



Unified COMMUNICATIONS

Discover Convergence Opportunities

TMC Labs Innovation Awards

Volume 5/Number 3

June 2011

www.uc-mag.com

Mobility & UC

IN THIS ISSUE:

- Strategies for Collaboration Technologies and User Adoption
- Five Key Factors to Success in Videoconferencing
- Top UC Security Issues and Steps to Mitigate Your Enterprise Risk

Jabra®

Introducing the Ultimate Headset

for PC Softphones & Mobile Phones



The **Jabra BIZ 2400 USB** headset is configured for business and contact center professionals. Hand-made Neodymium speakers provide maximum frequency response, resulting in greater call clarity, fewer misunderstandings and better all-around customer service. It is the ultimate IP/multimedia experience, including a version optimized for Microsoft® Lync™. **To learn more about the Jabra BIZ 2400 USB call Fontel Inc. at 800-238-0787 or visit our website at www.fontel.com.**

fontel
inc

Fontel, Inc. understands the importance of offering our customers cutting edge solutions to carry them into the future. We are a Premier Distributor and are proud to offer the latest in digital sound and VoIP.

800-238-0787 • www.fontel.com

OPTIMIZED FOR
Microsoft® Lync™

Jabra®
AUTHORIZED
DISTRIBUTOR

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)

Jennifer Russell, Copy Editor (jrusell@tmcnet.com)

TMC LABS

Tom Keating, Executive Technology Editor/CTO/VP (tkeating@tmcnet.com)

ART

Alan Urkwach, Senior Director, Creative and Operations

Lisa A. Mellers, Graphic Designer

EXECUTIVE OFFICERS

Nadji Tehrani, Chairman and Founder

Rich Tehrani, CEO

Dave Rodriguez, President

Michael Genaro, EVP of Operations

Editorial Offices: 203-852-6800

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

ADVERTISING SALES

Sales Office Phone: 203-852-6800

Anthony Graffeo, Vice President of Business Development (agraffeo@tmcnet.com), 203-295-0234

About Unified Communications Magazine®

Today's enterprise workforce is demanding productivity enhancing communications solutions from their IT and telecom departments. Unified communications technology is at the heart of these solutions that improve business processes and transform the way people communicate. Unified Communications magazine features a comprehensive, targeted news and editorial designed to provide decision makers the information they need in order to make intelligent investments in UC technology.

Subscriptions

Circulation Director, Shirley Russo, ext. 157 (srusso@tmcnet.com)

Unified Communications 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; \$25 U.S. nonqualifying, \$35 Canada, \$50 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: Unified Communications Magazine®, Technology Marketing Corporation, RiverPark 800 Connecticut Ave. 1st Fl., Norwalk, CT 06854-1628 U.S.A. Canada Post: Publications Mail Agreement #40612608 Canada Returns to be sent to: Pitney Bowes, P.O. Box 25542, London, ON N6C 6B2, CANADA

Unified Communications Magazine® is a registered trademark of Technology Marketing Corporation. Copyright © 2011 Technology Marketing Corporation. All rights reserved. Reproduction in whole or part without permission of the publisher is prohibited.

Reader Input

Unified Communications 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 Unified Communications Magazine®, please contact Reprint Management Services at The YGS Group Reprint Division, 3650 West Market Street, York, PA 17404, 717-505-9701 or 800-501-9571 x105 – tmcnet@theYGSgroup.com.

For list rentals, please contact Jill Olsen at JJOlsen@listincorporated.com or call 914-765-0700 ext. 105.



A Technology Marketing Publication
RiverPark 800 Connecticut Ave 1st Fl.
Norwalk, CT 06854-1628 U.S.A.
Phone: 203-852-6800 Fax: 203- 295-3773

Where It's At

Despite economic challenges, the communications industry continues to move forward on a number of fronts, including HD voice and SIP trunking; and growth on the social networking arena continues at an unprecedented pace, making funds more easily accessible to companies in this camp.

HD voice is expected to grow significantly over the next three years, says Doug Mohny, editor in chief of HD Voice News and a TMCnet contributor. Already, he says, tier 1 service providers including Cincinnati Bell, Comcast, France Telecom, and Verizon are leveraging the technology. Meanwhile, 17 mobile carriers have announced plans for or introduced HD voice in Asia, Europe, the Middle East, and North America.

"Anyone involved in telephony who is not tracking HD voice better wake up fast," says Mohny. "Verizon Business is going to make HD voice and video announcements in the coming weeks and Verizon Wireless will deliver HD voice in 2012 when they turn on VoLTE. Comcast is a good bet for the first tier 1 voice provider to deploy residential wideband service if they can get the right CPE out of its suppliers."

Comcast could launch HD Voice trials as early as this year, he adds.

But what happens with tier 1 SIP peering will play a key role in the future of HD voice, Mohny continues.

"The biggest single headache for HD voice – and video for that matter – is the need for tier 1 SIP peering," says Mohny, who created the research report "HD Voice 2011: Critical Mass," which can be purchased at <http://www.tmcnet.com/voip/ip-communications/>. "It's a Layer 8 and 9 problem, money and politics, not technology. We don't need more stinking technology, we need service providers to wake up and start making arrangements before the FCC and Congress decides to 'fix things' themselves."

Meanwhile, Diane Myers of Infonetics Research says that SIP trunking had a breakout year with 143 percent revenue growth in 2010. SIP trunking and hosted UC telephony are the two fastest growing areas in the VoIP space, Infonetics reports.

"The VoIP service market weathered the economic turmoil of the last couple of years, and, with increasing customer adoption, reached \$49.8 billion in 2010 (compared to \$34.8 billion in 2008)," she adds. "While the residential services segment remains the largest of the market at 69 percent of total revenue, business VoIP services are growing at faster rates."

Residential VoIP subscribership continues to climb, with an increase of 19 percent last year, meaning 157 million worldwide subscribers. The leaders in residential VoIP are NTT, Comcast and France Telecom, in that order, according to Infonetics Research.

The firm forecasts the business and residential/SOHO VoIP services market – which saw 20 percent growth for IP Centrex and hosted UC services last year – will reach \$74.5 billion in 2015 and that managed IP PBX business VoIP service revenue will more than double from 2010 to 2015.

As for social networking, everybody knows this area is hot. But in case there was any doubt, the recent initial public offering of LinkedIn clearly demonstrated that.

The company's offering soared 100 percent just minutes after it hit the market, blowing the roof off expectations. When the market closed the day of the IPO, LinkedIn was valued at whopping \$8.9 billion. Of course, this is just the tip of the iceberg.

Facebook's IPO is expected to be in the neighborhood of \$76 billion. And, pre LinkedIn IPO, some folks were putting Twitter's value at more than \$7 billion. **UC**



by Paula Bernier



CONTENTS

June 2011
Vol. 5 No. 3

- 1 Editor's Notes**
Where It's At
Paula Bernier
- 4 Publisher's Outlook**
Bin Laden's Death, Mobile and Social
Rich Tehrani
- 12 Hot Topic**
Technical Support That Helps Ensure 'Must Work' Products Work
Kurt Hogan of Accenture
- 14 Now UC It**
Reducing Complexity and Risk When Adopting UC
David Schenkel

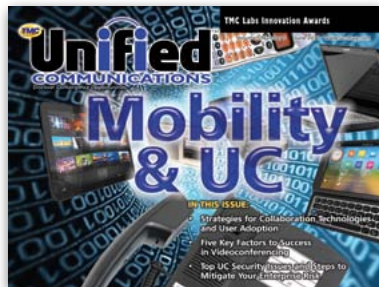
- 16 The Voice of IP**
Porting Without Porting: A Taxonomy
Jonathan Rosenberg
- 18 Guest Room**
First-to-Market Hosted, Multi-tenant Microsoft Lync Product Launches in the U.S.
Bob Barnes of CallTower
- 20 Unifying Views on UC**
Putting the Mobile in Your UC
Michael F. Finneran of UCStrategies

FEATURES

- 28 Strategies for Collaboration Technologies and User Adoption**
Mitchell Hershkowitz of Dimension Data
- 30 Five Key Factors to Success in Videoconferencing**
Allen Drennan of Nefsis
- 32 Top UC Security Issues and Steps to Mitigate Your Enterprise Risk**
Frank Semmler of Siemens Enterprise Communications
- 36 Hosted or PBX? How About a Blend of Both?**
Randy Richardson of Star2Star
- 38 The Role of the Interconnect Network in Enabling HD Voice Communications**
Mohan Palat of Sonus Networks
- 40 Movius Q&A**

OTHER ITEMS:

- 6 News**
- 41 Special Focus: UC Magazine Reveals TMC Labs Award Winners**

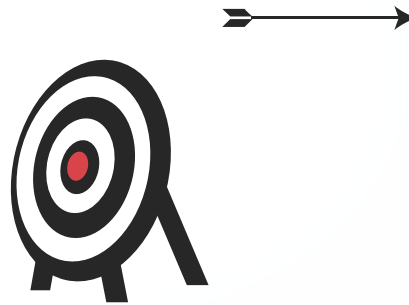


COVER STORY PACKAGE:

- 22 The Next Radio WAVE**
A company called Twisted Pair Solutions, has a product that enables different radios – whether analog or digital, and from any equipment provider – to talk to one another. In another move forward for unified communications, Twisted Pair recently unleashed version 5.1 of its WAVE solution.
- 24 New York City Has a PLAN**
When emergency strikes, helping people understand what to do is of key importance. Now NYC has a PLAN.

