that was both a media gateway and an Asterisk blade, for lack of a better term," he says of the initial plan. "But what we figured out part way through the thing is that limited us into a smaller vertical market.

"So what we decided to do was, because the power of Asterisk is on the card, we decided we were going to make solutions," McGravie says.

The Asterisk/open source telephony board market is a $30- to $40-million opportunity, he explains, but the PBX market is in the billions. While that entire space is not addressable for Positron Telecommunication Systems, it does bring the opportunity into the hundreds of millions of dollars for the company, he says.

Applications with 100 users or less are the sweet spot for Positron Telecommunication Systems, which uses a distribution model to bring its products to market. McGravie adds that call center solutions are typically custom solutions, but with the company's new turnkey initiative selling call center applications is now attainable for resellers. That includes call center applications both in the traditional sense as well as for uses that aren't technically call centers but require a lot of the same functionality, he says.

Positron's Richard McGravie

McGravie says resellers of the company's new turnkey solutions have plenty of ammunition they can use to differentiate these products from those of competitors.

Because each application can be provided on an array of hardware platforms, he says, resellers can respond to the needs of customers with virtually any price point. For the conference bridge application, he says, they can emphasize that bringing this capability can save business customers big in terms of telephony costs.

"We do a couple things that absolutely nobody else does in the marketplace," McGravie continues. "Nobody else has a PBX on a PCI card. Why is that important? If you look at the traditional Asterisk market, the problem with Asterisk is that you have to take a PC, you have to install Linux on it. You have to install Asterisk on it. And if you want telephony on it, you have to install a telephony board. And, typically, in all of those processes something goes wrong.

"We take the Linux, the Asterisk, and the telephony board and we combine it into a single solution. That's already done for you," he says, adding that decreases time to market for the reseller and its customer.

He adds that one of the limitations of Asterisk is it only works well on Linux, but that users that want to take a do-it-yourself approach can use a PCI card with the operating system of their choice.

Also, he says, traditional cards require the installation of a driver for the operating system. "We actually install as an Ethernet card," he explains. "So you install it, you get an IP address and off you go, which is again very unique in the marketplace."

Positron Telecommunication Systems' PBX-on-a-card architecture also addresses cloud-based applications in an unrivaled manner, says McGravie. He says VMware typically requires a virtual server and the installation of a virtual Ethernet adapter. That communicates with the host PC's Ethernet adapter, which then hits the switch and then goes on to a gateway. But voice traffic is sensitive to latency and delay, McGravie notes, so by the time the traffic goes through all those processes it can be adversely affected.

"Because our card has an internal Ethernet adapter we actually terminate the RGP and the traffic inside the box," he says. "So we have the least amount of hops."

"We're the only vendor in this space that can do this," he adds.

Beyond just the solutions themselves, however, McGravie emphasizes a point of differentiation for Positron Telecommunication Systems is the fact that it will offer customer support no matter what size the customer.

A Positron board

"I have a model where I'll give anybody their 30 minutes in court," he says. "If you have a problem, we'll help you fix it." **IT**
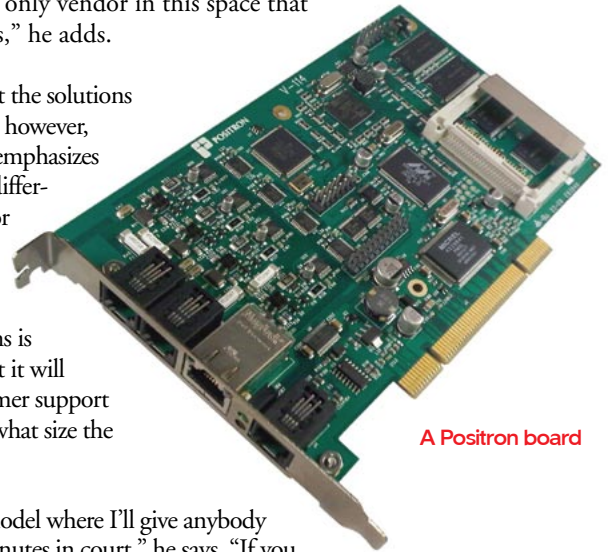
SIP Print Addresses Market Needs in Record Time

By Paula Bernier

Donald C. Palmer doesn't let any grass grow under his feet. When he sees an opportunity, he jumps at the chance. When he sees a need, he runs to meet it.

This unflagging energy and enthusiasm may explain why Palmer always has something new cooking at his SIP-based recording company, SIP Print.

Palmer, SIP Print's president and CEO, and Jonathan Fuld, the company's chief technology officer, came up with the idea for the company in early 2008. Palmer asked around to see if anyone was recording in pure SIP, and nobody was. So last fall at ITEXPO West in 2008, SIP Print made its debut with a hard launch of its SIP-based recording appliance. Palmer says it's been taking off ever since.

Jonathan Fuld and Donald C. Palmer

"I got heavy into SIP, and I loved it," says Palmer, "and we developed SIP Print."

Today SIP Print, which gets its product to market through a handful of distribution partners, has nearly 100 of its appliances in the field. That number is expected to top 100 by year's end. And by 2010, Palmer says, the expectation is that SIP Print will have an embedded base of up to 600 boxes.

According to Palmer, recording solutions are targeted mostly at enterprise business customers, but SIP Print took a different tack. The company instead decided to focus its efforts exclusively at small and medium businesses. Specifically, the company's recording products, which were developed by Fuld, are designed for businesses and other organizations with 10 to 200 seats per location.

Companies and other entities like hospitals and government agencies use recording for a variety of reasons and applications. First and foremost, many industries are now required by law to record certain conversations. Recording is also frequently used as a training tool and to monitor call center, sales staff and field technician quality assurance and productivity.

Palmer notes that the SIP Print solution can enable recording on fixed or mobile phones. That means the solution could record the service calls of a field technician during an evening run and that tech's supervisor could listen to and get other information about calls the following morning.

The Go-to-Market Strategy at SIP Print
By Paula Bernier

SIP Print doesn't sell its products direct. Instead, it relies on distribution partners to get its products to market.

President and CEO Donald C. Palmer was excited to announce late in September that SIP Print has added Interlink, "a relatively big name," as a distributor.

SIP Print's first distribution agreement was with Vital Communications Inc., a leading national value-added distributor of small to medium-sized business and enterprise-class telecommunications solutions. The VAD offers SIP Print products and solutions to SMBs through reseller partners in the continental United States, Puerto Rico and Hawaii.

Vital leverages its value-added infrastructure to offer SIP Print resellers additional sales support, product management, product training and operational capabilities. It also leverages its distribution relationships with leading VoIP equipment providers like Allworx, Axacore and snom.

