Volume 1/Number 6 November/December 2009

www.ngnmag.com

TMC

NGN™

Next Generation Networks

Metaswitch Networks CEO, John Lazar

Growing Gains:

Metaswitch Readies to Move to the Next Level

NGN Buyer's Guide 2010

En Route with Rating & Routing Provider GCS

PAETEC CEO Enlightens NGN on Energy Strategy

Editor's Notes

A Smartphone in the Hand is Worth…

by Paula Bernier

I know you've been bombarded with news about smartphones lately. But I have no choice. I simply have to write this column about smartphones.

This fall has been all about the smartphone.

While worldwide mobile phone sales totalled 286.1 million units in the second quarter of 2009, a 6.1 percent decrease from the second quarter of 2008, according to Gartner Inc., the smartphone remains a hot property. The research firm reports that smartphone 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.

You can't flip on the TV without being met by Whoopi, Phil Jackson and some tattooed dude (is that Sandra Bullock's husband?) pushing T-Mobile's version of the Google Android phone.

But for those that want this iPhone look-alike without using what many consider a second-tier wireless operator, they can now go through Verizon Wireless, which last month forged "a groundbreaking agreement" with Google around Android.

Verizon Wireless and Google plan to co-develop several Android-based devices that will be pre-loaded with applications from both parties as well as third-party developers. The first of these devices are expected out by the end of the year, possibly even before this issue of NGN hits the street.

As of mid-October, rumor had it that Dell and AT&T also were planning to come out with smartphones based on Android.

Not one to be left out of the high-tech action, Microsoft Corp. last month made smartphone news of its own, announcing the availability of a new line of Windows-based touchscreen phones. Microsoft says its partners will deliver more than 30 new phones based on the OS in more than 20 countries by the end of 2009. Customers can buy various applications to run on those phones from the Windows Marketplace for Mobile, Microsoft's version of the AppStore.

Microsoft also has thrown in a few nice features to sweeten the deal. It now offers the Windows phone Custom Theme Creator through which customers can choose the colors and designs of their devices. It has a free service called My Phone that helps people manage and back up information stored on their phones so they don't lose it if they lose or damage their handsets. And, though I'm not sure if this is new or just something Microsoft wants to emphasize, customers can use PowerPoint and open and edit Word and Excel documents from their phones with Microsoft Office Mobile.

How all this will impact the market share of various handset device makers remains to be seen, but it appears likely to shift the status quo. That's because Nokia, which according to Gartner holds the No. 1 position for mobile devices with a 36.8 percent share worldwide, has focused primarily on low-end devices. And Gartner says Nokia's flagship smartphone, the N97, met with "little enthusiasm at its launch in the second quarter of 2009 and has sold just 500,000 units in the channel since it started to ship in June." Meanwhile, Apple's new iPhone 3G S sold 1 million units in the first weekend.

I myself am in the market for a smartphone. While I'm currently working on a lovely HP ProBook provided by my employer, pretty much all the personal computing, music, on-demand TV and communications devices (and thus, the content running on them) in my household come from Apple. So, like many before me, the iPhone will probably be my next mobile handset purchase.

But competition is good, and I'm sure that the big names like Google, Verizon Wireless, and potentially AT&T and Dell, will use their formidable market power to make Google Android handsets a hit.

Just look at what Microsoft has been able to do with the Zune. **NGN**

NGN Next Generation Networks

Rich Tehrani, *Group Publisher and Editor-In-Chief* (rtehrani@tmcnet.com)

EDITORIAL

Erik Linask, *Group Editorial Director* (elinask@tmcnet.com)
Paula Bernier, *Executive Editor, IP Communications Group* (pbernier@tmcnet.com)
Erin E. Harrison, *Senior Editor* (eharrison@tmcnet.com)

CONTRIBUTING EDITORS: Kelly McGuire, Marisa Torrieri

TMC LABS

Tom Keating, *Executive Technology Editor/CTO/VP*

ART

Alan Urkawich, *Creative Director*
Lisa A. Mellers, *Graphic Designer*

EXECUTIVE OFFICERS

Nadji Tehrani, *Chairman and Founder*
Rich Tehrani, *Chief Executive Officer*
Dave Rodriguez, *President*
Michael Genaro, *Executive Vice President, Operations*

ADVERTISING SALES

Sales Office Phone: 203-852-6800

Anthony Graffeo, *Sr. Advertising Director - Eastern U.S.; Canada; Israel* (agraffeo@tmcnet.com), ext. 174

Editorial Offices: 203-852-6800 Customer Service: For all customer service matters, call 203-852-6800.

SUBSCRIPTIONS

Circulation Director, Shirley Russo, ext. 157 (srusso@tmcnet.com)
NGN Magazine® is published bi-monthly by Technology Marketing Corp. Annual digital subscriptions; Free to qualifying U.S., Canada and foreign subscribers. Annual print subscriptions; Free to qualifying U.S. subscribers; $24 U.S. nonqualifying, $34 Canada, $48 foreign qualifying and nonqualifying. All orders are payable in advance U.S. dollars drawn against a U.S. bank. Connecticut residents add applicable sales tax.

Postmaster: Send address changes to NGN magazine, Technology Marketing Corporation, One Technology Plaza, Norwalk, CT 06854 USA

Canada Post: Publications Mail Agreement #40612608

Canada Returns to be sent to: Bleuchip International, P. O. Box 25542, London, ON N6C 6B2, CANADA

READER INPUT

NGN Magazine® encourages readers to contact us with their questions, comments, and suggestions. Send e-mail (addresses above), or send ordinary mail. We reserve the right to edit letters for clarity and brevity. All submissions will be considered eligible for publication unless otherwise specified by the author.

REPRINTS AND LIST RENTALS

For authorized reprints of articles appearing in *NGN Magazine*®, please contact Reprint Management Services at 1-800-290-5460 • tmc@reprintbuyer.com • www.reprintbuyer.com.

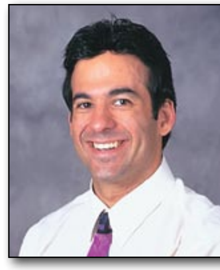
For list rentals, please contact Lisa Horder at lisah@l-i-s-t.com or call 914-765-0700, ext. 107.

Endorsed by: IMS Forum The Voice of IP Convergence www.imsforum.org

A Technology Marketing Publication,
One Technology Plaza
Norwalk, CT 06854 U.S.A.
Phone: (203) 852-6800
Fax: (203) 853-2845, (203) 838-4070

Publisher's Outlook

Mitel Benefits from Virtualization, Nortel Sale



by Rich Tehrani

On a recent trip to Canada I sat down with Mitel CEO Don Smith, and President and COO Paul Butcher, to discuss the company, industry and future. The dynamic duo is exactly that, mixing copious amounts of humor and friendly verbal jabs (this time at each other and not me) with frank talk about technology and market share.

The issue of greatest importance was the demise of Nortel and sale to Avaya, since both are Canadian companies with a similar tradition of great engineering.

Don and Paul explained right off the bat that they are excited to see two of their company's biggest competitors, Nortel and Avaya, merge as they have 100 percent channel/geographic/product overlap (that may be a slight exaggeration, but at least 85 percent is probably a safer estimate) and the two companies hated each other for 100 years. These gentlemen say they are getting calls from not only the Avaya channel, but the Nortel channel, as the combined channel from the newly combined company will make it more difficult for these resellers to compete for business.

Mitel has always been a strong engineering company, and the company has taken the PBX-as-software concept a step further by integrating tightly with VMware. Mitel worked closely with VMware engineers to get real-time working on a virtualized system. Now Mitel Communications Director software and Mitel real-time voice applications can run on the VMware vSphere 4 platform.

Don explained how more and more meetings with CIOs include discussions regarding how an increasing number of data center applications have to live in a virtualized world.

What the execs said next was perhaps the most important. They explained that the shift from TDM to IP, while dramatic, is really a lot easier than the shift from hardware to virtualized systems. This explains why in 2001 the company spent 60 percent of its R&D on software but today dedicates more than 90 percent of that spend on it. The questions I have are when will other companies catch up and will lack of virtualization support be a deal-breaker for CIOs?

The incredible power of virtualization reveals itself when you realize you can have a single server running different instances of your communications software. Imagine that one division can have one version of the software while another division uses a completely different version. In addition, each division has autonomy while data center functions such as backups can be centralized.

What's next for Mitel? Well, for the short-term it is trying to figure out the optimum way to sell VMware-based telephony. In a business in which resellers used to distinguish themselves by running wires neatly, we have seen a shift in the skill set necessary to be successful.

First there was CTI, and then VoIP, IP communications (including video) and now virtualization is the latest frontier. Expect more interconnects/resellers to hang up their hats as the complexity level eclipses their skills. Filling this void is the new opportunity for the channel.