- 26 Former MITers Unveil Kurogo Mobile Framework**
We all love our mobile devices and the wealth of information they can provide us. But sometimes it's not as easy to get the info we seek as it should be. To help address that, Modo Labs has introduced the Kurogo Mobile Framework, a platform that mobile developers of any skill level can use to build and customize mobile applications and features for businesses and universities.

Selling the right product to the wrong customer?



EMBRASE

San Francisco • Boston • Montreal

Product-Market Fit Experts

1-800-362-7273 • embrase.com



Bin Laden's Death, Mobile and Social

In the wake of bin Laden's death it is worth reflecting on how consumers learned about the incident – which was first live reported by Sohaib Athar, an unsuspecting bin Laden neighbor who tweeted the fact that he heard a helicopter and a subsequent window-shaking bang (a rare event as he called it).

by Rich Tehrani

Later, a commenter @naqvi on Twitter made the connection to these events and the Obama press conference that confirmed what had happened.

Of course, later the hard news and analysis did come from the mainstream media, with lots of commentary from the social world.

What is most interesting to me, however, is the cheering that took place at a baseball stadium when the crowd learned about the bin Laden news. Specifically, there was TV coverage of how people in the crowd were scanning their cell phones for the news and sharing it with others in the crowd. The concept of news circulating via social faster than TV is not something we haven't discussed before. But this stadium example of a large group learning about an important event via people at the center of an informal social circle shows you how news dissemination and the web have evolved over the years.

Speaking of large groups, as folks turned to Twitter to get information and comment on the news of bin Laden's death, the social networking site hit a new

record high of tweets even before President Barack Obama took to the White House podium to confirm that bin Laden had indeed been killed.

Twitter reportedly experienced 3,000 tweets per second from 10:45 p.m. – when the news started to spread – until 2:20 a.m. ET. Its traffic peaked at 5,106 tweets per second at

The concept of news circulating via social faster than TV is not something we haven't discussed before. But this stadium example of a large group learning about an important event via people at the center of an informal social circle shows you how news dissemination and the web have evolved over the years.

11 p.m., shortly after President Obama went in front of the cameras, and at 11:45 p.m., when he concluded his speech, with 5,008 tweets per second. Meanwhile, as of Tuesday morning, Athar's Twitter followers exceeded 94,000.

Also of note is the fact that news of Osama bin Laden's death not only increased social media traffic,

it led to a greater potential for spam and malware. Indeed, the SANS Internet Storm Center put up a warning right after the announcement was made that bin Laden had been killed, according to Ed Silverstein's recent posting on TMCnet, the online news and information source of TMC, the parent company of Unified Communications Magazine.

"With any large news event like this, we expect a flurry of e-mails, and likely black hat search engine operations trying to take advantage of the event to distribute malware," the center said.

"There are some image searches that return an image claiming to be an image of dead bin Laden, but right now, none of the servers hosting it respond," Johannes Ullrich, chief technical officer of SANS Internet Storm Center, said in a blog post. "Some of the sites return SQL errors indicating that the sites are receiving too much traffic."

Indeed two hours after the official announcement about bin Laden's death, sites claiming to have photos of the terrorist leader's dead body started to appear, according to

The Inquirer. In the case of one of these sites, Michael Sutton, vice president of Zscaler, a cloud security firm, told The Inquirer, "when viewers clicked on the link they were asked to download a VLC codec, which was in fact an adware tool called hotbar, a piece of malware that 19 out of 41 current antivirus engines can detect." **UC**

MAKE YOUR CONNECTIONS WITH JABRA!



Jabra's wireless and corded headsets have successfully completed compliance testing with Avaya's 9600 and 1600 series telephones. Jabra PC Suite enables integrated call control from Avaya One-X Communicator, One-X Agent, IP Soft Phone, and IP Agent.

Jabra headsets are recognized worldwide in being first to market with superior technology innovations, and award-winning design and style, resulting in proven unified communication solutions that enable your organization to maximize your return on investment.

Our critics agree, as Jabra is a recipient of the Frost & Sullivan Customer Value Enhancement Award along with Customer Interaction Solutions Magazine Product of the Year Awards for the Jabra PRO 9470 and Jabra GO 6430.



Jabra headsets ensure you and your users will stay connected anytime, anywhere, providing the best communications experience on every call.

For more details on Jabra's complete line of Avaya tested products, please visit us at: www.jabra.com/Avaya





NEWS



Polycom Provides Channel Partners with Better Choice

by Paula Bernier

Polycom has updated its Choice program by making it more simple, predictable and profitable for the company's channel partners. The company, whose sales are almost entirely through the channel, introduced the Choice program one year ago.

The company wants its partners to understand how they can capitalize on the Polycom channel program, so it created a very straightforward rewards structure and identified opportunities to accelerate those rewards, says Deandra Cassidy, director of global channel marketing at Polycom. As part of this effort, channel account managers do quarterly reviews to help partners get a better handle on where they are with their rewards.

There will be an automated system for partners to register new opportunities with Polycom. And starting this year Polycom will introduce a lead routing system to get opportunities to partners that are specialized in the areas that match customer needs. Also new this year is a customer locator tool.

Cassidy explains that the company has spent a lot of time aligning its sales, marketing and technical coverage model.

Polycom's gold and platinum channel partners get dedicated channel account management and a systems engineer.



And a new Global Partner Response Team, Cassidy continues, will help Polycom partners negotiate interactions with the company and get quick responses on any questions they might have.

This year the company launched an inside sales/telesales effort, through which it will support a large number of channel partners, she adds. Part of that effort involves end user demand creation, meaning this new team will qualify leads and, starting in the next quarter, do enhanced lead routing.

Maurizio Capuzzo, vice president of global channel marketing, adds that the Choice program was designed to meet the individual needs of Polycom's channel

Starting this year Polycom will introduce a lead routing system to get opportunities to partners that are specialized in the areas that match customer needs.

partners, which range from VARs and integrators, to distributors, to service providers.

"So our approach is not one program that fits the partners in one big framework... but very customized," he says. **UC**



E-SBC

Sipera's **NEW** Enterprise Session Border Controller

Learn more at www.sipera.com/esbc

- Safe SIP trunks: best protection against toll fraud, intrusion, security risks
- Faster ROI for SIP trunks, lower TCO, calls in minutes not months
- Upgradable to the industry's best and proven VoIP & UC security
- All the SBC you need, 10% of the cost



Join the Session Border Controllers Online Community today >>>

<http://session-border-controllers.tmcnet.com/>



NEWS



<http://tmcnet.com/58837.1>

UC Outfit Grows Revenue

ShoreTel says its third quarter fiscal year 2011 revenue was \$51.6 million, up 8 percent from the second quarter and up 39 percent from the same quarter a year ago. Peter Blackmore, the new president and CEO of ShoreTel, says: "Results were driven by strength among our core customers and carrier partners and revenue from major accounts. Additionally, ShoreTel won a notable new partnership with Vodafone in Europe. To put our revenue growth into perspective, ShoreTel's quarterly revenue jumped from \$40 million to \$50 million in just three quarters, a fraction of the time it took the company to pass from \$30 million to \$40 million."

www.shoretel.com

<http://tmcnet.com/58838.1>

Bobsled Hits a Barrier

T-Mobile's VoIP app, referred to as Bobsled, was pulled only days after it was released in mid April. The move was due to objections made by Facebook concerning the application's design. Bobsled allows Facebook users to make and receive free voice calls to and from their friends. Using the voice service, members can also record and post voice messages to their friend's Facebook walls.

www.facebook.com

www.t-mobile.com



<http://tmcnet.com/58839.1>

Interactive Intelligence Wins New Business

Dawson McAllister Association, which hosts a call-in radio show aimed at helping troubled teenagers and operates the call-in service HopeLine, has adopted Interactive Intelligence's cloud-based Communications as a Service. A hosted, standards-based, all-in-one IP communications software suite, this solution eliminated the need for the association to purchase and maintain hardware and add IT staff. Micky Thompson, CIO of the Dawson McAllister Association, says:

"It didn't require us to purchase its hardware, and we could also keep our existing systems, like the Avaya PBXs. We could even have our volunteer agents working at home, since the solution wasn't location-specific."

www.inin.com

<http://tmcnet.com/58840.1>

Downloadable Android Video Connect Is In Store

Qik Video Connect, a new version of Qik for Android and an update to the latest Qik iPhone app, is now available. Qik officials claim this is "the first time the video chat capability is available in the Android Market via download and not just as a pre-loaded app."