Palmer says SIP Print offers two tiers of support. It trains its distributors to do the tier 1 support, but anything after that SIP Print does directly "even if we have to put a guy on a plane to do it."

Good luck getting that from a big supplier! **IT**

GoTo:
GoTo:
Table of Contents • Ad Index

Subscribe FREE online at www.itmag.com

"Small- and medium-sized businesses are the backbone of our global economy and many of these organizations have business-critical requirements to record some or all of their phone conversations," said Palmer in launching the company's original solutions back in 2008. "Other providers claim to support SIP calls, but their solutions are either prohibitively expensive for SMBs, or they provide clumsy PC-based recordings at the handset. There seems to be little doubt that we are in the right place at the right time, with a pure SIP call recording platform that virtually every business can afford."

"I got heavy into SIP, and I loved it, and we developed SIP Print." – Donald C. Palmer

On its Web site, SIP Print states that: "In the case of call recording, a business requiring 15 to 30 users would commonly pay more for the call recording system than their PBX phone system."

The appliance that SIP Print announced in 2008, called SMB, serves 20 to 70 concurrent users and is priced at an MSRP of $5,745.

More recently, SIP Print launched a product called SME, a SIP-based recording appliance with hot-swappable components that can serve 50 to 200 concurrent users. It lists at $13,098.

The company also recently unveiled SIP Print Express, which supports 10 users and lists for $2,995.

All of SIP Print's products are SIP 2.0 compliant, according to company officials.

Palmer says the SME is targeted at customers in such verticals as health care, finance and law enforcement that have regulatory requirements that create a need for redundant recording solutions. The solution offers RAID hot-swappable drive bays, dual hot-swappable power supplies and a Core 2 Quad Series processor.

The SME, which became generally available in August, won the Best of Show Award in the Editor's Choice category at ITEXPO West 2009 in Los Angeles a month later. Palmer says as of mid-September, SIP Print had sold a couple SMEs and had several requests.

The company also made a significant announcement at the ITEXPO show earlier this year in Miami. This news saw the company entering the U.K. market. The timing couldn't have been better given a new call recording mandate set forth by the Financial Services Authority went into effect for the U.K. financial services market March 6, just a month after the Miami event.

According to the FSA call recording policy statement, many U.K. financial institutions now are required to record and archive telephone conversations and electronic communications relating to client transactions for a period of no less than six months. The new regulations apply to U.K. firms participating in the equity, bond and derivatives markets.

SIP Print's Leadership

Like many of its customers, SIP Print is a small organization. But its management brings a wealth of experience to the business.

CEO Donald C. Palmer
Donald C. Palmer is a veteran of the telecommunications and voice recording industries and a co-founder of SIP Print. He began his career in telephony with Pacific Telephone & Telegraph 1979 as a lineman. He also worked as a line supervisor and later headed up the company's Los Angeles district office.

Palmer then joined RCA Telephone Systems, which later became Mitel Telephone Systems, where he supervised the company's CPE installations and ultimately moved into sales management roles where he won every sales award for several years.

He left Mitel to form an interconnect company and later was co-founder of a digital/TDM voice recording com-

pany. Prior to joining SIP Print, Palmer was founder and CEO of Tel Net Technologies Inc. for nearly a decade.

CTO Jonathan Fuld
Jonathan Fuld is a co-founder of SIP Print with overall responsibility for the design, development and testing of the company's patent-pending voice recording products.

Fuld is a seasoned business executive with deep roots in information technology and leadership experience in a broad range of disciplines, including software engineering, operations, product management, corporate development and business development.

His career spans many years in the software, biotech, telecommunications, information services and manufacturing industries. **IT**

Subscribe FREE online at www.itmag.com

"The need to record calls continues to increase, driven both by internal quality assurance programs and by regulatory compliance requirements," Palmer said at the time of SIP Print's entry into the U.K. market. "In the U.S., the Communications Assistance for Law Enforcement Act (CALEA) and Sarbanes-Oxley legislation have dictated the recording of certain phone calls by some businesses, and many other firms choose to record calls for internal compliance purposes or for training and customer services needs. The new FSA regulations for the U.K. financial services community are yet another example of the trend towards increased regulatory oversight and improved corporate security and protection."

SIP Print's voice recording systems are compatible with mainstream VoIP phone systems and hybrid systems including Allworx, Aastralink, Altigen, Avaya IP Office, Avaya Distributed Office, Cisco, Epygi, Fonality, Grandstream, Mitel, NEC 8100, NEC 8300, Nortel, ShoreTel, Toshiba, Zultys and 3Com. But to ensure SIP Print customers around the world are able to integrate its call recording technology easily and inexpensively with their other telecommunications gear, the company recently started SIP Print Labs.

The SIP Print Labs certification program is an effort by SIP Print to work with IP PBX vendors, customers and channel partners to define standards of interoperability and performance for call recording applications on SIP-based phone systems.

"SIP Print Labs is really important for a couple of reasons," Palmer tells INTERNET TELEPHONY. "The main reason we started it is because a lot of manufacturers take too long, and they want you to join their group and pay a lot of money."

According to Palmer, some PBX suppliers charge $1,000 to $10,000 to join interoperability groups and might take on the order of six months to complete

interoperability with your product. But SIP Print Labs, which certified 20 vendors' products as interoperable with its own since opening for business in late June, doesn't require anyone to pay fees. SIP Print's effort to certify its products with a broad range of other solutions simply makes the company's products more appealing, he says. The company anticipates expanding its mission in the future to include testing and certification of a broader array of SIP-based devices.

As part of the effort, SIP Print does interoperability evaluations both at its facility and at other locations, as needed, says Palmer. And the company isn't waiting for other vendors or customers to request interoperability, Palmer adds, saying that in some cases SIP Print will go out and purchase an IP PBX solution and conduct interoperability testing proactively.

Since its introduction, SIP Print Labs has certified a number of leading IP PBX systems including the Allworx 6x and 24x lineup of IP-based phone and network systems; the SIPfoundry sipXecs IP PBX; and the Zultys Inc. family of IP PBX servers and other unified

"The need to record calls continues to increase, driven both by internal quality assurance programs and by regulatory compliance requirements. In the U.S., the Communications Assistance for Law Enforcement Act (CALEA) and Sarbanes-Oxley legislation have dictated the recording of certain phone calls by some businesses, and many other firms choose to record calls for internal compliance purposes or for training and customer services needs. The new FSA regulations for the U.K. financial services community are yet another example of the trend towards increased regulatory oversight and improved corporate security and protection."

– Donald C. Palmer

communications products and services. Palmer adds that several Avaya IP communication systems are currently undergoing certification testing, as is Verizon's HIPC.