After my meeting, I spent some time in Sir Terry Matthews incubator-land (Wesley Clover is a Terry Matthews company, which also owns Mitel) where a slew of communications start-ups compete for time, attention and resources. My wife tells me I have an obsession with Sir Terry, but I would call it a fascination. This is a person who launched and invested in many companies and has maintained a successful track record. When I compare Sir Terry to different legends in tech, I realize while others merge and slash jobs, Matthews keeps launching new companies, creating new equity and incentivizing new generations to build new companies that hire the engineers, marketers and salespeople of the future. **NGN**

TMCnet (www.tmcnet.com)

TMCnet EDITORIAL

Group Editorial Director, **Erik Linask**
Group Managing Editor, **Michael Dinan**
Executive Editor-IP Communications Group, **Paula Bernier**
Senior Editor, **Erin E. Harrison**
Assignment Desk, **Stefania Viscusi**
Contributing Editorial, **Patrick Barnard, Kelly McGuire, Amy Tierney, Marisa Torrieri**

TMCnet PRODUCTION

Webmaster, **Robert Hashemian**
Creative Director, **Alan Urkawich**
Senior Web Designer, **Maxine Sandler**
Web Designer, **Karen Milosky**
Advertising Traffic Manager, **Tim Goins** (tgoins@tmcnet.com)

MARKETING

Creative Director, **Alan Urkawich**
Marketing Director, **Lorna Lyle**
Marketing Manager, **Jan Pierret**

FINANCE

Controller, **Allen Frydrych**
Accounts Coordinator, **Mary Hodges**

READER INPUT

NGN encourages readers to contact us with their questions, comments, and suggestions. Send e-mail (addresses above), or send ordinary mail. We reserve the right to edit letters for clarity and brevity. All submissions will be considered eligible for publication unless otherwise specified by the author.

REPRINTS AND LIST RENTALS

For authorized reprints of articles appearing in NGN, please contact:
The YGS Group - Reprint Division
3650 West Market Street
York, PA 17404
717-505-9701 or 800-501-9571
e-Mail: tmcnet@theYGSgroup.com

FOR LIST RENTALS

please contact Glenn Freedman at glennf@l-i-s-t.com or call 914-765-0700 ext. 104.

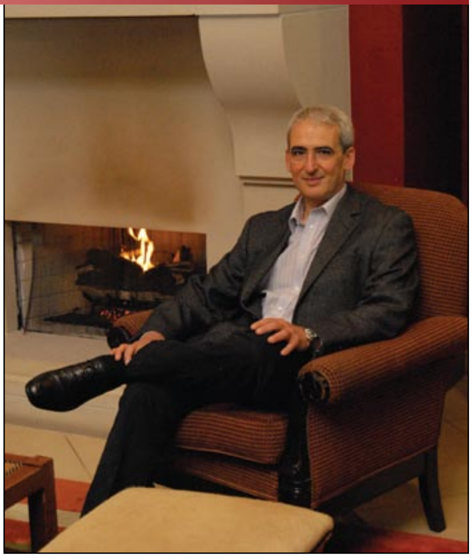
A Technology Marketing Publication,
One Technology Plaza,
Norwalk, CT 06854 U.S.A.
Phone: 203-852-6800
Fax: 203-853-2845 and 203-866-3826

NGN Next Generation Networks

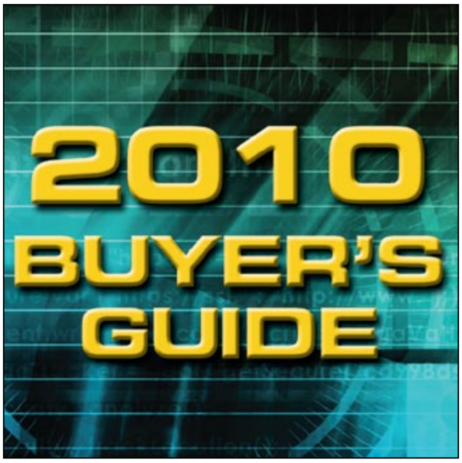
Contents

Volume 1 • Number 6 • November/December 2009 • www.ngnmag.com

Cover Story



In Every Issue



26

Columns

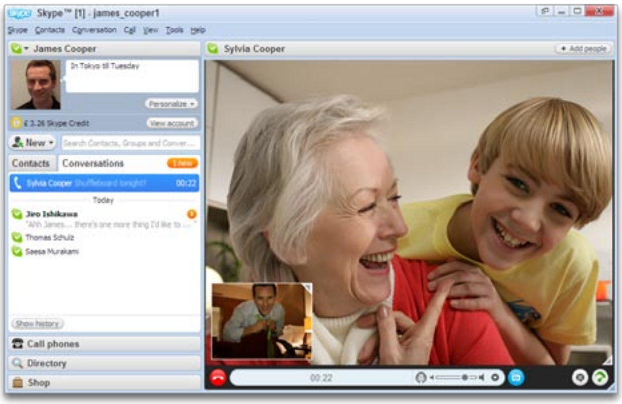
24

Feature Articles

http://tmcnet.com/17606.1

AT&T Changes Position on Skype

Reversing its earlier position, AT&T Inc. in early October said it will now let iPhone customers use Internet phone services such as Skype on its 3G mobile network. The move eliminates a controversial ban the U.S. telecom giant had in place blocking Apple Inc. iPhone users from placing phone calls using Skype and other Internet phone services on its network. The decision now opens the door for iPhone users to benefit from competitive efforts offering less expensive international calls and text messaging, officials said. The network currently permits iPhone use of Skype, but only through Wi-Fi.



www.apple.com
www.att.com
www.skype.com

http://tmcnet.com/17600.1

BroadSoft Gets Broader with Packet Island

VoIP application software provider BroadSoft Inc. has announced its intent to purchase privately-held, Cupertino, Calif.-based Packet Island. The latter company is a provider of SaaS-based quality of service assessment and monitoring tools for VoIP and video networks and services. Michael Tessler, president and CEO of BroadSoft, said the deal will broaden BroadSoft's range of cloud-based communications offerings, provide revenue growth opportunities and create long-term value for its service provider customers.

www.broadsoft.com
www.packetisland.com

http://tmcnet.com/17616.1

First States Get Broadband Stimulus Funds

The first states have been awarded federal stimulus money to collect information on the availability of broadband services in their states. The data will be used to create an interactive Web-based map showing available broadband services and providers by address. States receiving broadband stimulus funds from the National Telecommunications and Information Administration, which along with RUS and the FCC is administering the broadband stimulus program, are Arkansas, California, the District of Columbia, Indiana, New York, North Carolina, Vermont and West Virginia.

www.fcc.gov
www.ntia.doc.gov
www.usda.gov/rus

http://tmcnet.com/17482.1

Speakeasy Blocks and Tackles

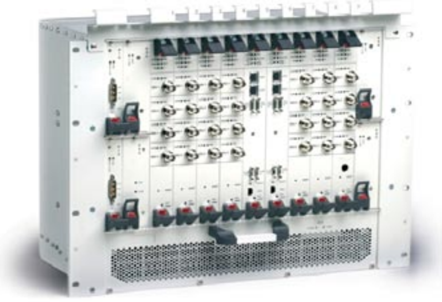
Competitive service provider Speakeasy is the latest company involved in blocking call completion. The company reportedly is refusing to complete calls to certain free conference call or free adult content sites, according to Public Knowledge, a Washington, D.C.-based public interest group. The news comes amid the AT&T-Google throw down in which the big telco charges the search giant with blocking Google Voice calls to rural carriers.

www.att.com
www.google.com
www.publicknowledge.org
www.speakeasy.net

http://tmcnet.com/17668.1

Alvarion Wins Two WiMAX Deals Abroad

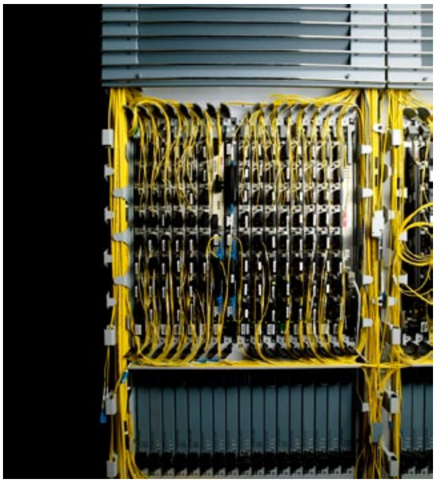
WiMAX equipment supplier Alvarion Ltd. announced new wins with Clearwire International LLC and Kenyan mobile services provider Safaricom. Clearwire International, a holding entity of Clearwire Corp., has tapped Alvarion to equip it with a mobile WiMAX 802.16e solution for a deployment in Spain. As for the Safaricom deal, Alvarion has been awarded a three-year turnkey contract to provide its BreezeMAX solution. Safaricom is the largest mobile carrier in Kenya and East Africa, and provides integrated data and voice communication solutions. Both deals involve deployments in the 3.5 GHz frequency band.



www.alvarion.com
www.clearwire.com
http://portal.safaricom.com/cds/

http://tmcnet.com/17618.1

Nortel Accepts Ciena's MEN Offer



Nortel Networks has agreed to Ciena Corp.'s stalking horse bid of $521 million for its optical networking and carrier Ethernet businesses. The offer, for which Ciena will pay $390 million in cash plus 10 million common shares, includes Nortel's business assets, plus patents and other intellectual property, according to reports. Ciena has said it plans to retain 2,000 Nortel employees, or 85 percent of the Nortel workforce.

www.ciena.com
www.nortel.com

http://tmcnet.com/17587.1

GC Brings Ethernet WAN to the World

Global Crossing now offers to enterprise and wholesale customers its EtherSphere family of services – which includes point-to-point, point-to-multipoint and multipoint-to-multipoint options – in Asia, Europe, Latin America, North America and the U.K. The Global Crossing EtherSphere WAN services, which ride over the carrier's MPLS backbone, are supported by numerous access methods. Through the company's EtherExtend Flex access service and U.K. EtherSphere service, enterprises will be able to connect to Ethernet transport services from 150 locations, including nearly 80 Cisco 7600 series provider edge routers, supporting 26 countries.

www.globalcrossing.com

by Ronald Gruia

Living in a Flat World

During the Middle Ages, it was thought that the Earth is flat rather than spherical. It wasn't until 1497, when en route to India, that Portuguese navigator Vasco da Gama managed to sail past the Cape of Good Hope and helped dispel that notion.