www.qik.com

<http://tmcnet.com/58841.1>

Videoconferencing Offer Includes Smartphone App

AVerMedia Information Inc. has introduced what it calls a budget-friendly, flexible and convenient videoconferencing line with the new H310 and H110 solutions that feature a smartphone application. This new AVerLink mobile smartphone applica-



tion for iOS and Android OS is integrated with a personalized phonebook. This helps with the sharing of images and controlling the system remotely during live conferences. "The all new H310 and H110 were designed to offer incredible value while providing easy-to-use features, added content mobility and seamless integration into a variety of environments," says Eric Yu, product management director for AVerMedia.

www.avermedia-usa.com

<http://tmcnet.com/58842.1>

VidyoMobile Available Next Month

Vidyo Inc., a provider of personal conferencing and telepresence services, has introduced VidyoMobile, which will be available starting next month for enterprise users already using Vidyo Conferencing. VidyoMobile will enable enterprise mobile users on iOS or Android-based smartphones or tablets to join multi-point videoconferences with desktops and HD room system participants. "By enabling devices like smart phones and tablets to participate effectively in video conferences with room systems and desktop users, VidyoMobile is a giant step in making Vidyo's vision of natural communications universally available a reality," says Ofer Shapiro, CEO and co-founder of Vidyo.

www.vidyo.com

<http://tmcnet.com/58843.1>

Nefsis Offers New Twist on Security

A specialist in videoconferencing software and cloud computing online services, Nefsis is making use of SSL/TLS encrypted connections to secure its web, VoIP and video data. The company says this an unusual practice. Such encryption is normally used only in web conferencing and online services, given SSL/TLS with full public key infrastructure or PKI has been established as the prevailing industry standard to secure web services. Traditional room-based videoconferencing systems typically leverage several

mechanisms including AES symmetric-key encryption with manual key management.

www.nefsis.com

<http://tmcnet.com/58844.1>

EagleEye Takes Video to New Level

Polycom has added to its portfolio of conferencing solutions. New from Polycom is the EagleEye Director, which features voice triangulation, face-finding technology and a dual-camera tracking system. That delivers what the company says is the ultimate face-to-face conferencing experience. Available as an option for HDX Room Telepresence systems, the EagleEye Director automatically pinpoints and focuses on speaking participants, thus abolishing the necessity for camera panning.

www.polycom.com

<http://tmcnet.com/58848.1>

SANS Institute Talks Security

SANS INSTITUTE

Information security training firm The SANS Institute last month taught the "Security 540: VoIP Security" course at the SANS Secure Europe event in Amsterdam. The six-day course debuted last year in Sacramento. "Voice over IP is a rapidly growing area due to the huge cost saving potential but organizations often fail to consider the security impact," says Paul Henry, an information security and computer forensic expert and SANS Institute faculty member. Henry points to arrests made last year in Budapest and London of 30 members of an organized criminal gang that allegedly stole 11 million Euros through VoIP toll fraud.

www.sans.org

<http://tmcnet.com/58845.1>

Broadvox, Jazinga Interoperable

Jazinga's Unity 2000 IP PBX has achieved interoperability certification from Broadvox. Customers who have the Jazinga Unity 2000 and Broadvox GO! SIP Trunking will now be able to enjoy cost-effective IP communications, whether migrating in stages from TDM or making a complete switch to VoIP, as a result of this new certification, according to company officials. Randy Busch, CEO of Jazinga, says: "The extensive Broadvox certification requirements assure Jazinga customers and distribution partners of the availability and dependability of the two companies' combined service offerings."

www.broadvox.com

www.jazinga.com

<http://tmcnet.com/58846.1>

Mirial Adds Xoom, ThunderBolt

Motorola Xoom and the HTC ThunderBolt are now among the catalog of certified products for Mirial ClearSea. Motorola Xoom features a dual core processor and runs on an Android 3.0 platform designed for tablets. The HTC ThunderBolt offers LTE connectivity, a 4.3-inch touch screen in an aluminum body, a 1GHz Snapdragon processor, 8MP camera with dual-LED flash, 720p video recording and 802.11n Wi-Fi.

www.mirial.com

<http://tmcnet.com/58847.1>

Forum Unveils FoIP Spec

The i3 Forum has released the Technical Specification for Fax over IP Service, Release 1.0. The forum encompasses 39 telecommunication providers that reach a combined retail base of more than 1.5 billion customers in more than 100 countries. Philippe Millet, Chairman, i3 Forum, says: "Fax services at the domestic



NEWS



and international level are still a key source of revenue, and need to be supported in any IP voice environment.”

www.i3forum.org

<http://tmcnet.com/58850.1>

Vidyo Serves Vatican City

The Vatican City has selected and deployed Vidyo's Vidyo Conferencing to enhance interactions between the various locations throughout the organization. The Vidyo platform will be used for communications between employees and clergy in central offices such as the Governatorate and the Roman Curia, and in other offices on all continents.

www.vidyo.com

<http://tmcnet.com/58849.1>

Smoothstone Pocketed by West

West Corp. will pay approximately \$120 million to acquire Smoothstone in an acquisition that is expected to close in the second quarter. The acquisition will boost West's unified communications business, which includes InterCall. Smoothstone is known for their IP telephony work, selling software-driven apps that exist in the cloud and are delivered through a

software-as-a-service model. Todd Strubbe, president of West's Unified Communications operating segment, says using Smoothstone's portfolio and cloud-based services delivery model "our clients will be able to focus on business initiatives that help drive their competitive advantage rather than on evolving IT infrastructure."

www.west.com

<http://tmcnet.com/58851.1>

New App Enables Videoconferencing x4

Fring is now offering a group videoconferencing application that allows users to conference four friends at a time. The new application is available for download on iPhone and Android-based devices.

www.fring.com

<http://tmcnet.com/58852.1>

UC From Mitel Expands to Android

Mitel has announced the general availability of its Unified Communicator Advanced software for devices that run on Google's Android mobile operating system. That means Mitel's portfolio of UC applications is now available to owners of Android-based mobile devices and those manufactured by Research In Motion, maker of the enterprise-focused BlackBerry line of devices. "The BYOD trend is a big challenge for companies that need to supply a consistent set of communications services across their entire workforce," says Stephen Beamish, vice president of marketing and business development at Mitel. "With the addition of a mobile client for Android, we further extend the in-office experience anywhere by leveraging the native capabilities of the device for enhanced UC application integration."

www.mitel.com



Smarter Superior

Communities...

Results...

You need an Online Community for your business. Here's why:

Reason #22

Your TMCnet Online community will achieve high organic ranking on major search engines.

Most people start their search for purchasing decisions online, so it's more important than ever to rank highly and be viewed as the thought leader in your industry.

TMCnet
.com



To learn how you can build your own customized Online Community, contact Anna Ritchie at aritchie@tmcnet.com or call 203-852-6800 x 107



Technology Marketing Corporation • 800 Connecticut Ave, 1st Floor East, Norwalk, CT 06850 USA
Copyright © 2011 Technology Marketing Corp. All Rights Reserved



Technical Support That Helps Ensure 'Must Work' Products Work



by Kurt Hogan

Long considered lifestyle products, consumer electronics devices have become essential business tools. And, because they have become essential to business success, a malfunctioning mobile phone or PC can become a career-damaging event. This "must work" requirement has opened up a huge opportunity for companies in the field of technical support, especially for those that can serve as a one-stop shop for multiple devices and brands.

A new Accenture survey of 3,886 technology consumers in 21 countries shows that 68 percent of technology users would want technical support to reduce the likelihood of serious computer problems that could put data at risk or require costly repairs. Sixty-seven percent of those surveyed indicated that they want increased security from virus and malware attacks that could put data at risk. Sixty-two percent desire improved computer speed for tasks, such as browsing the Internet, and 57 percent indicated that they would like help obtaining the latest software or security patches.

The most interesting finding of the survey was that 63 percent of the "super-users" – people who own and use 14 or more consumer electronics devices – indicated that they would like to have one company provide technical support for most or all of their home and mobile consumer electronics devices, regardless of the specific communications services they use, which range from fixed landline to wireless, broadband, cable and satellite services.

Consumers clearly recognize the value of integrated support to help manage their home and mobile devices, ranging from in-home support, including remote access, to live call center and web support to e-mail. In the near future, this concern will only broaden, especially as people integrate their business hardware into the home network

environment and use smartphones much the way they use computers, to browse the web, pay bills and play games.

There are many sectors from which new technology support services could emanate. However, when the smoke clears, service providers will emerge in a top position to take advantage of this opportunity.

A broadband service provider has direct contact with its PC user customers, and a hugely vested interest in improving customers' experiences. Whether a service provider, OEM, or retailer provides technical support – and all of these are potential candidates to do so – the ultimate goal must be a superior customer experience. Delivering a high quality technology support experience to customers must be the key driver.