"It just brings to market a quicker response to the marketplace," says Palmer. **IT**

M2M Shows Momentum in Consumer, Business Vertical Applications

By Paula Bernier

Machine-to-machine communication – which enables equipment anywhere in the world to provide data on its own status, relay other information and be remotely controlled – is gaining steam.

There has been significant growth in the adoption of M2M communications in the last two years, according to Jasper Wireless, which provides software for this arena. Global 500 companies including General Electric, General Motors and Xerox have publicly announced M2M initiatives.

"It's a significant type of application for our enterprise customers today and a whole emerging sector of consumer electronics," says Hamish Caldwell, executive director of product marketing management at AT&T Business Solutions, about M2M.

The Climb

According to ABI Research, more 20 million cellular M2M modules – the transmitters required for a device to communicate – shipped in 2007, and these shipments are growing faster than 30 percent annually.

The global M2M market is expected to reach $50 billion next year and is forecast to grow to $250 billion by 2012, according to FocalPoint Group data quoted by Duane Wald, director of embedded sales at MultiTech Systems. Wald presented the opening session at the Machine to Machine Evolution Conference, which was colocated with ITEXPO West this fall in Los Angeles.

The M2M opportunity applies to everything from ATM machines to heart monitors. In fact, telephone companies have been talking about the promise of M2M for more than a decade. But early on the telcos used the word telemetry to describe this concept. The application the telcos liked to reference in those days was vending – that is, allowing owners of candy and soda pop machines to monitor their boxes remotely to stay abreast of when refills or other maintenance were required. But the expansion of that still-popular application to what's happening today is no small change.

Ticket to Ride

So, other than its name, what's new with M2M today? And why, after years of being a niche technology, is the mass market

train finally leaving the station?

It's a combination of factors, including the now widespread availability of cellular networks, a move by some players in

AT&T's Hamish Caldwell

the communications industry to provide businesses with more customized solutions, and the growing availability of gear that is built for this kind of thing.

"It's a growing area," says AT&T's Caldwell. "It's an emerging segment. We're in the early days of a growing business, and it's going to be quite significant."

According to MultiTech Systems, cellular MVNOs both in the U.S. and abroad are pushing M2M forward by packaging specific vertical applications and related communications services.

KORE Telematics is one such outfit. The company calls itself the "world's largest fully digital wireless network provider specializing exclusively on the rapidly-expanding machine-to-machine communications market."

By partnering with tier 1 cellular network operators for connectivity over GSM, HSPA, CDMA and EV-DO networks, and equipment and software companies for gear and applications, KORE is able to deliver complete solutions for vehicle tracking, homeland security, automated metering and dozens of other M2M applications.

One application KORE is delivering to the transportation vertical was brought to market in partnership with RFTrax, a wholly owned subsidiary of Fairfield Industries. RFTrax's first product, the Asset Management Platform for locomotives, gives railroads the opportunity to "see" exactly what is happening to any locomotive equipped with a special RFTrax

Subscribe FREE online at www.itmag.com
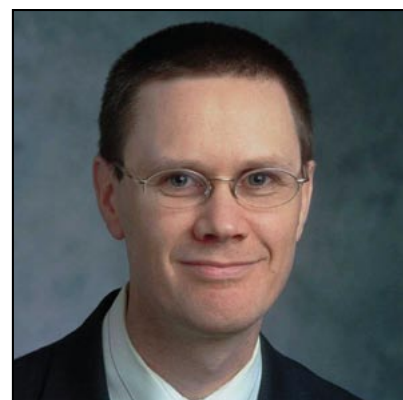
transceiver known as an Asset Command Unit. Dispatchers and managers employ the solution to log in to a password-protected site on the Internet and access real-time information on the location, state (whether shut down, moving or idling), fuel level, coolant temperature, ambient temperate and other factors on their locomotives.

Heavy Industry

Tier 1 service providers also are moving on the M2M opportunity.

 "The big carriers are really starting to focus on M2M in a big way," Bill Ingle, senior analyst at Beecham Research, tells INTERNET TELEPHONY.

AT&T has made at least a handful of M2M-related announcements in recent months. And Verizon Wireless recently joined forces with Qualcomm to form an M2M joint venture they call nPhase (http://www.nphasem2m.com/).

Ingle says these major players are interested in the M2M space because they see it as a significant new source of revenue. M2M also is a new growth area for wireless at a time during which cellular providers have saturated the wireless voice market, he adds.

What is M2M?

M2M stands for "machine-to-machine" communications. Essentially, it is the exchange of data between a remote machine and a backend IT infrastructure. The transfer of data can be two-way to: uplink to collect product and usage information; or downlink to send instructions or software updates, or to monitor equipment remotely.

Source: Jasper Wireless

AT&T, which has had a number of M2M announcements this year, recently expanded on those activities by forging a tie with Jasper Wireless to deliver a combined platform to connect and support M2M devices and applications on its wireless network. The companies' multiyear agreement, for which financial terms were not disclosed, involves providing wireless connection of personal navigation, in-car navigation, e-readers, mobile Internet devices, gaming, healthcare, tracking, and other devices.

Tracking New Devices

Jasper is providing its software to AT&T to power a Web portal called the AT&T Control Center, which provides device manufacturers and application providers with Web-based access to activation and assurance capabilities, analytical data, rate plan information, and design and support services relative to M2M and the AT&T wireless network.

More on KORE

KORE Telematics this summer announced the availability of a range of single-rate wireless data services throughout North America with no roaming or international charges. The company said the new pricing program provides an ideal, cost-effective solution for businesses that require reliable wireless data communications for tracking vehicles, assets and personnel.

The KORE 'One Rate' program, which features no additional charges across Canada, Mexico and the U.S., "drives down the cost and uncertainty of alternatives when embedded wireless devices need to operate occasionally across country boundaries, enabling application service providers to offer more powerful M2M applications at controlled price points," company officials said. **IT**

"With the AT&T Control Center platform, we can offer consumer electronics and M2M device manufacturers and enterprise solution providers an experience they simply cannot receive from another provider," says Glenn Lurie, president of emerging device and resale for AT&T Mobility and Consumer Markets. "We're streamlining the process by offering a one-stop solution for network provisioning, device activation, customer support, billing options, performance audits and much more. Consumers and businesses will benefit from an unprecedented end-user experience – instant activation, flexible pricing options, and customized support."

AT&T's Caldwell tells INTERNET TELEPHONY that more than 1 million devices involved in M2M are deployed today.