Interestingly enough, more than half a millennium later, Thomas Friedman's bestselling book analyzing the ongoing globalization trend swung the pendulum back the other way with its title "The World is Flat". Evidently, Friedman was using a metaphor to help him drive home the key idea of the book, namely that there is a level playing field in the world of global commerce.

In the telco domain, a similar trend is happening, and the "flat architecture" approach is making a comeback. A fundamental principle of IMS is the notion of reutilizing common functions such as billing and presence and then integrating them into a flat approach. This "horizontalization" of common functions leads to tangible benefits such as opex reduction, since the incremental cost of deploying additional services once the IMS core is deployed goes down exponentially, as more components can get reutilized.

Vertical silos are being replaced by a flatter architecture, and this also applies in the edge, aggregation and core network segments.

That said, let's look at a few key trends.

We're seeing huge growth in mobile data traffic.

Earlier this year, Cisco predicted a 131 percent CAGR in mobile data traffic over the next five years, mostly being driven by video. This is the direct consequence of the explosion of mobile broadband. A single laptop can generate as much traffic as 450 basic-feature phones, and a high-end handset such as an iPhone or BlackBerry device creates as much traffic as 30 basic-feature phones. 4G LTE will transport voice on an IP channel, which could put further strain on the underlying infrastructure requirement.

Data volume is soaring with the spread of advance services in mobile networks, including deco-anime (decorated animation), Chaku-uta full (music download) and movies running on networks of operators such as NTT DoCoMo. The need for more bandwidth can be illustrated by a simple comparison of a movie payload of 5MB and that of an ordinary e-mail, 100 2-byte characters.

And the mobile broadband opportunity in terms of user numbers is substantial.

Only about 5 percent of global wireless subs had broadband capabilities by the end of 2008. However, we expect the mobile broadband penetration to grow to 18 percent, and subscribers with mobile broadband capabilities to triple to more than 1 billion by 2013. This represents a substantial increase and shows the tremendous potential of the mobile broadband opportunity going forward.

All that said, what are the key takeaways here?

A fundamental driver in generating a multi-year wireless packet core network upgrade cycle – that started in the second half of this year – is the recent development in the 3GPP standards group of the evolved packet system, which concerns the evolution of the flat mobile core architecture. The EPS, in its most basic configuration, is made up by the following elements:

- a simpler base station (eNodeB) and an evolved packet core network gateway (EPC-GW) in the data path; and
- a mobility management entity (MME) in the control path.

The above topology is premised upon Ethernet and IP and represents an access-neutral implementation intended to cost-effectively and simultaneously support 3G cellular, non-macro-cellular access (i.e. femtocells and Wi-Fi), and fixed access methods for all traffic types (e.g. text, voice/audio, video, images, etc). The flat EPS core also will provide an incremental upgrade path to LTE radio access.

Vendors such as NSN have carried out recent analyses that indicate double-digit savings might be achievable in core network opex via upgrades of the carriers' legacy SONET/ATM core networks to a flatter Ethernet/IP architecture. Savings arise from reduced services provisioning, software upgrades, a smaller degree of troubleshooting and fewer network administration tasks, which all combine to improve the opex side of the equation.

Recognizing the exponential growth patterns in mobile data and IP video services, many tier 1 service providers are engaged in migrating their legacy infrastructures to a flat Ethernet backhaul and core network topology. This "horizontalization" also entails the utilization of open Internet standards-based approaches, leveraging technologies such as SIP, TCP/IP, etc., instead of proprietary "stovepipe" Telecom 1.0 implementations.

The near-term goal is to lower significantly the network's running costs. The ultimate objective is to operate a feature-rich network that can be cost-effectively enhanced via software upgrades, following the IT service model. With this modular approach, IT features can be deployed incrementally without the need of a forklift upgrade.

This is yet another example of the "ITfication" of the telecom space, which strives to deliver services on modular, large-scale and lowest cost bases. **NGN**

Ronald Gruia is program leader and principal analyst at Frost & Sullivan (www.frost.com) covering emerging communications solutions.

by Grant Lenahan

Content and Advertising Form a Perfect Union

Sometimes we can't see the forest through all those pesky trees.

For as long as I can recall, content and advertising have gone hand in hand, and for good reason. They're a great couple. This is because content gives such good insight into the readers' (or viewers' or listeners' or …) interests. At one level it's obvious – people who read about sports like sports. But it also turns out we can infer a lot of others things from an interest in sports, such as age, gender and other associated likes and dislikes. Ergo, beer features prominently in sports advertising and sponsorship. Keep this in mind.

This brings me to three consequent points on which I would like to elaborate.

First, our industry is changing as it switches from telephone and even data connections to a world made up of convergent, multimedia IP streams transporting everything from stock quotes and transactions to news clips via VoIP and IPTV – or similar telco- or cable-based video services. As such, content is now front and center.

But along with this opportunity comes a new business model. Content, as noted, is almost always subsidized – maybe even made free – by advertising. Telcos need to realize that their first forays into walled gardens are not indicative of how they can succeed in the longer run. If telcos (mobile, broadband, cable) expect to make money from content and information, in addition to transport, they must adopt competitive business models, including advertising.

Content-rich media has always depended on advertising to make their business models viable. From the earliest days of newspapers, through radio, television and the Web, advertising has been the primary source of revenue – and thus, of growth. The corollary of this is that consumers have a clear value-price benchmark against which they will measure competition. If our industry does not employ advertising, our value proposition will be commensurately weak.

On the other hand, if we find ways for advertising to generate a bit more incremental revenue, and also be incrementally more relevant to consumers, then our value proposition will be stronger than those of existing content delivery media. As I have shown (or at least argued) in previous articles in this series, our industry has the technology not only to compete, but to redefine effective and acceptable advertising. While we could start by delivering beer ads with sports, we can aspire to do better.

This brings me to the second point – that correlation between sports and beer. While it's a good correlation, it's not perfect, nor is the connection between sports and gender (male) or any of the other partly correct stereotypes that drive much ad placement today. Advertisers know this. That's why CPMs (cost per thousand, or "mile") impressions are relatively low; why ad effectiveness is relatively poor; and why consumers sometimes find ads useless and annoying.

Not every sports watcher likes beer. Similarly, they also like things other than beer. Ads would be more interesting, useful and profitable (higher CPMs at maybe lower incidences) if they were more surgically targeted. Therein lies another opportunity for the industry: Combining content genre with other factors to make a more accurate appraisal of each subscriber's interests (note that I just switched from plural to singular).

Within the group of sports watchers we may find those who don't like beer. But we can also get more sophisticated data: we can find those who only are interested in beer when they are at a ball park or when a promotion is being run close to where they are (both location and time aware intelligence). Given a subscriber's (opt-in) agreement communications networks can add that intelligence. The moral so far is that we must embrace the connection between content and advertising, use the genre information, but, and this is a big but, we can and should then make it more accurate than content alone allows. That's telecom's special sauce.

Third and finally, advertising and content can begin to blur. One recent over simplification defines the difference between information and spam as relevance. At the very minimum, advertising IS content. It may be commercial content. It may be forced on you. It may even be annoying, but it is content and it needs to be managed as such. So, for example, minors who should not access adult Web sites also should not receive adult promotions and advertisements.

With that said, we need to think about how advertising can be integrated into the fabric of information delivery. Search does this fairly well by, in effect, providing sponsored suggestions in response to search queries.

As above though, the communications industry – if it thinks across networks, media, time and history – can do so much better. Opt-in interests can receive coupons, discounts and topical alerts. Are these ads? The consumer may find them useful, as I do when I sign up for alerts in "deal" sites or for advance notice of sporting event tickets. But, in the end, these messages are paid for by merchants. So to me they are information, and to the merchant they are advertising. Eureka!

I have long advocated that communications service providers treat individuals as "markets of one" with individual policies, preferences, opt-ins, settings, contact lists etc., – powered by a personalized network infrastructure. As we look at advertising this seems to be the strongest link yet – one in which the value to sellers, and the relevance to consumers, both improve in response to more information and trust in the privacy of that information.