While service providers are well positioned from the standpoint of direct customer experience, it's not yet clear where consumers will ultimately turn for support of their digital lifestyles. There are stringent criteria to meet. Users want service that is personalized, designed to address problems that they are most likely to encounter, and simple enough to keep their technology up and running with minimal effort.

There are several aspects providers should consider if they decide to provide premium technology services to consumers and enterprises alike.

- Adopt a systems integration mindset to address today's digital ecosystem – Today's digital ecosystem requires providers to offer a set of changing technology services, compared with providing tech support for a fixed asset.
- Offer specialized technology services for higher value – A technology support solution must be segmented to align with individual customers' needs and accommodate a broad range of technologies. Therefore, it must be designed to handle the increasing complexity and rapid deployment of applications and hardware.
- Put convenience first – Technology support must be convenient for the end users, performed at times and in a way that avoids negative impact on their daily lives.
- Provide an industrial strength solution – Very high quality and cost effectiveness, relative to users' investment in their technology, are key elements. Only an extremely reliable solution delivered at the right price points can produce consistent results and adoption at scale.
- Address the complex technology ecosystem – Consumers have high expectations and a plethora of technology, and providers must weigh scope of support expectations heavily to avoid customer dissatisfaction.

Now is the time for service providers to evolve from one-size-fits-all solutions to a more focused approach that utilizes deploy once/fix-everything, software-driven models. There's an opportunity for service providers to capitalize on today's digital home trends as a means of pursuing profitable growth if providers are willing to rethink their business models, organizations, processes and systems for helping consumers transform their digital home experience. Only then can providers create an enhanced customer experience to generate revenue, and help increase customer loyalty and satisfaction. That's a recipe for success by any service provider's definition. **UC**

Kurt Hogan is senior executive of premium technology services at Accenture (www.accenture.com).

High Definition video conferencing on Low Bandwidth



Vu TelePresence allows your business to gain the convenience and efficiency of conducting remote meetings, reviews, and interviews from the office or boardroom - with the realism of higher-end video conferencing systems that cost 3 to 5 times the price. About as easy to use as instant messaging, Vu operates across low bandwidth environments. It's available for multiple room size options, while maintaining HD quality images and sound.

"While other companies in the industry are focused on scaling down their large enterprise solutions to fit a different market, Vu is a customized solution specifically made for entrepreneurs and SMB professionals."

- Vu CEO Devita Saraf



1.888.99.VUMENOW
www.vutelepresence.com

VU[®]
TELEPRESENCE



Reducing Complexity and Risk When Adopting UC

by David Schenkel

Complexity... The Wikipedia article on this topic says "In general usage, complexity tends to be used to characterize something with many parts in intricate arrangement." It's something that our increasingly technological society deals with every day, and unified communications is no exception. Complexity introduces risk, and both pose a major barrier to UC adoption, especially for small and medium-sized organizations and even larger ones that are risk averse. How can you reduce complexity and risk when you adopt UC?

Quite a long time ago, back in the '80s I think, I attended a presentation by a wise person (for whom I sadly can't recall an attribution). He presented a simple graph that showed system complexity increasing steadily over time and a fixed horizontal line intersecting it labeled, somewhat ominously, human cognitive ability. That graph has been rattling about in my head now for several decades. It represents an important lesson for all engineers, inventors and product managers. Make your system or product too complex and people can't understand it, make it work, or even repair it when it breaks. Fortunately, when systems get too complex one of two things tend to happen. Either someone comes up with a more understandable way of doing the task or process (epitomized by the KISS principle – keep it simple, stupid) or we use technology to hide system complexity so that it is rendered simple to understand. This is typically accomplished by using automation to hide complexity. Once a simpler alternative appears on the market, everyone quite naturally migrates to use the less complex alternative.

Generally speaking, the advantages of removing complexity and risk relate to improved efficiency and hence reduced operations costs. So the graph of system complexity over time for each type of system tends to rise above the human cognitive limit and periodically drop back down to an understandable level as market forces come into play. Many people have discovered that this is a good strategy for creating successful products (and hence a lot of money).

So, what should you look for when choosing a UC solution to reduce complexity and risk? Complexity raises its head both during the initial deployment and during the ongoing administration of your UC system, so you should consider both for complexity reduction when choosing your solution.

Deployment complexity can be reduced by using an all-in-one solution from a single vendor that provides as many of the UC features that you need in your UC system as is possible. Generally this type of solution is easier to deploy and maintain, has a single administrative interface for many functions, and fewer integration points that can fail. It also gives you one throat to choke when things go wrong. Look for solutions that offer automated wizard-based deployment that is integrated with your data center administrative tools like Microsoft Active Directory that simplify initial deployment. ADTRAN's NetVanta Enterprise Communications Server is a good example of this type of solution.

Another major complexity/risk point during initial system deployment occurs when interoperability is required with existing equipment like PBXs, phones, etc. Look for system vendors that support interoperability via both standards- and proprietary-based interfaces to these types of products with formal interoperability programs between vendors. Proprietary interfaces to these types of products are often supported by third-party company

products, so look for formal interoperability between the UC product you choose and these third-party product providers rather than the vendor of your existing equipment (which may not offer any formal interoperability for your existing products with a UC system).

Choosing an experienced vendor and reseller that has a program to provide network evaluation, deployment, customized service development and integration services will allow you to offload unavoidable complexity and reduce the risk of deployment problems and unexpected costs and delays. This is especially true if you are planning to create custom IVR, CEBP, or outbound calling type services in your deployment.

Since a lot of complexity in the ongoing maintenance of a UC system comes from on and off-boarding employees, look for solutions that integrate closely with your IT administrative system. Having a single administrative interface for IT and UC reduces complexity. Consequently, you should also look for solutions that integrate with your data center administrative tools such as Microsoft Active Directory and PowerShell; that employ modern graphical user interfaces; and provide wizard-based user configuration to enable data center staff to efficiently manage day-to-day UC operations. Desktop clients that utilize single-user login also reduce account management complexity. You can also utilize software-based solutions that use the same servers and network environment as existing IT services to reduce complexity.

Complexity can kill a UC project. By carefully choosing a UC solution with complexity reduction in mind you can significantly reduce deployment and ongoing management complexity as well as associated risk, deployment time, and both initial system deployment and ongoing administration costs. **UC**

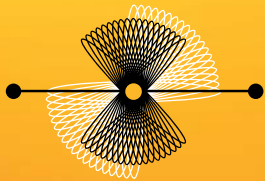
David Schenkel is senior technology analyst with ADTRAN (www.adtran.com).

Contact Center Solutions

<http://callcenterinfo.tmcnet.com/>

Log On Today!

A Global Online Community sponsored by:



INTERACTIVE INTELLIGENCE[®]
Deliberately Innovative

Powered By:



Porting Without Porting: A Taxonomy



by Jonathan
Rosenberg

The Voice of IP

2003 was a landmark year for mobile communications in the United States. No, it was not the year Apple released the iPhone, but rather, the year when number portability between mobile operators was mandated.

Prior to number portability, changing carriers meant changing numbers, a painful process that prevented many users from switching. The pain of getting a new number was good for carriers as a churn reduction tool, but it was bad for consumers. The arrival of number portability meant users could more easily choose between competing carriers.

Some VoIP operators also took advantage of porting. Vonage was among the first to do so, and a handful of others have done so since then. However, porting remains complex – it requires commitment to the target service provider. It takes time, and it requires users to go through a multi-step process. In recent years, new models have emerged that enable users to use their existing phone numbers with VoIP service providers, yet do not require porting – a not-port. How is that possible?

Broadly speaking, solutions for the not-port can be broken into two categories. The first category involves integration with the user's existing carrier (carrier integrated), and the second category is done without any integration with the carrier at all (over-the-top).

The best example to date of a carrier-integrated not-port is Google Voice. In March of 2011, Google Voice announced a partnership with Sprint, whereby Google voice users can use their existing Sprint numbers without porting to Google.

Carrier integrated not-ports involve two parties – an operator and an application provider. Calls to and from a user's device are routed from the operator, toward the application provider, which can then process them (for example, by routing them to additional devices, as in the case of Google

Voice), and then hand them back to the operator for completion of the call. In a sense, the call is hair-pinned from the operator to the application provider and back. Carrier integrated not-port solutions have the benefit of working for all calls to and from the user, without regard to whether the other party in a call is also using the same application provider. They also work without change to the user's end device. However, they require bilateral arrangements with each individual operator, and such arrangements are complex both technically and financially.

Over-the-top solutions, on the other hand, can be done without involvement from any operator. To date, we've seen two distinct categories of over-the-top not-ports. The first category involves a mobile app on a user's smartphone (mobile app), and the second category involves enterprises and uses software installed in their data centers (inter-domain). Good examples of mobile app not-ports are Apple's Facetime, Tango and Viber.