The company is doing its best to expand on that, Caldwell adds, through efforts such as the AT&T Control Center, its new Emerging Devices Organization and its lab (which it expanded with new equipment and people just last month), which certifies devices such as smart meters and other gear for M2M to work on the AT&T network.

Twenty percent of all newly produced electronic and mechanical devices will be cellular enabled by 2010, says MultiTech Systems' Wald, who points out that Qualcomm CEO Paul Jacobs has noted that 50 billion machines could be addressed through "smart services."

Added Fuel

Such services could apply to a broad range of industries, including but not limited to energy, healthcare, transportation and finance, continues Wald.

Given the future of energy is expected to center on the smart grid, M2M comes in to play to help users and energy companies better manage and track energy consumption. That has many communications players energized.

Marthin De Beer of Cisco Systems' emerging technologies group in a video on the home page of the company's website highlights Cisco's Smart Grid strategy and activities. Referring to how Cisco offers IP communications platforms to help enable M2M, he mentions such applications as energy grid automation, home energy management, security and more, and says Cisco is working with government bodies and industry alliances on interoperability and connectivity standards relating to smart grid.

As mentioned previously, AT&T also is hot on smart grid. Caldwell notes that the company has partnerships with both Cooper Power Systems, a division of Cooper Industries Ltd., and SmartSynch to jointly market and deliver smart grid applications.

Of course, healthcare is another hot topic these days. M2M addresses this space as well.

The AT&T Control Center Offers:

- **Instant activation** – Simplifies provisioning and enhances the customer experience by automatically activating wireless service when the device is powered on for the first time

- **Usage analytics** – Enables manufacturers and service providers to gain real-time insight into product performance on the AT&T network

- **Performance assurance** – Utilizes best practices to test devices and assure their performance before deployment

- **Flexible business models** – Provides customized rate plans that address the needs of particular market segments

- **Design services** – Optimizes devices for global deployment within a few weeks

- **Customer support** – Ensures service continuity with support from expert engineers.

Beecham Research's View of the M2M Opportunity

GoTo:
Table of Contents • **Ad Index**

GoTo:

Subscribe FREE online at www.itmag.com

Monitoring devices employing M2M can be used to monitor a patient's vitals and send status reports or alerts to doctors or other medical staff.

At ITEXPO in Los Angeles MultiTech Systems was discussing a health care application, which it can support with its rCell 3G intelligent wireless router.

"This product can be deployed in mission-critical applications," says Annette Evans, major account sales manager for MultiTech Systems.

The product's persistent connectivity feature means the router stays connected to the cellular network, which is particularly important for applications within the health care vertical. Evans explains that the rCell could be used by an emergency medical technician to monitor a patient's heart while en route to the hospital.

Health care monitoring applications can also be used in hospitals or clinics, or even within patient homes. If M2M can allow a patient to stay in his or her home as opposed to within a hospital or other health care facility, it could potentially result in health care savings for patients, doctors and/or insurance companies. This could become an important application as the Obama administration and other politicians move to lower U.S. healthcare costs, which Wald notes now amount to something like $2.3 trillion.

The now widespread availability of cellular networks, a move by some players in the communications industry to provide businesses with more customized solutions, and the growing availability of gear that is built for this kind of thing are all driving interest and activity around M2M.

Signaling Success

"M2M is going behind the hype at this point and becoming very much a reality," says Macario Namie, senior director of product marketing at Jasper Wireless.

Check Out Our M2M Resources Online!

TMC, parent company of INTERNET TELEPHONY, has partnered with Crossfire Media to launch of a new Web site called Smart Product Ecosystems Connection (SPEC). An additional partner in the site is Mary Cronin, Ph.D., a professor in the Information Systems Department of Boston College's Carroll School of Management.

Of course, smart products and ecosystems are an important part of the M2M phenomenon.

This resource – at www.specosys.com – carries the latest news and insights about smart products and services including smart mobile, smart auto, connected smart health devices and services, smart homes and personal energy management. Daily news and expert analysis will provide an in-depth view of new smart product releases, ecosystem partnership announcements, revenue models, competitive strategies, financial deals, industry trends, predictions, commentary, product and service reviews, and more.

Crossfire Media, an integrated marketing company with a core focus on future trends in technology, is home to Carl Ford, a regular blogger on the TMCnet site, with whom TMC has collaborated to build online and live communities in the 4G and M2M arenas. **IT**

Namie says now Toyota and many other automobile manufacturers have joined the on-board vehicle system movement started by GM with OnStar. He adds that in-vehicle M2M systems in the future could also be used to help motorists book restaurant reservations and order videos, which could be streamed to the passenger-seat screens in vehicles such as SUVs. He expects all new cars to have connectivity features in the 2011-12 time frame.

Jasper Wireless' Namie also points to the availability of other often-mentioned devices like connected eBook readers, connected digital frames and connected digital cameras that will enable users to download the latest bestseller or send pictures to grandma while they're still on vacation.

"Not everything will be a winner, and I think there will be a lot of surprises along the way," says Namie, "but connectivity is really spurring a lot of innovation and R&D." **IT**

Subscribe FREE online at www.itmag.com

Service Providers Take TEM in New Directions

By Paula Bernier

Telecom expense management is set to become a growing force in telcos' business service portfolios as companies like PAETEC and Verizon Business move to assist customers in managing their costs around everything from wireline and wireless connectivity services to energy consumption.

Getting Charged Up

While TEM traditionally has been an area addressed by specialty software houses, competitive service provider PAETEC moved into the fold back in 2000 with the acquisition of Pinnacle Software. The service provider became interested in the area of accounting because it permeated so many aspects of its business and its customers' interests, including call management, CDRs, facilities management, trouble ticketing, help desk and PBX interconnection.

At the time of the deal, says PAETEC President and CEO Arunas Chesonis, most people had multiple Excel spreadsheets and databases into which they were making duplicative entries. They needed one platform and one database that fed everything, he says, so that's what PAETEC developed, based on the Pinnacle Software solution.

Today PAETEC's Pinnacle Software offer, an Oracle-based solution, is used by about 300 customers. It enables businesses to see whether they're being charged appropriately per invoice, whether they should be disputing something, and more, says Chesonis, adding the solution is like ERP for the IT set.

Businesses can buy the Pinnacle software and run it in their data centers. They can elect to have PAETEC host the software.

Quickcomm's Louis Crespo

Or PAETEC can both host the software and handle invoicing for the customer.

"The fastest-selling part of the [Pinnacle] product today is TEM, and it's managing not just the wireline bills, but the wireless bills," says Chesonis, adding

---

Verizon Managed Mobility Solutions will help companies improve mobility programs by addressing five key areas. Enterprises can subscribe to one or more of the following modules.