Content and advertising really are perfect together. Except that they may, with luck, become one in the same. And when they do, our value proposition to consumers, and the revenue streams associated with that value proposition, will change (improve) forever. **NGN**

Grant F. Lenahan is vice president and strategist for service delivery solutions at Telcordia Technologies (www.telcordia.com).

by Marc Leclerc

Making Networks Social

No one can dispute the massive uptake of social networking around the globe. The success of Facebook, MySpace and LinkedIn, among other sites, is changing the way people communicate and even how we define the word communication.

Once relegated simply to written and spoken words, communication today is enriched with images, video and interactive elements on an unprecedented scale. Communication is now, in essence, complete experience sharing.

Considering the elements of this new experience sharing trend within the defined social contexts of family, friends and colleagues, basic communication turns into social networking. The trend is fueled by Internet-based applications such as Facebook, which enable easy tracking of relationships and allow activities to be organized around these social contexts.

However, purely digital experiences cannot compare to real life interactions. Simply put, people are not satisfied using social networking tools when only sitting in front of a computer screen, but would rather use them to augment reality wherever they go to enhance in-person experiences. Our industry has the opportunity to make the necessary mobility possible for people to take the experience with them and engage in social networking whenever the mood strikes. With these facts in mind, one important question arises in terms of telecoms: what must we do to make *our networks* social?

Online social networks have become widely successful, with Facebook, for example, recently surpassing the 200 million subscriber mark. However, telecom networks offer access to a much larger and active subscriber base than even the Internet can provide, with Chinese operator China Mobile having just announced its 500 millionth subscriber.

Social networking applications are defined by several key elements. First, they make it possible for people to organize and keep current information about their contacts. Second, they use these contact lists as a starting point to engage in enriched communications such as interactive chat, messaging, picture and video sharing, and even application sharing. Third, external application gateways can further enhance enriched communications by supporting and integrating third-party devices and externally defined services such as YouTube. These add-on services extend what subscribers can do when using social networking applications, increasing their value and creating additional revenue opportunities for service operators.

In telecoms terms, the contact list function is represented by the subscriber's address book, now most often stored within a mobile phone. People take this electronic address book with them everywhere. As expanded upon in a previous column, mobile address books offer a vast opportunity to network operators. To ensure the central role of this information, carriers should consider solutions that keep the data up to date and secure, such as "active address books."

Carriers must also provide a mechanism to synchronize the address book with external contact lists through social networking sites, perhaps even supporting media sharing directly from a variety of devices including mobile terminals. These social media portals can support direct integration of Internet-based social networking functions with telecom network services including messaging, chat, file transfer, notifications and GPS location.

Combined with network enablers such as voicemail, media streaming, SMS and MMS, social networking applications make it possible to extend the user experience across device types and network boundaries. Many of these functions have already been integrated into a comprehensive globally-deployable and standards-based solution called rich communications services. With more than 80 members worldwide, the GSMA's RCS initiative is involved in assisting market trials starting in the fourth quarter of 2009.

A carrier implementing this convergent social experience approach in its network also can use it as the foundation for a beneficial two-way business model. This model would generate revenues not only from subscriptions, but also from providing service providers access to their subscriber base for advertising, sponsored messaging, viral marketing and even retail sales. This way, operators can increase revenues from new applications while encouraging greater use of their existing infrastructure. By taking full advantage of the efficiencies and expanded capabilities of IMS network elements, costs can then be reduced by amortizing infrastructure across a wider revenue base.

Online social networks have become widely successful, with Facebook, for example, recently surpassing the 200 million subscriber mark. However, telecom networks offer access to a much larger and active subscriber base than even the Internet can provide, with Chinese operator China Mobile having just announced its 500 millionth subscriber.

By making networks social, carriers can place our industry at the heart of the consumer's social life. Offering consumers a rich and seamless social networking experience and service providers a more intimate and secure commercial channel, carriers with social networks can drive monetization of network resources and deliver winning user experiences, which ultimately keep customers coming back. **NGN**

Marc Leclerc is manager of the Global IMS Expert Centre at Ericsson (www.ericsson.com).

Upcoming TMCnet Webinar Schedule

December 3, 2009 • 2:00pm ET/ 11:00am PT

How to Grow Your Local or Regional Business Using the Web

Sponsored by:

crexendo

http://www.tmcnet.com/webinar/crexendo3

Archived • View Today!

Reduce Costs and Improve Efficiencies with Virtual Fax over IP

Sponsored by:

BISCOM Dialogic Making Innovation Thrive

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

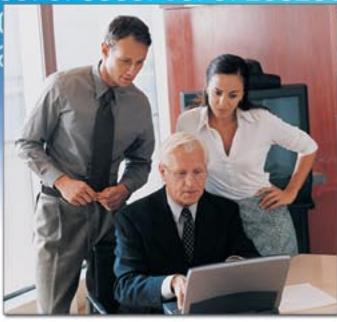
Archived • View Today!

Telecom Companies and Google: Maximizing Return on Information

Sponsored by:

Google™

http://www.tmcnet.com/webinar/google2



Archived • View Today!

SIP Beyond Telecom

Sponsored by:

RADVISION®
Delivering the Visual Experience®

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

Archived • View Today!

Drive Business Results While Freeing Up Time and Budget, What You Need to Know

Sponsored by:

VAROLii CORPORATION®

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

Archived • View Today!

Swap Enterprise BlackBerry, iPhone and WinMo Management Chaos for Complete Control in 90 Days or Less

Sponsored by:

BoxTone®
The Expert in Mobile User Management

http://www.tmcnet.com/webinar/boxtone2

Archived • View Today!

Role of Communications Technology in Business Continuity Planning & Disaster Recovery for Contact Centers

Sponsored by:

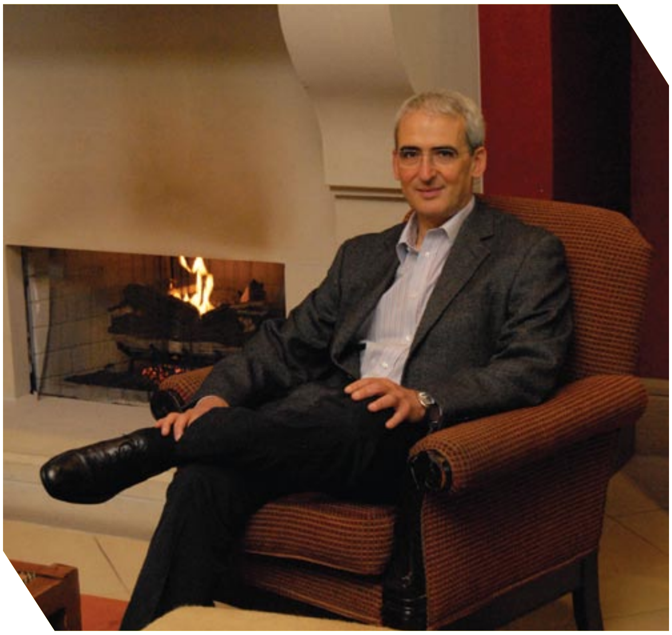
NORTEL

http://www.tmcnet.com/webinar/nortel2

By Paula Bernier

Growing Gains: Metaswitch Readies to Move to the Next Level

MetaSwitch started life less than a decade ago as the carrier systems division of U.K.-based Data Connection Ltd. But the student became the master, as the division grew to generate more than 80 percent of Data Connection's revenue. As a result, the company decided to put its two divisions under the new banner of Metaswitch Networks.



The company combines the assets of MetaSwitch, best known for its Class 5 replacement solutions, with the network protocols division of Data Connection, whose stacks can be found in the gear of such major suppliers as Alcatel-Lucent, Cisco and Ericsson, among others.

"The two brands that we had, had begun to get confusing for our very diverse customer base," explains John Lazar, CEO of Metaswitch Networks.

The new name offers a more coherent brand based on the name that is more visible, and that is Metaswitch, says Lazar. It also reflects the company's ambition, adds Lazar, which includes becoming a much bigger presence on the communications scene and, eventually, going public.

"We think that we have a base and platform now to drive forward to become a global player and a major player in the communications space," says Lazar, who was promoted from president and COO of MetaSwitch to the CEO of Data Connection in April, taking over for founder Ian Ferguson, who continues as chairman.

At the time, the company revealed its plan to consolidate all of its products and business operations under the MetaSwitch brand. Then, in early October, coinciding with its annual financial report, the company announced the consolidation and the new name, Metaswitch Networks.

Going Soft

The move to brand its two divisions under the Metaswitch name also appears to be an effort by the carrier side of the business to emphasize its play in the application space. In fact, Lazar says that more than half of the carrier systems division's revenues come from applications.

"Our key smarts, our real value proposition, is actually in software development," says Lazar. "That's incredibly important to both our future and our history."

The carrier system division's central product is a softswitch, which is used by hundreds of service providers to deliver a variety of services, including VoIP, legacy TDM and next-generation telephony offerings. But in his interview with NGN, Lazar emphasized the importance of the company's MetaSphere and CommPortal products.