The first time a person uses one of these apps, it verifies the user's mobile number. Through this process, the application provider is able to determine, with a high degree of certainty, that the device on which the application is running is associated with a specific mobile phone number. Verification is typically done through SMS. The user enters in his or her mobile number, and the application provider sends an SMS to the phone which contains a code. The user copies this code into the mobile app, and the verification process is complete. The user is now identified by his or her mobile phone number. To receive a call by any other user of the service, these individuals need only be called using their

existing mobile number. Indeed, for convenience, some of the mobile not-port apps scan the existing address book to find numbers that correspond to existing users of the service. Mobile not-port apps, unlike carrier integrated not-port solutions, only work for calls between users of the same application and require special software to be installed on the user's device.

Inter-domain not-port solutions are quite different. Instead, they are enabled at the domain level with software deployed in data centers, and do not require software on the user's device. They assume that the domain has obtained phone numbers from existing PSTN providers, and utilize VoIP to enable inter-domain calling without sending calls through the PSTN provider.

The best example to date of an inter-domain not-port solution is Cisco's Intercompany Media Engine, which uses Verification Involving PSTN Reachability technology. ViPR, like the mobile-app solutions, involves verification of numbers. Verification is a fundamental process that is shared by all over-the-top not-port solutions. However, ViPR verifies numbers through an invisible process that uses PSTN call detail records as a form of shared secret between domains.

Unlike mobile-app not-port solutions, inter-domain solutions work with whatever endpoint the user has – typically a hard phone in enterprise deployments. Inter-domain not-port solutions are also different in that they are by definition inter-domain, and require that the other domain has deployed compatible technology.

With these solutions now in the marketplace, customers are faced with a new choice: to port, or not-port – that is the question. **UC**

Jonathan Rosenberg is chief technology strategist at Skype (www.skype.com).

ROAM UP TO 350 FEET
MANAGE PC AND DESK PHONE COMMUNICATIONS

UC+

Simplify.

Using Savi® Office as your single source for business audio eases communication and improves collaboration

Easily manage deskphone and PC audio with the Savi Office wireless headset. Improve everyday collaboration by using a single headset to effortlessly mix conference calls or switch between PC audio calls and applications like webinars, video, and Web conferencing. Choose Plantronics, the trusted leader in audio excellence for almost 50 years, to give you ongoing value, quality, service and support to ensure the voice of your business now and into the future.



First-to-Market Hosted, Multi-tenant Microsoft Lync Product

by Bob Barnes

Guest Room

The way in which business people communicate and collaborate has seen rapid changes recently. Workers are increasingly distributed, conducting business from branch locations, home offices and partner sites, as well as from the road. These virtual workers rely on unified communications applications as a way to share information easily and to communicate and interact with co-workers, partners and clients. With the transforming nature of working environments into a more collaborative and mobile model, unified communications is successfully paving its path to the business market.

Microsoft Lync delivers advanced unified communications capabilities and features that are helping companies change the way their employees communicate and collaborate. Enabling rapid access to experts, peers, and decision makers via the most optimal communications method allows business to accelerate business process completion by significantly reducing human latency. Lync delivers benefits for management as well as for information workers, allowing more interaction with the right people to improve a company's efficiency.

CallTower will be the first U.S. company to launch a hosted, multitenant, Microsoft Lync product that delivers the complete business communications solution. The product, called NextUC, is a one-stop shop for fully integrated unified communications that combines telephony, presence, chat, conferencing, video, collaboration and mobility in one single cloud-based platform that can be leveraged on a wide variety of platforms including Windows, iOS and BlackBerry. The platform allows for more collaborative, engaging and effective experiences for end users while cutting the client's infrastructure costs. NextUC is unique in that it provides a truly integrated

enterprise telephony and unified messaging solution in addition to the base Lync product from Microsoft.

CallTower's long and successful history of delivering cloud-based unified communications led to this unique approach for small businesses. The user experience and product requirements are far different for the small business than they are for larger businesses. The foundation of the product is based on providing exactly what the small organization needs, which includes support for a broad range of endpoints; the full suite of communication services from a single provider; services that all work together seamlessly; automatic integration to key cloud companies like salesforce.com, netsuite and others; and full, independent, fast and automated provisioning, onboarding and service.

The service suite will include telephone service, unified messaging, e-mail, calendaring, client-to-client video-conferencing, web conferencing, audio conferencing, rich presence, enhanced call routing, auto attendants and chat, among other services. NextUC will deliver the service to all of the main operating systems on the desktop as well as mobile environments including Windows, iOS, Android

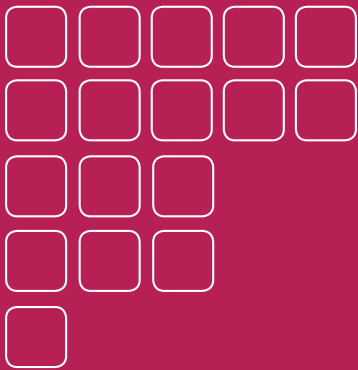
and Windows Phone. The key benefit for customers is that this approach allows a very wide array of hardware device support including PCs, Macs, Windows Phones, iPads, Android Devices and BlackBerrys.

One key characteristic that drove much of the product approach is the dispersed and mobile nature of the small business. Small businesses generally want to appear larger, want to be easily accessible, must be mobile and dispersed, and need a product that is easy to use.

NextUC will be delivering the cloud integrations about three months after the initial July launch. These integrations are extremely important for the small market space and will help drive customer adoption and satisfaction. Small businesses do not generally have easy access to IT resources necessary to make these types of integrations possible on their own, and CallTower believes these can provide immense value for their clients. Some of the key functionality will include click to dial, communication history, screen pops and call routing integrations.

The NextUC model is also partner friendly. There is a clean partner program that can be leveraged by a wide range of organization types with an easy online application process. Once approved, the partner will receive recurring commissions for a year for any customers that chose to associate their assigned ID to their onboarding activity. In addition, NextUC enables a wide potential range of IT-related activities inside of the customer environment that are not provided by NextUC. Some examples of these activities can include Sharepoint site development, call routing design, PC support, LAN support and wireless device support. **UC**

Bob Barnes is executive vice president of sales, marketing and business development at CallTower (www.calltower.com).



SIP Trunk-UC Summit, ITEXPO September 13-15, Austin, Texas

Get the facts about SIP trunking and Unified Communications. Learn everything you need to know from the industry's top experts in these educational seminars, free for all ITEXPO attendees. New sessions, ROI strategies, case studies and more. More information to come on www.ingate.com.

SIP Trunking Global Online Community

Visit the SIP Trunking Global Online Community, sponsored by Ingate and powered by TMCnet. A community designed to serve as an educational resource for users looking to learn more about SIP trunking and how to use this technology to benefit their business - <http://sip-trunking.tmcnet.com/>.

MAKING
SIP TRUNKING
POSSIBLE

inGate

The Ingate E-SBC

[ENTERPRISE SESSION BORDER CONTROLLER]

SECURE SIP TRUNKING SOLUTIONS

WHY SIP TRUNKING?

- Enhanced productivity
- Proven ROI in less than a year
- Opens the door to Unified Communications

WHY INGATE?

- Simplified installations
- Interoperability
- NAT traversal
- Security
- Scalability
- Reliability
- Affordability

CHANGING THE WAY
BUSINESS GETS DONE



Putting the Mobile in Your UC



by Michael F. Finneran

Unifying Views on UC

One of the core tenets of unified communications is the ability to access all of your enhanced communication and collaboration tools either in or out of the office. However, while all of the UC vendors offer mobile clients (and promote them endlessly), the uptake on the user side has been negligible. While conducting a number of sessions at a recent trade show, I polled the audiences at several sessions to see who was using those mobile UC tools. I found a total of five users, and three of them worked for Cisco!

Clearly there has been a disconnect here, and it could be one that effects the whole UC value proposition. Users are increasingly mobile, and UC holds the promise of providing more functional and efficient communications to those harried mobile users. So why aren't they jumping on this with both feet?

There appears to be a number of factors coming into play. First, the mobile UC products simply aren't providing enough of what users are looking for. Most mobile UC implementations involve installing a client on the mobile device that allows access to the corporate directory where presence status is displayed and users can then click to dial or text. However, this is different from the way users are accustomed to using their mobile phones.

What the UC vendors have failed to grasp is that people really like the way their phones work, and you would have to be offering something akin to eternal life to get them to change. Saving a few moments per day in making internal calls falls somewhat short of eternal life. Further, as most people use their mobile devices for both business and personal calls, you are asking them to handle those two sets of functions differently.

Another major factor is that what is new in UC is often old news in mobility. Take for example the idea of clicking to join a conference. This is indeed a very useful feature, but we've been able to do that on a BlackBerry for ages. Similarly, the ability to dial a number embedded in an e-mail or a Word document might be big news in UC, but it's old hat in mobility.

Therein lies the UC vendors' biggest challenge in gaining traction in the mobile space. They are trying to do what the mobile solution is already doing, and doing it better than they can. When it comes to supporting the mobile user, the mobility companies simply have been focusing on it way longer than the UC crew and hence have developed better mobile solutions. That is certainly the case with BlackBerry and is increasingly happening on the more consumer-oriented Apple and Android platforms as well.