Inventory and Expense Management
- Tracks mobile assets, usage and spending
- Delivers consolidated and departmental reporting, as well as auditing, electronic billing and charge-back information for accounting purposes
- Same platform can track global wireline telecom spending

Logistics
- Automates procurement workflow and device deployments across carriers via a centralized procurement portal
- Defines approved devices by work group or function
- Procures devices and tracks ordering process

Mobile Device Management
- Delivers tools, applications and data to employees, where and when required

- Creates and enforces flexible mobile policies across devices, groups or individual users

Mobile Security
- Enforces access codes
- Establishes "lock/wipe" policies by which devices that are stolen or lost can be locked by the administrator and data wiped out
- Encrypts devices and data cards
- Delivers firewall and antivirus applications
- Supports mobile access to corporate applications

Application Management
- Supports mobile enterprise applications by enabling the deployment of new and enhanced applications, as well as the mobilization of business processes and traditional desktop applications

---

Subscribe FREE online at www.itmag.com

that the solution helped one state catch $800,000 in miscalculations.

"TEM is part of the whole lifecycle management," he adds.

Chesonis, who in a keynote speech at ITEXPO West 2009 in September revealed PAETEC's plans to expand into the energy vertical, says TEM also will be an important solution powering the company's initiatives in this space.

TEM for a Global Solution

Meanwhile, Verizon has made some significant moves in the TEM space recently as part of its Managed Mobility Solutions effort.

The carrier in September announced it had tapped Quickcomm Software Solutions and Sybase to help it deliver integrated inventory and expense

management, and device logistics as part of the above-mentioned offering. Managed Mobility Solutions helps enterprise customers manage mobile devices, usage plans and applications, across multiple carriers.

"We live in a 24/7 world and organizations of all sizes struggle with managing a mobile workforce," says Nancy Gofus, senior vice president of global business products at Verizon. "By working with Quickcomm, our Managed Mobility Solutions enable enterprise organizations to meet the demands of their growing workforces – across the globe."

Louis Crespo, senior vice president of global business development at Quickcomm, illustrates how the Verizon Business Managed Mobility Solutions offer works. He says the solution can help companies that are struggling to manage their mobile costs and inventory (the

number of employer-provided mobile devices used by staff). Verizon Business does that by taking all of the organization's mobile service charges – be they from Verizon or any other mobile service provider – and consolidates them. As part of the service Verizon also can run those charges through the organization's systems as needed (for example, through an HR system to match billing information with employees or departments).

"At the end of the day Verizon Business is loading the bills [and] managing the expense side," says Crespo.

Additionally, Verizon offers customers a portal that their employees can visit to peruse and order new mobile devices. The portal provides employees with a catalog of devices available to individuals at their level of the organization; employees can place orders for the devices of their choice of the options provided;

Credit Card Services Are Ripe for Competition

By Paula Bernier

Eighty-five percent of the small business market is still using analog technology for point-of-sale applications, and this presents a significant opportunity for competitive service providers, says Charles Wu, head of IP Pay, a division of Convergence Technologies Inc., which wholesales credit card services.

About IP Pay

IP Pay sells the IP Pay Account Updater, which ensures uninterrupted recurring payments by seamlessly updating "card on file" account information without impacting cardholders. Cardholder account information changes occur for a variety of reasons, including card upgrades, bank portfolio conversions, card expirations, lost or stolen cards and account closures.

The company's Account Updater extends the life of recurring payment arrangements by helping secure ongoing, revenue-generating relationships, all while locking in revenue, reducing processing costs, maintaining service continuity and strengthening cardholder satisfaction.

Competitive providers could come in and offer those customers the services and connectivity to help them move credit card applications onto IP-based connections, and they could offer

other voice and data services as part of the deal, says Wu.

"People are doing it," says Wu. "The technology is there. It's more of a mindset change, and it's more of a fundamental business process change" that will be required for this movement to go mainstream.

"To a small business, they love to save $30 on their voice. But if they can't process payments, they're out of business," Wu adds. "So you'll still find gas stations and convenience stores that have dedicated phone lines for each credit card machine." And a supermarket with five registers may have five phone lines, he says.

Some companies address these customers by running ATAs and emulating a dial line, he adds. But he says that's a problem because then the credit card information is traversing the connection unencrypted. It's also less than ideal because dial-up transactions for this application typically take 10 to 15 seconds, whereas similar IP-based transactions average just two to three seconds, which is a significant difference for both businesses and their customers.

"If you look at the world of payment, it reminds us of the world of Internet [when] Internet was mostly dial-based and broadband was just coming along," says Wu. **IT**

With this interface, Quickcomm shows customers trending invoices over a 12-month period.

New Drivers

The explosion of mobile services and usage is leading corporations to look for outsourced solutions such as the one offered by Verizon Business, Globalcomm's Crespo says. In the past mobile was about 5 percent of the telecom spend for corporations, he says; today, it's typically between 30 to 45 percent. And often it's even more for organizations in Europe.

According to IT research firm Forrester, 73 percent of the global enterprise workforce will be mobile users by 2012. That means the 187.9 million mobile users in 2008 will expand to 397.1 million users in 2012.

"Managed mobility services are an increasingly critical offering in the enterprise mobility space," says Stephen Drake, program vice president for mobility and telecom research at IDC. "Incorporating best-of-breed mobile device management and security components provide a key value to enterprises seeking to manage and control their mobile deployments."

Verizon is the first mobile player to get into this space doing more than just outsourced billing, according to Crespo. But in light of the expansion of mobile use in the enterprise space, more service providers are starting to pay attention to this opportunity, he says.

And that's not just in the U.S., but worldwide.

"Customers are now having more options from an international perspective," says Crespo.

TEM was born in the U.S and there are lots of telecom expense management providers here, he says. However, choices for TEM are "thin" in Asia and the Middle East, he says, but things are beginning to mature from an international TEM perspective. **IT**

once selections are approved by the organization, Verizon Business handles the fulfillment and ensures employees receive not only the devices they ordered, but also any related instructions and peripherals.

"The end result is the customers' end users get their phones on their desks completely going through a Verizon service for all requirements and fulfillment," Crespo says.

"If there is a new security update that needs to happen for 5,000 Treos of BlackBerries that are out there, the customer will go to Verizon and say 'Hey, I have a fix that needs to be broadcast out,'" Crespo says.

Mobile devices also can be remotely controlled in particular situations as part of the Verizon service, he says. For example, if the organization's CFO leaves her

> Arunas Chesonis, who in a keynote speech at ITEXPO West 2009 in September revealed PAETEC's plans to expand into the energy vertical, says TEM also will be an important solution powering the company's initiatives in this space.