"We have in our MetaSphere application server platform, one of the most flexible, extensible and rich platforms in the industry, and really this comes from our software heritage," he says, noting the product is widely deployed by carriers including tier 1s such as AT&T. "Within the platform our customers are doing the full range of Class 5 services, but then also consumer VoIP, small business services, fixed mobile convergence, next-generation voicemail, find me/follow me service, etc. All of that is shrink-wrapped now."

End users – be they residential or business subscribers, or even customer service representatives – can access those applications through CommPortal.

"It's very important for our customers to be able to allow their customers very very flexible ways to access services," he says. "Our CommPortal, which is the customer portal into MetaSphere, allows access to the services from any screen. We supply sets of widgets for a whole set of different environments including Apple, Google Android, etc. We're also delivering a whole set of mobile applications on the iPhone and the BlackBerry."

To help drive applications onto its platforms, MetaSwitch in April announced the creation of the MetaSwitch Innovators Community. The online portal provides sample code, open source projects, API help and documentation, a sandbox test environment, discussion groups, blogs and the ability to communicate and network with others in the industry.

Investing in the Future

Of course, Metaswitch Networks isn't relying exclusively on its partners and other third parties for innovation. Lazar emphasizes that despite tough economic times, the company remains dedicated to research and development.

"We've continued to make a massive investment in R&D across the whole company," he says.

During the course of the company's past financial year, he says, it plowed $34 million into R&D in an effort to develop new products and services. That's better than the industry-wide norm of investing 10 to 15 percent of revenue in R&D, says Lazar, adding that Metaswitch Networks has $113.7 million in revenue.

8x8, Inc.

Join The 8x8 Hosted VoIP Community!

Whether you are a start up or an established company, a one-person business or an organization of 100 employees, a Hosted VoIP phone solution with a lower TCO, reduced complexity and more advanced communication features is the obvious and smart choice.

But, one size does NOT fit all! As such, TMCnet has joined together with one of the industry's leading IP communications service providers, 8x8, Inc., originator of Packet8 Internet Phone Service, to educate the business and residential communities on the advantages and efficiencies of Hosted VoIP phone service.

VoIP Services For SMB & Residential

hosted-voip.tmcnet.com

The now 500-employee company also has continued to invest in its people, adds Lazar, who says he spends 20 percent of his time on recruitment. Over the past year, between Sept. 1, 2008 and Aug. 31, 2009, headcount in the carrier systems division grew about 20 percent.

The company this year also created for the first time a dedicated CFO position and hired Stephen Halstead to fill the post. Halstead previously was co-founder of Heart Telecom Ltd., a U.K.-based B2B service provider.

And just last month the company announced that Stefan Knight has been named to the newly-created post of vice president of strategic alliances and tapped Steve Gleave as vice president of marketing. Both work in the company's carrier systems division.

"We didn't resort to the mass layoffs that many of our competitors or other companies in the industry needed to do," says Lazar. "We've been remarkably careful about expenditure. But we've maintained the investment, and that means that during a very difficult year we've gained market share, which gives us a great platform to move forward."

A Look at the Numbers

Indeed. Infonetics Research recently put MetaSwitch for the first time at the top of its global ranking of VoIP vendors for Class 5 softswitch licenses. According to the report, "Service Provider VoIP Equipment and Subscribers Q1 2009," the company is now the No. 1 supplier of Class 5 softswitch licenses, with 18.4 percent share. In North America, the company maintained its leading position in the same product category, increasing its share to an impressive 60.1 percent.

Greg Collins, vice president of carrier IP telephony research at Dell'Oro Group, tells NGN that MetaSwitch went from less than 2 percent market share worldwide for softswitches, media gateways, voice application services and session border controllers in the second quarter of 2008 to 3.2 percent market share in that combined space in the second quarter of 2009. In the same category and time span, he adds, the company increased its North American market share, based on revenue, from 6 percent to 10 percent.

The company in mid-September announced Cavalier, a provider of competitive telecommunications services throughout the eastern U.S., would use Metaswitch gear to offer hosted PBX and unified communications services to the small and midsize business market. The equipment supplier this summer also noted it has garnered business this year from regional U.S. operators including Ben Lomand Telephone Cooperative, which serves multiple counties in Tennessee; Rural Telephone, which is located in northwest Kansas; and Telephone Electronics Corp. of Jackson, Miss.

While Lazar concedes that his company has gained marketshare at Nortel's expense, he says it can also be attributed to the fact the Metaswitch continues to deliver quality product, service and innovation.

Metaswitch Networks in early October reported its annual results for the 2008-2009 financial year to Aug. 31. Overall revenue grew 4.2 percent from £59.3 million to £61.8 million ($113.7 million), with operating margins sustained above 20 percent.

Lazar says the company is "extremely pleased" with the results, especially considering that carrier VoIP spending during this time was down by more than 30 percent according to industry analysts.

"I think it's quite interesting to trace our financial year," says Lazar. "We started our financial year the first of September 2008, and at the time the economy felt like it was entering a difficult patch. But within a week or 10 days of the start of the financial year, we had Lehman Brothers going away. The economic crisis has tracked our financial year. So that's the backdrop.

"During the financial year we've managed to grow our company revenue," he continues. "We haven't grown it by a huge amount, but we've grown by a couple of percent. Revenue growth in the worst economic year in living memory is a huge achievement, and I'm very proud of that."

The company has also remained profitable, says Lazar, who declined to disclose details on that front other than to say: "We've got significant profit."

Moving Forward

To keep that growth going, Metaswitch Networks continues to expand globally, is moving on the mobile opportunity, maintains its focus on providing solutions for customers in their migration to IP and an IMS core, and is working to help its customers effectively compete with an increasingly diverse group of players.

In June, the company announced a win with EUTEL, an incumbent telecommunications service provider in the Netherlands Antilles, which deployed the Metaswitch carrier VoIP solution to replace its existing legacy TDM switching infrastructure. A month later, the vendor revealed it had new contracts with Santa Barbara Utilities, which provides VoIP services to the Santa Barbara Plantation Resort Community, one of the leading luxury hospitality projects in the Southern Caribbean, and with Technology Bureau, a systems integrator in Argentina that serves Latin America.

But while Metaswitch seems to have a good start in its global expansion, Collins of Dell'Oro Group says it will take time to develop relationships and channels abroad.

Whatever the location of its customers, Lazar says Metaswitch is working to create frameworks for customers so that they can respond quickly to threats from new entrants and otherwise move as fast as possible to take advantage of new opportunities.

The delivery of such solutions, Lazar believes, will help further propel Metaswitch forward to realize more growth and, eventually, a public offering.

"In a very cautious, careful way, based on the economy, we're looking for growth somewhere between 15 and 20 percent over the year [going forward]," he says. "We may well blow that out. But right now that's our intention.

"Within that, the very important thing is to have good quarter-on-quarter growth," he adds. "So what we're looking for is to make sure our first quarter for this year is significantly better than the first quarter for last year – on the order of 15 to 20 percent as well."

And while Lazard says the economy makes planning an IPO a very iffy proposition at this point, he brought up the subject of a potential public offering before NGN got a chance to ask the question.

"Looking forward, we have no plans. We've not set a date. We're not actively planning to do anything quite yet," says Lazar. "But it's perfectly possible at some point in the future we may decide to actually take the company public." NGN

By Paula Bernier

En Route with GCS

Rating & Routing Provider Reels in a Big One, Goes on the Road

It's been a good year for Global Convergence Solutions. The three-year-old company has at least 60 customers. While they won't talk dollars and cents, company officials claim it's seen a revenue increase of five times and profit increase of eight times between 2008 and 2009. And it's debt-free and profitable. But the next few months have the potential to be even better.

The company, which outfits service providers with real-time rating and routing solutions, last month was set to announce its biggest customer yet – a household name no less. GCS also is in the initial stages of a "road show" and expects its initial round of funding early in the first quarter of 2010.

Princeton, N.J.-based GCS has its roots in the professional services arena, but today also provides rating and routing software on both a licensed and SaaS basis. Most of the company's 17 staffers (including CEO Neal Axelrad and President, CTO and Co-Founder Jay Meranchik) are former employees of ITXC Corp., the VoIP wholesale pioneer founded by Tom Evslin.

What GCS offers, however, is a very different brand of least-cost routing and rating, says Axelrad, and can be used by service providers of all stripes to optimize efficiencies and lower costs on both their own networks and the connections they lease from other carriers.

"We route every call on a call-by-call basis, and we have patented technology that allows us to do that," says Axelrad. "That's really our differentiator, our Dynamic Route Manager."

Say you're a large carrier, and you have TDM in your network. You might also have multiple brands of softswitches and perhaps a session border controller solution from one or more providers. Under normal circumstances, a hybrid network such as this would be managed at the edge via a network element, explains Axelrad. That means every time you want to make a decision based on quality or price, you face some major, manually-intensive changes to your network as well as approvals from various levels of your organization, he says. On top of all that, you probably need to do this for every network you operate that includes different vendor gear, so multiply the above effort by X.