The UC vendors also face some major challenges in delivering that same degree of functionality. For a variety of reasons, the mobile device manufacturers do not expose all of their APIs to third-party developers. In some cases that has to do with ensuring a consistent user experi-

ence. (Apple is very big on that.) And, in some cases, it has to do with the security exposure that could result from allowing applications to access potentially sensitive contacts, calendar entries, or other information on the phone. There is also the issue of the mobile vendor looking to maintain control of particular functions for marketing or contractual reasons. We certainly saw that in the early days of the iPhone when applications that allowed tethering or VoIP over 3G mysteriously disappeared from the iTunes store in the dark of the night.

There is a lot more at stake for the UC vendors than the few bucks they might make by selling a mobile UC client. That financial consideration is shrinking in importance as the mobile UC client may be offered as a free add-on with the UC seat license; Cisco's CUWL licensing is a good case in point. If the user's primary access to communications is shifting from the desk to the mobile, and they're looking to the mobility vendors to meet their needs, where does that leave the UC vendor who's touting a solution for a desk the user is never at?

Mobility companies like RIM and possibly mobile device management vendors like AirWatch, MobileIron, Sybase and Zenprise could begin adding UC-like capabilities to their offerings. They might need to partner with gateway and session border controller vendors like Acme Packet, AudioCodes or NET to round out the offering. But the locus could easily shift from the vendors who are grounded in wires and desktops to UC offerings centered on the mobile universe.

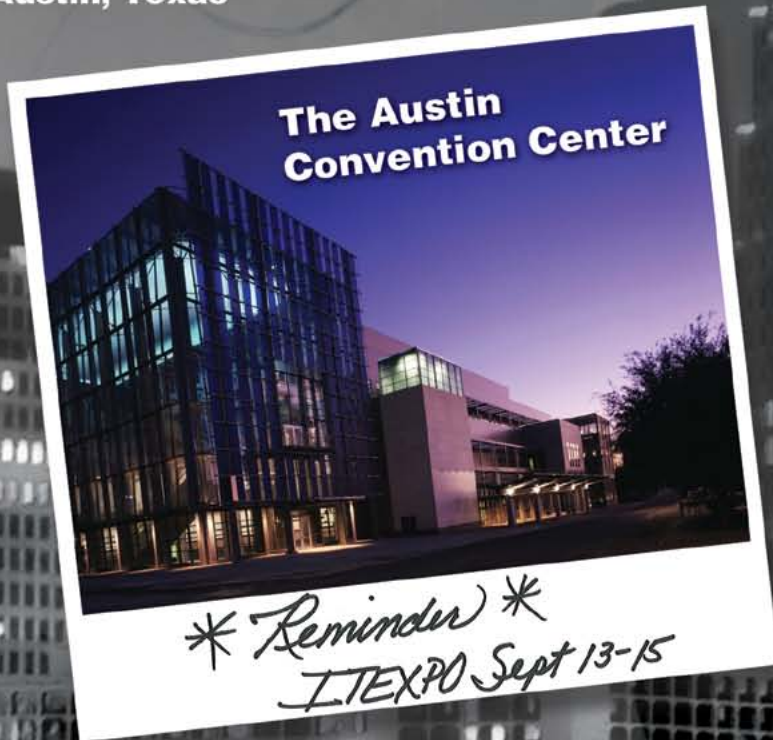
Remember, just because they don't call it UC, if it walks like a duck, . . . **UC**

Michael F. Finneran is a UC expert at UCStrategies (www.ucstrategies.com).

The New Home

of ITEXPO West 2011

September 13-15, 2011
The Austin Convention Center
Austin, Texas



The industry's best attended event attracting thousands of communications professionals

The One and Only Event for:

- Enterprise/SMBs
- Government
- Healthcare Agencies
- Service Providers
- Resellers
- Developers

Platinum Sponsors:



Supported By:



Follow Us On:



#ITEXPO



The Next Radio WAVE

Twisted Pair Enables Unified Communications Among Disparate Wireless Endpoints

The assassination of Osama bin Laden in Pakistan, which President Obama and other key U.S. officials witnessed from Washington, D.C., in real time via video, demonstrated how far we have come in using advanced communications.

by Paula Bernier

But sometimes just getting everybody on the same frequency can be a challenge. That became clear a decade ago this September when first responders in New York City were unable to communicate via radio because fire fighters, police and other emergency workers had incompatible radio solutions.

A company called Twisted Pair Solutions, however, has a product that enables different radios – whether analog or digital, and from any equipment provider – to talk to one another. In another move forward for unified communications, Twisted Pair recently unleashed version 5.1 of its WAVE solution.

Twisted Pair got its start back in 1999 when its two founders were looking at VoIP as a way to improve trading in the financial market, explains James Mustarde, director of marketing. At the time, the cost of trading floors and leased lines were going through the roof, he says. New York financial institutions had employed VoIP when Sept. 11 occurred, he adds, so they experienced the benefits of its redundancy. Twisted Pair took all of the above as indicators that it could do more with WAVE on the unified communications front.

While unified communications is great at enabling workers to manage their communications and more easily keep in contact with colleagues, UC in most cases fails to address how you keep mobile workers and other workers in the loop, says Mustarde. What happens, he asks, if you have a worker or military person-

nel in the field with a two-way analog radio and he or she needs to speak to a colleague on an analog radio? This, he says, is the real world of communications.

“If you can’t really talk to them, it kind of makes [stuff like presence] a moot point,” Mustarde adds.

By using IP, he adds, WAVE allows anybody on any device to talk to anybody else on the planet. WAVE is a pure software platform that includes applications that can sit on PCs or smartphones or other endpoints; also part of the solution is software that can sit on an enterprise server or in the cloud to create connections. (The company introduced its cloud-based offer, called WAVE Connections, this spring. WAVE Connections, for which setting up an account is free, turns a smartphone into a proxy for push-to-talk capability to any device.)

“You can come to the table and you can put whatever you have on the table, and if you have the authority to do so” you can take that audio or whatever communications off the table, says Mustarde.

WAVE comes with AES-256 encryption, but users can also leverage a software developer kit to add their own encryption of other features to the solution.

The military represents the largest Twisted Pair customer. The Air Force, Army, Navy and special ops each have hundreds of thousands of licenses for WAVE.



But, Mustarde adds, that there are plenty of enterprises, like companies in the gas industry, that have huge mobile workforces that also use WAVE. Such organizations have people using everything from cell phones to various types of specialized radio devices, and those businesses would like to enable those endpoints to communicate with one another. With WAVE, he emphasizes, these companies don’t have to invest in new devices, they can extend the communications capability of their existing endpoints – whether those endpoints are field radios, old Nokia cell phones, or the latest in smartphone technology.

What does this all have to do with UC? Mustarde says that WAVE is essentially voice over IP with a preference for radio. At the end of the day, he says, it’s data that manifests itself in most cases as audio, but it also could be used for GPS or for video. While Twisted Pair is focused on video, it does have a distribution network that can get video where it needs to go, and with appropriate permissions, the ability to enable people to view it.

Also of note is that Twisted Pair last month introduced a plug in for Lync. WAVE Lync Communica-

BIG UNIFIED COMMUNICATIONS

DELIVERED AS A SERVICE THAT
ANY **SMALL BUSINESS** CAN AFFORD

UNIFIED EMAIL, IM, VOIP
TELEPHONE AND PBX
SOFTWARE AS A SERVICE



FROM



Unified communications is now simple. With hosted Unison from Intermedia you get all your business communications as a service, fully-managed, for just a few dollars per month. No PBX, servers or hassle. All you need is a computer and an Internet connection

**LEARN MORE AT WWW.INTERMEDIA.NET/BIGUC
OR CALL 800-379-7729**

tor extends the functionality of Lync, which is Microsoft's UC solution, by adding push-to-talk connectivity between office-based users and their mobile colleagues who are using two-way radios or smartphones. Using the Lync client, individuals can see who is where in their organizations and allows for call set up.

So, to go full circle on all of the above, you might be wondering if the first responders in New York City are currently using WAVE,

or plan to do so in the near future. The answer is that the jury is still out on that one.

Mustarde tells Unified Communications Magazine that it has suggested its product for that application. But he adds that creating a system linking different radios in the Big Apple has become something of a political football. Some entities want to allocate a segment of the radio spectrum for

this purpose and then build solutions to suit that, he says, but that would be an expensive fix.

However, Twisted Pair already has had great success with all of the airports around Washington, D.C., and as of last April was in discussions with one of the largest Southern states, which was looking to unify communications over its radios statewide. **UC**

New York City Has a PLAN

When emergency strikes, helping people understand what to do is of key importance. To enable that to happen in an orderly fashion, New York City and federal agencies have joined forces with the big four cellular service providers to introduce the Personal Localized Alerting Network.