There's another cool aspect to this service in its logistics component, adds Crespo. Employees get software and security profiles automatically loaded to their mobile devices as needed.

BlackBerry in a taxi, Verizon Business can do a remote wipe or remote security lock on that device to ensure no outside party has access to the proprietary company information that might be on it.

Subscribe FREE online at www.itmag.com
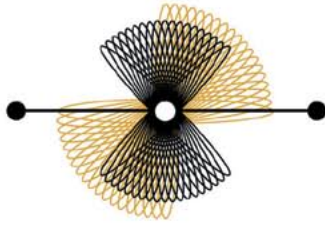
Smartphones Put Wind Beneath Wi-Fi Wings
(And Telcos Take Notice)

By Paula Bernier

For a while Wi-Fi was flying high. Road warriors and college students helped popularize use of the technology in public settings as access points popped up here and there, mostly in charming little locations such as coffee houses and book stores.

As access points and user numbers grew, Wi-Fi service aggregators Boingo and Wayport were born. Large companies began to take notice.

Starbuck's was early to jump on the Wi-Fi wagon by partnering with cellular providers T-Mobile and, later, AT&T, which offer(ed) Wi-Fi for a fee at its coffee and cruller locations. McDonald's followed suit in an effort to get customers to hang around and buy more Happy Meals. The big name book stores came on board as well.

Wi-Fi moved to the next level, though, when news broke of plans for citywide initiatives around the technology.

The municipal Wi-Fi effort in San Francisco probably got the most ink, no doubt because ISP pioneer Earthlink and online search giant Google were involved. But there was plenty of action on the muni Wi-Fi front. Atlanta, Chicago, New York, Philadelphia and Portland, Ore. These were just a handful of the cities with tall Wi-Fi aspirations.

In the end, however, pretty much all such plans were scrapped due to the absence of viable business plans and a lack of involvement by service providers willing to shoulder the costs. Some cities, like Miami, use Wi-Fi in a limited way, like for public safety applications. But the once big dreams for municipal Wi-Fi became rubble.

So, despite the fact that Wi-Fi remained a great connectivity tool at certain high-profile retail locations, high-tech businesses, libraries, airports and homes, word on the street was that Wi-Fi was dead. So the communications industry turned its collective head and got bug-eyed about WiMax, the "next big thing" for wireless.

Of course, Wi-Fi never went away. And in recent months it has seen renewed interest – this time from tier 1 service providers, some of which were noticeably absent from earlier efforts to make Wi-Fi ubiquitous.

"In the past year and half we have seen a recognizable trend of service providers embracing Wi-Fi," says Edgar Figueroa, executive director of the Wi-Fi Alliance.

Probably the biggest tier 1 Wi-Fi proponent in the U.S. these days is AT&T, which a year ago this month announced plans to buy Wi-Fi outfit Wayport for $275 million.

AT&T claims it operates the nation's largest Wi-Fi network, which includes more than 20,000 hotspots. The company reported nearly 15 million Wi-Fi connections on its network in the second quarter of 2009. That was a 41 percent increase from the first quarter, according to AT&T. And it looks to be all uphill from there.

"Our Wi-Fi network is a competitive differentiator for AT&T and a major value for our customers," says David Christopher, chief marketing officer for AT&T Mobility and Consumer Markets. "We include unlimited Wi-Fi access with the majority of our broadband and smartphone plans, and our customers are clearly taking advantage of it. It's another reason that twice as many smartphone customers choose AT&T than any other carrier."

As AT&T and others have noted, this growth is being fueled by the rising number of customers with Wi-Fi enabled smartphones. Indeed, Wi-Fi recently is becoming a must-have feature on smartphones.

Subscribe FREE online at www.itmag.com

A Growing Trend

The number of customers with Wi-Fi access as part of their AT&T service continues to grow.

AT&T broadband connections — which include both wireline broadband and wireless LaptopConnect cards — grew by 209,000 in the second quarter to reach 16.9 million in service.

The company includes unlimited Wi-Fi access with qualifying AT&T High Speed Internet plans, 3G LaptopConnect plans and with select smartphone plans. **IT**

In a recent Wi-Fi-related news announcement Cablevision Systems Corp. noted that Apple has sold more than 40 million Wi-Fi-enabled iPhones and iPods and that some BlackBerry smartphones such as the Curve, Bold, and Pearl can operate over Wi-Fi with cellular service providers such as AT&T, T-Mobile, and Sprint.

According to Ovum, 49 of the 77 smartphones released between the second quarter of 2008 and the first quarter of this year had on-board Wi-Fi. ABI Research says half the traffic from Apple iPhone's comes from Wi-Fi connections. And it forecasts that by 2014, 90 percent of smartphones will include Wi-Fi.

Pair that with Wi-Fi-enabled laptops and the wide variety of other consumer electronics gear like cameras and even digital picture frames (see related story "M2M Shows Momentum in Consumer, Business Vertical Applications," on page 40) that could soon be Wi-Fi-capable and you have a serious movement going.

That may help explain why Qwest, which is rarely early to the party, is offering free, unlimited nationwide Wi-Fi access to its high-speed Internet customers. The company recently commissioned a study conducted by Impulse Research Corp. that found nearly half of all respondents valued Wi-Fi because it provided them with the freedom and flexibility to stay connected beyond the home or office.

"Mobility is important to our customers, as is value," Dan Yost, executive vice president for Qwest's Mass Markets Organization, said in May as the new offer was revealed. "With free Wi-Fi, our high-speed Internet customers can extend the benefits of their Qwest broadband experience to the nation's largest Wi-Fi network, powered by AT&T Wi-Fi."

Even Verizon, apparently not a fan of Wi-Fi earlier on, now provides free Wi-Fi to customers whose bundles include an up-to-25/15 Mbps or faster connections, according to the company's Website.

That's good news for both customers and the telcos, says Pejman Roshan, chief marketing officer at Agito Networks, which leverages Wi-Fi and cellular connections to enable applications involving enterprise voice, presence and unified communications.

He says as dual-mode smartphones are ushering in more widespread demand for Wi-Fi, telcos can leverage that by using Wi-Fi connectivity as a tool for subscriber retention, to offload traffic from overloaded cellular networks and to increase landline revenue loss.

However, the rise of Wi-Fi-enabled smart phones paired with moves by competitor Cablevision seem to have forced Verizon's hand on this front.

In a July 22, 2009, press release announcing the expansion of its Optimum WiFi service, Cablevision wrote: "Verizon Wireless currently blocks Wi-Fi on most of its customers' smartphones, making it impossible for these customers to take advantage of the speed and convenience of broadly available Wi-Fi."