"Managing rates and routes is incredibly complex," says Mark Delaney, GCS's chief marketing officer. "It's almost like a financial exchange where you've got information coming in on a daily basis from the customers that want to change what they're buying from you. You've got the actual traffic coming across the network that's routing based on your routing rules."

As you can probably tell from this explanation, the folks at GCS believe the current model is flawed and, thus, have created a solution wherein a business policy engine is interrogated at call setup so the network knows how to route each call and can do so in real time rather than based on past traffic trends, as traditional least-cost routing works.

The GCS Product Suite

- GCS Dynamic Route Manager
- GCS Dynamic Rate Manager
- GCS Managed Switch Services
- GCS Professional Services

Axelrad says that when he and his coworkers were offering white-label professional services for such companies as session border controller vendor NexTone and others in past years, they became aware of a "gaping hole" in the rating and routing solutions space.

"As we queried that SBC marketplace we found time and time again that the thing they asked us for was to help them route complex code bases from a number of perspectives" including jurisdictional-based routing and source-based routing, says Axelrad.

So nearly a year-and-a-half ago, GCS launched the Dynamic Route Manager, which can scale to handle up to 100,000 concurrent calls. Six months later, the company unveiled Dynamic Rate Manager, a business engine that people across a carrier organization can use to create a common interface into how the network is performing and how calls are being rated and managed. It can handle 100,000 CDRs per minute.

The company recently expanded its portfolio by bringing TCAP into the fold, which means that its carrier customers with TDM-based infrastructure can now use the company's next-generation networking tools.

GCS's solutions today handle millions of minutes per day.

And, as mentioned above, those minutes can be running over any kind of infrastructure.

"You can manage every one of those platforms with separate service levels and, in fact, you can have as many service levels as you want within each platform," says Axelrad.

"We've built a very powerful software, [gotten into] a difficult, competitive industry in a down market, and positioned ourselves to be the dominant player," he adds. "And we're close to being the dominant player in the U.S."

GCS has a variety of distribution partners, the most noteworthy of which are probably Siphon Networks and Verscom, both of which are reselling GCS products. GCS also recently entered into a partnership with Telx, which is distributing its products. **NGN**

Companies mentioned in this article:

Global Convergence Solutions
www.globalconverge.com

Verscom
www.verscom.com

Siphon Networks
www.siphonnetworks.com


FREEDOMIQ®
THE INTELLIGENT PHONE SOLUTION
Introducing the
VoIP Phone Systems
Global Online Community
Voice over IP is transforming the business communications space with immediate benefits, including cost savings, added features, greater functionality, remote access, and more. Finding the right VoIP phone system for your business can be a challenge, which is why FreedomIQ brings you the VoIP Phone Systems community on TMCnet.
The community presents a reliable resource for your business communications needs, with expert advice and the latest news from the VoIP industry.
http://voip-phone-systems.tmcnet.com
The community showcases:
Free Quotes
Ask the Expert
Featured Articles
Latest News
White Papers
Product Showcase
Powered by:
TMCnet™

PAETEC CEO Enlightens NGN on Energy Strategy

Arunas A. Chesonis, chairman and CEO of large competitive service provider PAETEC, during his ITEXPO West keynote earlier this fall promoted his plan to expand further into the energy space. NGN Executive Editor Paula Bernier sat down with Chesonis at the September event in Los Angeles to discuss the thinking behind this move and what's next for PAETEC.

You mentioned during your keynote that some of PAETEC's customers that spend about $40,000 a month on telecom pay a whopping $440,000 a month on energy. That explains the allure of this space for PAETEC. But why is the company so charged up about this opportunity now?

"It's going to be about how energy and communications are going to get linked together more and more. It's the basic proposition that the offices of the CIOs are going to be pulled more and more into energy purchasing decisions over time, just like they were 10 years ago when you saw more of the telecom managers in telecom purchasing migrate toward IT. A lot of people made that bet, and you look at it today and [see] hosting, data centers, software, network security, cloud computing."

Are you saying CIOs are getting involved in energy purchasing decisions because the energy costs to support communications are so high?

"Partly. One way to look at it is: Who are the biggest energy users in most companies, outside of major manufacturing? Typically IT organizations – big data centers, energy load off of all the equipment that runs the business. They get pulled more and more into real estate decisions, whether it's remote users or another satellite office. They're being pulled into energy-efficiency discussions. I know a lot of CIOs who are now being asked not just to worry about the backup power generators, but also to 'help me with my green initiatives. I need a green data center. I need to showcase that to my clients and people who give me money.' And, politically, people have to show something."

How does that translate into what PAETEC is doing?

"We've got sort of a long-term project. It's not going to be a core business tomorrow. But we bought a little gas and electric company last January, almost two years ago, that was brokering energy in upstate New York. And we just wanted to play around with it and see if this made sense and there was really some common interest between IT and energy decisions in telecom and how they play with each other. And there was. It turns out that about a third to half of our clients were buying energy from us and [they said] 'Well, what else do you have for us.' And we said 'Well, we have telecom too.' [And they said:] 'Really, well come over and tell us about that.'"

What has the learning curve been like for PAETEC in moving into this new area of business?

"When you think about it, think about the infrastructure ... and you have been used to selling bits and bytes of data and minutes of voice, it's not something you actually take and put on a shelf like at a supermarket. It's all virtual. And that's what gas molecules are – all virtual. It's basically UNE-P on steroids. Most of the energy costs for those companies are an order of magnitude larger than their telecom bill. We find our typical customer spends four times more on energy [than they do on telecom]."

So do your telecom and energy sales people go out and do joint sales calls?

"Right now we have eight employees out of 3,700 at PAETEC Energy. Maybe next year we'll have 30 or 40."

Currently PAETEC is selling energy services exclusively in New York state. I understand you plan to expand to additional states, potentially around a dozen, within the next three years. Does that mean PAETEC soon will make additional acquisitions in the energy space?

"That's a possibility. It's a really weird industry because there aren't a lot of medium-sized players. There are a lot of little folks and a couple big folks. And there are not a lot of in-betweens."

We're hearing a lot about smart grid lately. But what does smart grid mean to you, and what will it entail from an infrastructure standpoint?

"If you're thinking about keeping your power strips and your computers on in your office building, there are different ways to shut down that cost. Just because you think you're on standby doesn't mean you're not sucking a lot of power. It's like leaving your phone charger in the socket; it's pretty hot, and that means you're drawing energy."

Right, but does smart grid require some smarts in terms of the in-building wiring, on-site meters or end user devices themselves?

"Within office buildings you've got meters that haven't actually been connected to every single outlet to track it. So some is hardware, some is software."

What will ultimately motivate businesses and individuals to embrace smart grid?

"That's where the world is headed. They talk about climate change. But whether you believe it or don't believe it, it doesn't really matter. You can save money by just being more efficient." NGN inGate

SIP Trunking Global Online Community

http://sip-trunking.tmcnet.com

All You Need to Know About SIP Trunking

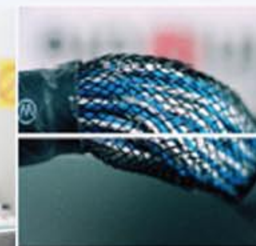
Today's enterprises are constantly looking to improve their communications infrastructures and leverage the latest communications technologies to enhance their business opportunities.

The SIP Trunking Community is a unique space for:

- End-users
- Carriers
- VARs
- Distributors
- Vendors

Learn about:

- Secure SIP Trunking
- Deployment scenarios
- ROI for SIP Trunking
- Interoperability
- Future-proofing the enterprise network



- Case studies →
- White papers →
- Product news →
- SIP Trunk Network →
- Security features and news →
- SIP Trunking blog and feature editorial →

Powered by:

TMCnet™

BUYER'S GUIDE 2010

PRODUCT LISTING

1. 3G Air Interfaces
2. Application Servers
4. Billing
6. CDMA
7. CSCF: Call/Session Control Function
9. Fixed Mobile Convergence
10. GPRS
11. GSM
12. High Availability
14. I-CSCF: Interrogating Call/ Session Control Function
16. Interactive Voice Response
17. IP Phones
18. IP/MPLS Backbone Equipment (Routers/Softswitches)
19. Media Gateways and Servers
20. MGCF: Media Gateway Control Function
21. Mobile Video
25. Multimedia Messaging Service
29. OSA: Open Service Architecture
31. OSS/BSS and Back-end Systems
34. Push-to-Talk over Cellular (PoC)
35. Quality of Service
38. Security & Policy
39. Signaling Gateways
40. SIP Servers
41. SIP-Related
43. SLF: Subscriber Location Function
44. Testing
47. Video Services
48. VoIP
49. VPNs
51. WLAN: Wireless Local Area Network

Other

ALPHABETICAL LISTING

8x8 Inc.
408-727-1885
www.8x8.com
Products/Services: 48

A

Accudata Technologies
972-390-2610 x100
www.privusmobile.com
Other: Wireless Calling Name - Caller ID