PLAN, a free service that will provide mobile subscribers with text alerts about safety threats in the area, is expected to go live in the Big Apple by the end of the year. The launch was announced last month by the Federal Emergency Management Agency, the FCC, New York City Mayor Michael Bloomberg, and AT&T, Sprint, T-Mobile and Verizon. With PLAN, authorized government officials can send messages, which participating wireless providers then push to enabled mobile devices in a targeted geographic area, and these alerts will not be stalled by congestion on the network.

"In both the public and private sectors, I've always believed in the need to harness technology in new ways, including ways that its designers hadn't anticipated," says Bloomberg. "The City's opt-in Notify NYC system is a great example of that: It alerts people to dangers and delays via email and mobile devices, and it has become a national model of emergency communication.

"But given the kinds of threats made against New York City at the World Trade Center, Times Square, and other places popular with visitors and tourists, we'll be even safer when authorities can broadcast warnings to everyone in a geographic area regardless of where they came from or bought their phone."

FCC Chairman Genachowski adds that mobile broadband has the potential to revolutionize emergency response.



"Our communications networks need to be reliable and resilient in times of emergency," adds Genachowski. "The FCC is working with carriers to ensure that they are."

Under the Warning, Alert and Response Network (WARN) Act passed by Congress in 2006, carriers that choose to participate were asked to activate PLAN technology by a deadline determined by the FCC, which is April 2012. That said, PLAN should be launched by the nation's four top cellular providers at least two calendar quarters ahead of schedule in New York City. The organizations involved in the PLAN announcement for New York City did not outline any details to bring PLAN to other areas of the country. **UC**

you unified

My NetVanta® UC Story.

My name is Paul Lipscomb. I am a pediatrician and I became a doctor to help people. One of my biggest challenges is being accessible to patients not only during normal office hours but for after-hour emergencies. When an emergency call comes in it can be as simple as a concerned parent needing reassurance, or it can be something critical when seconds matter. And it's my job to find a solution.

Today, I'm proud to say that NetVanta UC is part of my solution. When that late night emergency call comes in, a parent can leave a detailed message of their child's situation. The NetVanta UC system immediately rolls their voice mail message to myself, or the doctor on duty. We get the message via our cell phones, text message, or email. That allows us to call right away and gives us the ability to assess their situation and provide fast, accurate feedback.

The NetVanta UC system also allows me to operate without the expensive "after hours" answering service. I can now say I can save lives and save money at the same time. NetVanta UC helps me and my patients sleep better at night.

To learn how NetVanta UC can be personalized for your business, visit adtran.com/UC_DOC



- Unified Communications tailored to your business
- Integrate communications with business applications
- Increase workforce efficiency and response time
- Automate to cut cost and complexity

Smart Solutions for a
Connected World.

ADTRAN®

Visit us on:

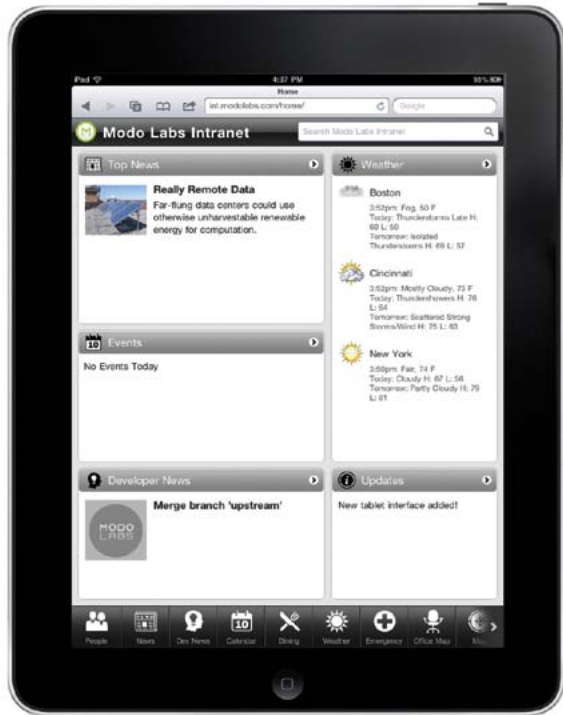


Former MITers Unveil Kurogo Mobile Framework

We all love our mobile devices and the wealth of information they can provide us. But sometimes it's not as easy to get the info we seek as it should be. To help address that, Modo Labs has introduced the Kurogo Mobile Framework.

The Kurogo Mobile Framework is a platform that mobile developers of any skill level can use to build and customize mobile applications and features for businesses and universities. An open source effort, it's based upon the MIT Mobile Framework and includes pre-packaged, customizable calendar, emergency, external content, link, people directory, maps, news and video modules. It also supports iPhone and iPad native application development.

Modo Labs CEO Andrew Yu says the spark for the frameworks first came to light in 2006-2007 when he struggled to get the information he needed via his mobile device on his professors and classes at the Massachusetts Institute of Technology. MIT had websites, of course, but none of them were mobilized, says Yu. So MIT provided Yu and some colleagues with funding to create the MIT mobile web, which helps students quickly locate professor information and office locations on any mobile device.



The MIT mobile web launched in 2008. A year later the effort was open sourced. But this solution, which was designed to MIT specifications, doesn't necessarily translate cleanly to the needs of other organizations, says Yu, so he and some of his colleagues came up with the idea to create Modo Labs.

With \$2 million in funding from New Magellan Ventures, Modo Labs last year opened its doors to help other universities, as well as enterprises, set up a mobile presence. And today the company formally unveiled version 1.0 of the Kurogo Mobile Framework. The Kurogo Mobile Framework is offered under the MIT license and is available for download, free of charge, at <http://kurogo.org>.



Harvard, MIT and the University of North Carolina are among the early adopters of – and open source contributors to – the framework. Modo Labs, which makes its money from professional services related to the framework, also has won business from some financial companies, including Fidelity Investments.

Yu notes that the Modo Labs solutions can address the mobility goals of any type of organization. For example, the company offers tools and services to help enable organizations to disseminate company news to employees; let employees use their mobile devices to look up people within the company; or trigger alerts if there's an emergency situation within the campus.

While the framework and related professional services can help organizations to mobilize their applications quickly and easily, Yu says the real benefit is that it doesn't lock an organization into any specific device platform. That's important given the growing bring-your-own-device movement at organizations. **UC**



Upcoming **TMCnet** Webinar Schedule

5165368894331258794523215
24648948555464852552
145632710047599841202546
1254404044565212



Archived • View Today!

Who's on the Line? Optimizing Call Center Effectiveness by Identifying and Valuing Unknown Prospects and Customers

Sponsored by:



<http://www.tmcnet.com/webinar/targus/Targus.htm>

Archived • View Today!

SMS, Voice & Video Mobile Messaging for Small Businesses

Sponsored by:



<http://www.tmcnet.com/webinar/callfire/callfire.htm>

Archived • View Today!

Building Communities Online: Reduce Marketing Spend While Boosting Sales, Search and Social Initiatives

Sponsored by:



<http://www.tmcnet.com/webinar/tmcnet/tmcnet-Building-Communities-Online.htm>

Archived • View Today!

Using Customer Value to Distinguish Service Levels

Sponsored by:



http://www.tmcnet.com/webinar/incontact/incontact_2_25_11.htm

Archived • View Today!

Automating Service Activation in Carrier Ethernet Networks

Sponsored by:



<http://www.tmcnet.com/webinar/tail-f/tail-f-3-1-2011.htm>

Archived • View Today!

Making VoIP Secure, Efficient and Seamless Across Enterprise and Service Provider Networks

Sponsored by:



http://www.tmcnet.com/webinar/dialogic/Dialogic_making_voip_secure.htm



4579235642402457959319
5462157854246624456556

Strategies for Collaboration Technologies and User Adoption



by Mitchell
Hershkowitz

In today's economic landscape, the jobs of CTOs and CIOs are anything but easy. Enterprise executives expect the same service, business enablement and technology solutions from tighter budgets and pared down IT departments. Key to overcoming this challenge are unified communications and collaboration platforms. UC&C technologies offer many benefits: They can help companies to reduce travel expenses, enable a remote workforce, encourage greater collaboration, and improve overall business functions.

To get a better picture of UC&C adoption today, Dimension Data, a multibillion dollar IT services and solutions provider, recently surveyed more than 800 IT professionals across the United States – from industries including education, health care, financial services and manufacturing. Results reveal that while companies are investing in UC&C solutions, they aren't realizing the full benefits due to the lack of a strategic roadmap and enterprise adoption.

The Current Business Environment

The top three business priorities expressed by respondents were: reduce enterprise costs, improve business processes and enhance workforce effectiveness. Advanced UC&C tools such as document sharing, presence and video collaboration can help organizations to succeed in these areas by enabling business agility and enhanced decision making while offering hard cost savings.