Cablevision offers Optimum WiFi, which spans thousands of access points, and offers wireless Internet capability across the company's New York, New Jersey and Connecticut service areas. It provides the Wi-Fi service as a free enhancement to Optimum Online high-speed Internet customers.

Since its launch in September of 2008, Optimum Online customers have accessed the Internet more than three million times over Optimum Wi-Fi, and are averaging more than a million minutes online every day over the network, which delivers speeds of up to 3 Mbps downstream.

"Unlike many expensive cell phone data plans that can cost upwards of $100 per month, Optimum WiFi is free and more than twice as fast as many cellular networks," says Kevin Curran, Cablevision's senior vice president of wireless product development.

However, not all the big cablecos are focused on Wi-Fi in a big way.

"Our current wireless focus is on building out 3 and 4G networks and developing business products and services for those networks," says Cox Communications spokesman Todd C. Smith. "That said, we [will] pursue Wi-Fi contracts opportunistically in some markets. We have done a significant amount of in-room Wi-Fi deployments with the hospitality industry. We have large deployments at the Palms and Wynn hotels in Vegas, for example.

"We also have some deployments at apartment/condo developments in lobby/pool/common areas," he adds. "We support a few public area free Wi-Fi hotspots. And we'll pursue wireless LAN opportunities with our customers when they have needs." **IT**

Business VoIP's New IT Factor

By Paula Bernier

Hosted VoIP is so last season. In style now are telephony-in-the-cloud services, communications-enabled business processes and managed service providers.

Don't think basic PBX, darling. The new trend is all about outfitting businesses with communications solutions that offer presence, can allow today's worker to go from wireline to wireless in a flash, and have hooks into popular business applications.

"Hosted VoIP is not very descriptive. I prefer telephony from the cloud because that's what we're really talking about here," says Bill Bumbernick, CEO of service provider Alteva. "VoIP today is just one component of many things that are coming together to create communications."

Bumbernick adds that a communications-enabled business process could have email, text and/or telephone.

"And all of this stuff is to create efficiencies in business," he says. "The cloud or the hosted part of this is what creates the rapid development – the ability to rapidly move that capability into businesses."

David Zwicker, vice president of marketing at Whaleback Systems, says his company considers itself a managed service provider and fits somewhere between the two options of buying a PBX from Ayava, Cisco or ShoreTel and using IP Centrex.

Hosted VoIP sounds like it is purely Internet-based, meaning "best effort," Zwicker says, and Whaleback is certainly not that.

"We don't want any part of that association," he adds.

Rather, Whaleback provides QoS through intelligence in the PBX, intelligence in the network operations center, and control over the gateway where the IP-PSTN handoff takes place. Additionally, he says, Whaleback provides a dedicated pipe for voice traffic.

As part of its service, Whaleback handles installation; cuts a deal for access connectivity, which could be for a T1, DSL, cable modem service or whatever is the best option in the customer's area; provisions the bandwidth needed for the customer's applications; and maps how those calls will move over the network so it can control the call paths, says Zwicker.

Whaleback, which supports CrystalBlue Voice using its own server-based PBX, aims its collection of products and services at

Alteva, Others Join Forces to Peer, Advertise Quality Service

By Paula Bernier

Alteva and about a dozen of its peers have banded together to ensure and advertise under a single name their high quality of service.

The group is also working to create "a peering environment that expands the capabilities of HD voice and video calls," Alteva CEO Bill Bumbernick recently told INTERNET TELEPHONY. And it sounds as if the effort also may involve leveraging the combined members' size to get better deals for SIP peering with companies not in the group.

Alteva's Bill Bumbernick

Bumbernick declined to publicly disclose the names of the other member companies as this issue was going to press in late September, but said that an announcement about the group is planned for this fall, likely following the BroadSoft Connections 2009 event Oct. 25 to 28 in Scottsdale, Ariz. He explained that many of the group's original members got to know one another through such BroadSoft events, but adds that the group isn't limited to BroadSoft users.

"We believe that a rising tide raises all boats. So the more we help each other, [the more we] push the industry forward," he said.

"By bringing quality companies together with quality services we can debunk some of the fly-by-night operations that bring up crappy services and then damage the reputation of the industry," he said. "It's about bettering the industry."

As for the peering aspect of the group's work, Bumbernick said there are companies out there that offer SIP peering services to carriers, but when you get into peering for profit, you create a relationship that has a lot of restrictions around it. But when peers have a common goal, he added, "it's very open." **IT**

Subscribe FREE online at www.itmag.com

**Whaleback's
David Zwicker**

customers with five to 500 employees, he says. But Whaleback considers businesses in the 15 to 99 employee space as its sweet spot because they tend to be too big for key systems and too small for traditional enterprise-class PBXs.

Customers today are looking for alternatives to expensive PBX purchases because of the economy and because they just don't want to put a lot of capital into these systems, says Zwicker. Hosted VoIP is an option, but a problematic one, he says, because it risks service qual-

ity and can limit feature functionality. But a managed service in which Whaleback provides the PBX, the management

of it and the connectivity packaged in "a nice, predicable, flat-rate" setup is a more attractive offer, he says. **IT**

Whaleback Systems' CrystalBlue Voice managed VoIP service in a typical deployment

---
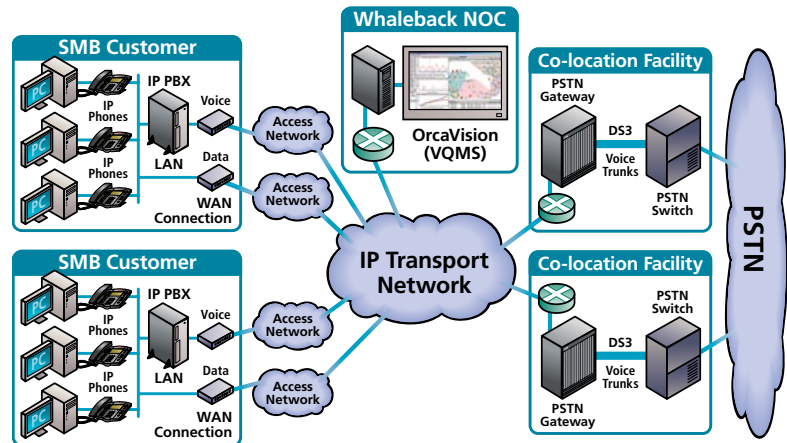
FMC by the Book
PosTrack Brings Converged Services to Higher Education

By Paula Bernier

PosTrack is an interesting study in hosted telephony.

The company's current telephone effort evolved from its point-of-sale division, which sells solutions to companies in the food service sector. Sodexo, the owner of Marriott, is its biggest customer. In addition to hospitality, Sodexo caters to cafeterias at institutions of higher education.