Adax Inc.
510-548-7047
www.adax.com
Products/Services: 9,12,18,39,41

ADTRAN
256-963-6739
www.adtran.com
Products/Services: 17,48,51

Agilent Technologies
970-679-5397
www.agilent.com
Products/Services: 9,10,35,44,48

AiTech
952-829-5511 x201
www.aitech.net
Products/Services: 18,41,48,49

Allied Fiber
516-455-1869
www.alliedfiber.com

APEX Voice Communications
818-379-8400
www.apexvoice.com
Products/Services: 2,16,21,45,47
Other: Service Delivery Platform

Appia Communications
877-277-4297
www.appiaservices.com
Products/Services: 35,47,48,49

AppRiver
850-932-5338
www.appriver.com
Products/Services: 38

AppTrigger
214-572-7801
www.apptrigger.com
Products/Services: 7,15,37,36,39

Arbinet
732-509-9100
www.arbinet.com

AXIOM Sales Force Development
904-303-5804
www.AXIOMsfd.com
Other: Professional Sales Training & Management Coaching

B

BillSoft Inc.
800-525-8175 x125
www.BillSoft.com
Other: Tax Solutions

Bravo Communications Inc.
408-297-8700 x112
bravobravo.com
Other: Lightning & Surge Protection/All Types

Brekeke Software Inc.
650-401-6636
www.brekeke.com
Products/Services: 40,48

BUYER'S GUIDE 2010

C

Calient Networks
408-232-6400
www.calient.net
Other: Fiber Cross-connect

CallMiner
239-689-6463
www.callminer.com
Other: Speech Analytics

Celergy Networks Inc.
760-268-1913
www.celergy.com
Products/Services: 17,18,48,51
Other: Structured Cabling & Telecommunications Installations

CommuniGate Systems
800-262-4722
www.communigate.com
Products/Services: 2,25,40,48
Other: Unified Communications, Rich Internet Applications

Comsys Mobile
+972-9-9717 888
www.comsysmobile.com
Other: Multimode communication processors

CosmoCom
631-940-4200
www.cosmocom.com
Products/Services: 12,16,17,48
Other: Multimedia IP Virtual Call Center

Coyote Point Systems Inc.
408-291-5240
www.coyotepoint.com
Products/Services: 2,12,42
Other: Load Balancing, application acceleration

CRE8 Group Inc.
813-649-8504
www.cre8groupinc.com
Other: Telecom Marketing and Public Relations

Cynergy Software Corp.
405-516-2420
www.cynergysoftware.com
Products/Services: 2,16,17,40,48

Cypress Communications
800-869-2500
www.cypresscom.net
Products/Services: 17,18,35,48,49

D

Dialexia Communications Inc.
514-693-8500 x226
www.dialexia.com
Products/Services: 4,13,16,32,48

Dialogic
800-755-4444
www.dialogic.com
Products/Services: 19,21,39,47,48
Other: IP & IP Enabled Components, Signaling IP & SS7 Components, TDM Boards

Dorado Software
916-673-1160
www.doradosoftware.com
Products/Services: 31,35,45,48,51

E

Eastwind Communications
508-862-8600
www.EastwindCom.com
Products/Services: 2,4,19,39,40

EDX Wireless
541-345-0019
www.edx.com
Other: Wireless network design

Empirix Inc.
781-266-3285
www.empirix.com
Products/Services: 44
Other: Monitoring

Endeavor Telecom
678-460-2500
www.endeavortelecom.com
Other: CPE Installations, Inside Wiring, Trouble Tickets, Site Surveys

ESR
909-793-2853
www.esri.com/telecom
Other: GIS Software

Evolving Systems Inc.
+1 303 802 1000
www.evolving.com
Products/Services: 31

G

Gigamon
408-263-2022
www.gigamon.com
Products/Services: 38,48

GL Communications Inc.
301-670-4784 x114
www.gl.com
Products/Services: 1,6,11,41,44

Global Digitec
972-231-3005
www.globaldigitec.com
Products/Services: 4,9,17,40,48
Other: Softswitching and Integration Services

GLOBALINX
585-321-5693
www.GLOBALINXsolutions.com
Products/Services: 48

GN Netcom Inc.
603-598-1100
www.jabra.com
Other: wireless multiuse headsets

GTek
972-200-4472 x111
Products/Services: 12,17,19,40,48

H

Head Acoustics GmbH
+4924075770
www.head-acoustics.de
Products/Services: 44
Other: Audio & Voice Quality Optimization

Hermon Labs TI
+972-4-6268450
www.hermonlabs.com
Products/Services: 11,17,44,48,50

HTK
+44 (0) 870 600 2311
www.htk.co.uk
Products/Services: 2,16,29,41
Other: Hosted Applications for Revenue Generation

I

Integrated Broadband Services (IBBS)
770-387-2053
www.ibbs.com
Other: integrated OSS, Network Management, Diagnostics, Provisioning

Ifbyphone
888-803-5345
www.ifbyphone.com
Products/Services: 16
Other: Call Routing, Virtual Call Center, Cloud Telephony

iGLASS Networks
888-YOUR-NOC
www.iglass.net
Products/Services: 31
Other: NOC Services, Network Monitoring

Info Directions Inc.
585-924-4110
www.infodirections.com
Products/Services: 4,31

Ingate Systems
603-883-6569
www.ingate.com
Products/Services: 35,38,41,48
Other: SIP trunking, UC, remote SIP connectivity, SIParator, Enterprise SBC

inphonite
520-797-1844
www.inphonite.com
Products/Services: 16,25,40,48

Intelliden Inc.
719-785-0660 x7003
www.intelliden.com
Products/Services: 31,35,38

IntelliNet Technologies
321-726-0686 x303
www.intellinet-tech.com
Products/Services: 9,36,38,39
Other: Diameter

Interact Inc.
402-476-8786
www.iivip.com
Products/Services: 2,4,16,31,41

InternationalFoneNumbers.com
213-452-1505
www.tollfreeforwarding.com
Products/Services: 48
Other: International Phone Numbers

BUYER'S GUIDE 2010

IP Gallery
603-475-2938
www.ipgallery.com
Products/Services: 2,9,15,36,48

IPitomy Communications
941-306-2200
www.ipitomy.com
Products/Services: 17,41,48

IPNetZone Communications Inc.
646-254-6800
www.ipnetzone.com
Products/Services: 12,35,41,49
Other: ISP and Network Monitoring & Management

IQ Services
612-243-5124
www.iq-services.com
Products/Services: 35,44

IVR Technology Group
800-715-9990
www.ivrtechgroup.com
Products/Services: 14,16,25,37,41

L

Lexent Metro Connect
212-981-0700
www.lexent.net

M

Media5 Corp.
819-829-8749 x5210
www.media5corp.com
Products/Services: 38,40,41,48

MeetingOne
866-523-9194
www.meetingone.com
Products/Services: 47,48

Minuteman/Para Systems
972-446-7363
www.minutemanups.com
Products/Services: 18,31,48,51
Other: Power Protection

Movius
770-283-1000
www.moviuscorp.com
Products/Services: 16,21,25

Multi-Tech Systems Inc.
800-328-9717 x5200
www.multitech.com
Products/Services: 6,10,11,48,49

N

NEC Corporation of America
703-834-4145
www.necam.com
Products/Services: 2,9,29,40,43

NetComp Communications Group
561-202-8010 x8007
www.netcompcg.com
Products/Services: 18,34,48,51

NetScout Systems Inc.
800-309-4804
www.netscout.com
Other: Unified Service Delivery Management

NGM Network
+972547581704
www.ngm-network.com
Products/Services: 48
Other: Multilateral Voice Peering Exchange Point

O

Octasic Inc.
514-282-8858
www.octasic.com/index.php
Products/Services: 19,21,47,48

Open Controller
0031 38 7852611
www.opencontroller.com
Other: Embedded controllers M2M solutions

OpenVox Communication Co. Ltd.
+86-755-82535461 x817
www.openvox.com.cn
Products/Services: 11,48

OPNET Technologies Inc.
240-497-3000
www.opnet.com
Products/Services: 35,38,46,48,51
Other: Network Planning and Diagramming, Configuration Auditing, App Performance Mgmt

P

Patton Electronics Co.
301-975-1000 x109
www.patton.com
Products/Services: 19,21,35,38,48

PCTEL Inc.
301-444-2046
rfsolutions.pctel.com/
Products/Services: 1,6,44,50
Other: Wireless test and measurement equipment

Phybridge Inc.
(905) 901-3633 x104
www.phybridge.com
Products/Services: 35,48
Other: risk-free, quick and easy IP Telephony Deployment

Polystar OSIX AB
+46 8 50 600 600
www.polystar.com
Products/Services: 9,10,11,31,35

Psytechnics
603-427-6500
www.psytechnics.com
Products/Services: 9,35,47,48
Other: VoIP and Video troubleshooting

Q

QuickPhones
877-417-1739
www.quickphones.com
Products/Services: 12,17,19,40,48

R

RAD Data Communications Inc.
201-529-1100
www.radusa.com
Products/Services: 18

REDCOM Laboratories Inc.
585-924-6500
www.redcom.com
Products/Services: 7,19,39,41,48

Redline Communications
905-479-8344
www.redlinecommunications.com
Other: WiMAX and Advance Broadband Wireless

Redwood Technologies Ltd.
+44 1344 304 344
www.redwoodtech.com
Products/Services: 2,4,19,40,48

Resource Software International Ltd.(RSI)
905-576-4575
www.telecost.com
Products/Services: 4,31

S

Salesboom.com
902-446-4857
www.salesboom.com
Products/Services: 4,35
Other: CRM

serVonic GmbH
+49 8142 4799 x12
www.servonic.com
Products/Services: 16

Siemens Enterprise Communications
800-310-6308
www.siemens.com/open
Products/Services: 9,17,25,41,48

Sipera Systems
214-206-3210
www.sipera.com
Products/Services: 17,38,41,48

snom technology AG
978-998-7882 x507
www.snom.com
Products/Services: 17,41,48

Spirit
408-540-6033
www.spiritdsp.com
Products/Services: 9,21,34,47,48

Spiritcraft
813-695-6110
gosolo.spiritcraftaudio.com
Products/Services: 16,19,21,25,47

Squire Technologies
+44 1305 757314
www.squire-technologies.co.uk
Products/Services: 12,20,39,41,48

Stage 2 Networks
212-497-8078
www.stage2networks.com
Products/Services: 41,48

Sundance Multi-processor Technology
+44(0)1494-793-167
www.sundance.com
Products/Services: 51

BUYER'S GUIDE 2010

SunTec Business Solutions
609-520-8223
www.suntecgroup.com
Products/Services: 4

System Engineering International Inc.
301-694-9601 x214
www.seipower.com
Other: Critical Power Systems and Backup

T

Talari Networks
408-423-9100
www.talari.com
Products/Services: 12,18,35,48,49

Tekelec
919-460-5500
www.tekelec.com
Products/Services: 7,12,35,40,41

Tekno Telecom LLC
630-579-9800
www.teknotelecom.com
Products/Services: 4,11,39,44,48

Telco Systems, a BATM company
781-551-0300
www.telco.com
Products/Services: 12,18
Other: Media Gateway

Tele Resources Inc.
888-698-8787 x114
www.teleresources.net
Products/Services: 25

Telegrupp AS
372-6-800888
www.telegrupp.ee
Products/Services: 40,48

Telehouse America
718-355-2500
www.telehouse.com

Telenity
203-445-2025
www.telenity.com
Products/Services: 2,25,47
Other: service delivery platform, value added services, converged messaging services

Telesis A.S.
+-903123840540 x060
www.stillink.com
Products/Services: 9,19,39,40,48

Telesoft Technologies
+44 1258 480 880
www.telesoft-technologies.com
Products/Services: 19,22,31,39,43

Telrex
425-827-6156 x2
www.telrex.com
Other: IP Call Recording & Monitoring, speech analytics services

teltronics
941-753-5000 x7292
www.teltronics.com
Products/Services: 16,17,41,48

Tilgin (former i3 micro technology)
+468 572 38600
www.tilgin.com
Products/Services: 18,19,41,45,48

Tilts Visiem (TiVi)
37167881001
www.tivi.com
Products/Services: 2,4,17,21,40

Tinet
+39 07046011
www.tinet.net

Tone Software Corp.
714-991-9460
www.reliatelsolutions.com
Products/Services: 12,35
Other: converged voice management

Toshiba America Information Systems, Telecom Systems Div.
949-583-3700
www.telecom.toshiba.com
Products/Services: 2,16,17,48
Other: IP-PBX, Soft Phones, Unified Messaging, IP Phones, digital phones, wireless

TotalTel
201-574-0193
www.totaltel.com
Products/Services: 16,17,41,48

TransNexus
404-526-6060
www.transnexus.com
Products/Services: 4,31,38,40,48
Other: Least Cost Routing, Number Portability

U-V

Untangle Inc.
650-425-3300
www.untangle.com
Products/Services: 2,35,38,49
Other: Internet Management

Valid8.com Inc.
781-938-1221
www.valid8.com
Products/Services: 10,11,41,44,48

Vertica Systems
978-600-1000
www.vertica.com
Other: Analytic Database Management Systems

Vitelity Communications
303-997-2309
www.vitelity.com
Products/Services: 41,48

W-Z

Voxeo
407-418 1800
www.voxeo.com
Products/Services: 16,19,22,40,48

World Telecom Labs
322-722-7200
www.wtl.be
Products/Services: 4,16,19,39,48

Xirrus
805-262-1644
www.xirrus.com
Products/Services: 51

zCONNEX GROUP
800-715-9990
www.zconnex.com
Other: Consulting

Zultys Technologies
408-328-5431
www.zultys.com
Products/Services: 2,12,40,41,48

MORE ONLINE

For the long-form version of the NGN Buyer's Guide please visit the TMC website, at www.tmcnet.com. The extended NGN Buyer's Guide on the site includes vendor listings both on an alphabetical basis as well as by category.


digium | Asterisk
digium | Asterisk

by Michael Khalilian

Plugging Into the Latest Developments on NGN and IMS Interoperability

In 2009, the forum continued with its interoperability programs, known as IMS/NGN Plugfests, and added new working groups focused on the control plane, IP/OSS/BSS, and the Diameter protocol and security. We published a number of technical guidelines papers related to these topics. And we have seen significant planning around NGN IMS deployments that have been mapped to NGN technology advances and changes in the industry since we held our first plugfest in 2007.

The IMS and NGN Forum held its eighth plugfest on Oct. 5 through Oct. 9, 2009, at the InterOperability Lab in Durham, N.H. While all of the results have not been tallied as of the time of this writing, it was a success by all accounts.

Plugfest 8 focused on interoperability for voice and multimedia applications, BSS/OSS and inter- and intra-network security including:
- end-to-end interoperability testing for IMS and NGN applications and services;
- interoperability of the control plane and the Diameter protocol; and
- charging function impacts on BSS.

Examples of test topics covered in Plugfest 8 included:
- multi-domain scenarios covering user-to-network and network-to-network IMS interoperability;
- application and feature testing across the control plane;
- billing interfaces;
- online and offline charging scenarios for IMS events and sessions;
- interface compliance testing (the 3GPP standard interfaces that use Diameter); and
- topology hiding scenarios (IMS/NGN control plane interoperability including border controllers, legacy network gateways, service location function and policy control elements).

We tested operations, and application management, NGN and IMS deployments, integration of network elements, OSS/BSS and security and QoS evaluations. Plugfest 8 participants and contributors included: Comverse, HP, Mu Dynamics, NTT-AT, Radvision, Sonus, Tekelec, Tektronix, Testing Technologies, U.S. government communications agencies, Japan NICT (National Institute of Information and Communications Technology), Maben-Products, and others.

At Plugfest 8 we also held an initial planning meeting for Plugfest 9 and 10, to be held in 2010. The meeting included service providers and integrators, applications developers as well as governmental research/agencies from the U.S. and Japan. Topics of importance to our members for future Plugfests in 2010 included the following:
- IPv6;
- IMS Rel.7 & 8;
- IPSec for UE;
- SIP signaling compression;
- IPsec using AKA;
- RCS testing (not to overlap with OMA testing);
- VCC single radio and access domains;
- triple play;
- OSS billing.

There also was significant interest in testing for 4G (LTE and WiMAX), femto, VCC and FMC. Defining the ROI for migration to convergence also was important. These are all topics that we will address in the coming year. In 2010 we will focus more on metrics, ROI and business cases and we will devote a working group just to that. Plugfests 9 and 10 will take place in the spring and fall of 2010.

Our plugfests have followed a logical path, becoming increasingly complex as the technology matures, as the following list of titles shows. We have held more NGN IMS interoperability events than any other forum in the industry.

Plugfest 1 – January 2007, "IMS Infrastructure"

Plugfest 2 – June 2007, "Voice and Multimedia"

Plugfest 3 – October 2007, "A Network of Services"

Plugfest 4 – February 2008, "Triple Play, OSS and Billing"

Plugfest 5 – June 2008, "Gm Interface, Load Balancing and Security"

Plugfest 6 – January 2009, "Robustness and Reliability"

Plugfest 7/8 – October 2009, "Home and Visiting Networks"

We are pleased to say that the progression of our series of plugfests to date has followed along with the plan set at the outset to be executed in phases. The phases are outlined below.

Phase I

Defining "reference" IMS test network
Non-stress testing and basic interoperability
Examine interaction of north/south interfaces

Phase II

Enhanced interoperability and interaction east/west
Nomadic services
Forward migration, moving from 2G to IMS
Presence services

Phase III

Focus on performance, scalability and load testing
Basic security (DOS attacks)
Electronic surveillance (CALEA requirements)

Phase IV

Security and support systems, advanced attacks
Enhanced security, support systems
Multiple types of IMS networks

We look forward to seeing what new advances our plugfests will bring in 2010. We welcome all of the telecom industry to get involved in helping us move the bar for NGN and IMS services. **NGN**

Michael Khalilian is chairman and president of the NGN Forum & IMS Forum (www.NGNForum.org / www.IMSForum.org).