While serving up its solutions on college campuses, PosTrack got an education on the telecommunications habits of students. It became clear, says Chad Schumacher, director of marketing at PosTrack, that students were shifting to mobile and away from wireline telecommunications services. So PosTrack saw an opportunity to deliver a hosted telephony system with fixed/mobile communications capability, he says.

Today PosTrak offers a solution for which each line of service can be assigned up to five devices. That can include an IP phone

on a user's desktop or within a home, an ATA or a mobile handset, says Schumacher.

Within the PosTrack network is a firewall management gateway that allows a SIP proxy server to manage endpoints for things like moves, adds and changes. The solution also ensures high-quality voice, and allows mobile devices to move seamlessly between wireless and wireline networks.

But while PosTrack's telecom division attends to the higher education vertical, the company is focused on the large enterprise market, including large franchises and big hospitals.

PosTrack uses the Siemens OpenScape Voice application as its centralized software-based VoIP solution, forming the basis of three services offered to corporate enterprises. PosTrack Trunking provides SIP trunking directly to customers' legacy PBX systems. The PosTrack Desktop service extends SIP service to the desktop phone, delivering the enhanced features and unified messaging services enabled

PosTrack's Chad Schumacher

by the OpenScape Voice application, all at a fixed cost. PosTrack Mobile leverages the HiPath MobileConnect solution to provide FMC.

PosTrack recently began rolling out the FMC service to 6,000 students and faculty at a large university, equipping the users with dual-mode phones.

"We're currently certified for FMC on the Nokia Symbian operating system," says Schumacher.

PosTrack expects to certify for FMC on the iPhone short order. Certifying on the BlackBerry is its next assignment. **IT**

Subscribe FREE online at www.itmag.com

Integrated Marketplace

GoTo: GoTo:
Table of Contents • Ad Index   Subscribe FREE online at www.itmag.com

By Erik Linask

8x8 Builds More than Just a Virtual Office in Sunnyvale

When 8x8 moved into its new corporate headquarters facility in Sunnyvale, Calif., back in August, it was largely to accommodate the growth it was experiencing with its Virtual Office service. Not only is it continuing to grow in the SMB space, but when the company officially celebrated its new facilities with an open house last month, Huw Rees, 8x8's vice president of business and channel development, told me that the company is also seeing much more interest from the government and large enterprise markets as well.

"They have been watching from the sidelines and realize there are real advantages, not the least of which is cost savings, but also mobility, flexibility and ease of use and management," he said.

It's not that hosted VoIP is a new concept for these customer segments. Rather, they have been concerned about the quality, reliability and security of such services. But, over the past year or two, the industry has made significant strides in improving what had been detrimental attributes and kept many larger businesses from actively engaging companies like 8x8.

"There is data to support these claims," Rees explained. "This isn't just a wish list."

In addition, with government agencies receiving mandates to explore cloud-based IT solutions, it stands to reason that hosted communications would also fall into that activity, and Rees expects the interest from government agencies to continue to grow.

Locally, 2010 Republican gubernatorial candidate Meg Whitman has installed Virtual Office lines in her two campaign offices and, in a letter to 8x8, expressed her pleasure at not having to go outside Silicon Valley for a cost-effective, reliable phone service.

"It's companies like 8x8 that will help California stay competitive and grow our economy," she said.

In addition to simply adding a growing company to the list of telecom vendors in Sunnyvale, 8x8 is also committed to helping the community grow, which was the key focus of the open house, including an address by Barrie Hathaway, executive director of The Stride Center.

The Stride Center provides career training, development and placement programs for individuals, who, as Hathaway noted, are unemployed or "underemployed" and likely lack the skills to advance to a more effective career path.

"To be a student of The Stride Center, you have to get that you have to invest in yourself – you have to invest your time and your effort and you're going to have to rally your resources," Hathaway said.

The program comprises a minimum six-month, 330-hour training regimen, five nights a week for 22 weeks. That requires a genuine commitment from its students. It also ensures graduates have a sense of accomplishment that translates into a sense of responsibility in their careers.

"I know there is 12 percent unemployment out there, but it's still very hard to find qualified individuals who can adapt to the speed with which technologies change," noted 8x8 Chairman and CEO Bryan Martin. "You need to find individuals who have a passion for success; we're finding that passion in the people we're meeting out of The Stride Center."

Growth, in and of itself, is a benefit to the local economy, since it results in additional hires. But, when a company is able to not only hire, but find talented, motivated employees from a pool of candidates that have made a conscious decision to dedicate themselves to career improvement, that not only rewards those individuals, but adds employees that want to work and will provide the greatest benefit to companies like 8x8 and their customers. At the end, it's about hiring the right people.

"What Bryan and his team are trying to do is run a successful business, and they have to make smart hiring decisions," said Hathaway. "But they have also made the decision as an organization to make decisions that are good for the community, while running a smart business."

Smart business means making decisions that better the entire corporate culture, which, for 8x8, includes the community. In fact, two Stride Center graduates were in attendance that evening. At the end, 8x8 is preparing itself for continued growth, especially as it looks to become the largest high-definition VoIP provider in the country when it rolls out its wideband service to all of its IP endpoint users in the next few months. While most people don't even realize what HD audio is – to them, a phone is just a phone – once they hear the difference, they will realize the difference. The rollout of HD and other sticky services will generate even more interest from all market segments, and as for 8x8's relationship with The Stride Center, as Martin said, "There are a lot of empty chairs out there." **IT**

Subscribe FREE online at www.itmag.com

The Sky's The Limit

when it comes to features you can offer your customers.

NEW from >ifbyphone

Cloud Telephony for Carriers

A powerful new white-label, web-based voice telephony option for small-to-mid-size carriers & service providers.

- **Offer more features your customers want**

- **Dramatically lower up-front costs (no investment in switch hardware and software)**

- **Low risk investment with minimal commitment to get started**

- **Complete installation in just days so you can offer your customers new features fast**

- **Add new services that generate more revenue from existing accounts**

- **Offer more services to WIN NEW BUSINESS**

Let Our Anyphone Technology Features Complete Your Platform:

Virtual Receptionist
Interactive Voice Response (IVR)
Find Me Call Forwarding
Voice Mail to Email
Conference Calling
Call Distributor / ACD
Interactive Voice Broadcasting
Call Tracking & Reporting
Schedule-Based Call Routing
Store Locator
Google™ Analytics Integration
Virtual Phone Numbers
Call Recording
Click-to-Call
Developer API
And More

>ifbyphone | **Call 888.832.4962** | ifbyphone.com/cloud