Unfortunately, companies that have adopted advanced UC&C technologies aren't maximizing their investments. While companies will frequently utilize UC&C tools to elicit great travel cost savings, respondents revealed that nearly 70 percent still travel at least one to two times per month, and nearly 25 percent of business leaders travel three to five times per week. To realize travel cost savings, companies must first understand and recognize the true costs of travel, including transit time and the inability to meet with multiple parties in different regions in the same day. Only then will executives be able to determine when they need to travel and when a videoconference will suffice, sometimes even enhancing the experience by connecting people from different regions with complementary skill sets. Reducing the amount of executive travel by just 10 percent would result in a significant reduction in a company's overall travel expenses.

Travel habits may remain unaltered, but the corporate environment does not look the same as it did a decade ago. As technology has advanced, the remote workforce has grown. Today, more than 88 percent of respondents reported having some remote workforce, and nearly half said that 10 to 20 percent of their workforce is remote, either as a virtual office desk worker or as a mobile employee. Organizations must realize that this growing population requires the same communications and collaboration tools as local employees. If remote workers are utilizing technologies different from those at the main office, they'll be unable to communicate and work with their colleagues, business partners and customers.



Mitch Hershkowitz of Dimension Data

Benefits of UC&C Tools

With the widespread availability of solutions that enable greater collaboration and flexibility, one might suspect that enterprises would be drawn away from traditional collaboration tools. Surprisingly, Dimension Data found that the majority of respondents are continuing to utilize traditional tools and collaborate in conventional ways, preferring to meet in-person (86.3 percent) or utilize audio-only conferencing (83.4 percent).

Of available UC&C solutions, IM and document sharing were found to be the most popular with more than 63 percent of respondents using both online tools for business communications. Document sharing, a typically straight forward tool where colleagues can save documents in a shared folder, is usually accessed over a secured corporate network and enables collaboration of projects, proposals, contracts, etc. On the other hand, IM, which began life as a social tool, is a bit more complicated. There are multiple IM offerings in the market – some people have accounts with AOL, others with MSN, Facebook or Google. To better secure the corporate network

against vulnerabilities inherent in public IM tools, enterprises are beginning to establish formal business processes to govern the use of IM for business. Currently, approximately 19 percent of respondents use IM tools not sanctioned by corporate.

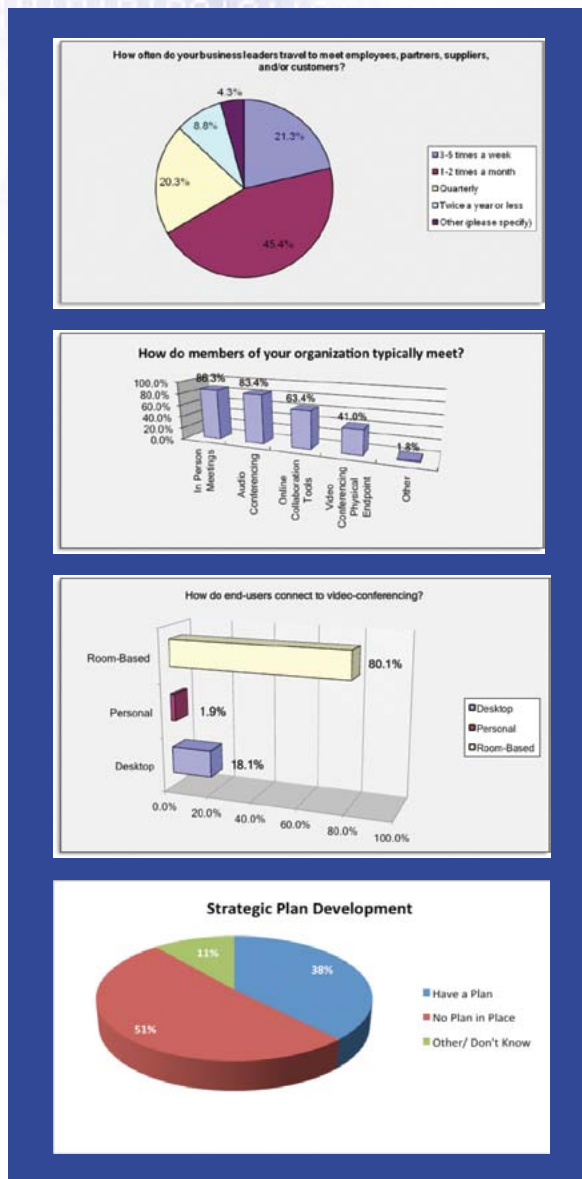
Once secured for enterprise use, IM offers multiple benefits for collaboration, not only within the enterprise, but also with partners and customers. When IM spans an enterprise, its customers and its partners, it is called federated IM. This tool can easily be combined with video solutions, which would connect individual users with one another, as well as an individual to a room-based video system like Cisco TelePresence. In the study, 66 percent of companies were found to integrate IM with other software applications, but less than 30 percent of organizations reported integrating their IM solution with video or federated IM.

Despite the widespread lack of adoption of video solutions, companies are increasingly investing in this technology. Of the 70 percent of companies found to have invested in video solutions, only 41 percent reported using videoconferencing and physical endpoint solutions. Further, 80 percent of organizations with video solutions reported using a room-based system, primarily for internal communications. This finding suggests that remote and traveling employees do not have access to video tools. A remote worker will most likely not have access to a conference room with a videoconferencing system, and an executive on the road most certainly won't unless it is at a client's office. To maximize their investment in video solutions, companies can deploy more desktop video solutions, thereby equipping the remote and traveling workforce with tools that will synchronize with the technology in the main office.

Despite the initial adoption of IM, corporations have a long way to go to realize the full benefits of UC&C tools. In today's vulnerable economic environment, failing to realize the expected benefits and return on investment of advanced solutions is detrimental. Organizations must develop a more effective strategy for the deployment and adoption of solutions.

Strategies for Effective Deployment and User Adoption

Successful implementation of new tools requires more than just good technology. It requires buy in from the business units, executive sponsorship, a deployment strategy and a user adoption plan.



Crucial for effectively deploying a new technology is a strategic roadmap. This plan should outline the corporation's goals and rationale for investing, as well as what tools will be deployed, where, when and how. By defining the goals and rationale upfront, companies can be confident that the correct platforms are built to meet business needs. Of concern, more than 60 percent of respondents reported that they have no strategic deployment plan for video solutions. It is evident that a well thought out roadmap is an immediate need for most enterprises investing in video technology.

Changing employee habits can be just as difficult – if not more difficult – than well-executed deployments. Most internal IT departments don't have the time or skill sets necessary to promote successfully a new technology and educate employees on how to use it. To generate greater user adoption, corporations should develop change management programs to create awareness of new technologies, train employees to use the tools specific to their job roles and requirements, and assist employees when they require support. Change management or user adoption programs should make employees comfortable experimenting with and using new technologies, lowering the barrier to widespread adoption.

Once enterprises have a strategic roadmap and user adoption program in place, they should deploy new solutions "fast and full". A "fast and full" deployment provides the enterprise with a better opportunity for user adoption as employees can interact and collaborate with a wider audience rather than just colleagues in their local office.

Supported by the findings of Dimension Data's recent survey, corporations are increasingly investing in videoconferencing and other UC&C solutions, but most have yet to realize the complete benefits, both in cost savings and increased collaboration. The key to unlocking the value of these solutions is to develop a comprehensive implementation roadmap and user adoption program. When organizations fail to plan, they plan to fail. **UC**

Mitchell Hershkowitz is the national practice manager for consulting at Dimension Data Americas (www.dimensiondata.com).

Five Key Factors to Success in Videoconferencing

In the 1990s, only one category of business videoconferencing existed: hardware-based solutions for fixed-site installation. Thanks to the Internet, today, millions of people use videoconferencing without fixed-site systems for tasks such as interoffice meetings, employee and customer training, and sales meetings.

by Allen Drennan

According to a March 2011 study by Infonetix, enterprises will spend \$5 billion on videoconferencing and telepresence solutions in 2015, and last year, revenue from these technologies grew 18 percent, reaching \$2.2 billion worldwide. As businesses continue to seek out new ways to cost-effectively communicate, their spending on videoconferencing and telepresence is expected to increase.

While the scope of videoconferencing has evolved, so have the key factors for success – today there is more to it than just video quality and cost. Here are five critical success factors for enabling anyone, anytime, anywhere business videoconferencing while staying within the bounds of IT security policies. These apply to any multipoint videoconferencing system.

Ease of Use

Today, anything more difficult than clicking on a web link can be an obstacle to success. Web-based videoconferencing services have solved this problem via standard URLs and web links that everyone can use. The best solutions have an intuitive user interface that follows a familiar office application or browser metaphor. These well-designed applications support a natural online meeting process, increasing adoption and improving return on investment.

Secure Accessibility

To encourage widespread adoption, companies must make videoconferences easy to launch from desktops, laptops and conference rooms. Secure access also requires the ability to include external participants, such as customers and business partners, behind their own firewalls and proxies. Only the leading web-based videoconferencing services can meet these requirements today. They have deep support for firewall

Allen Drennan of Nefsis



and proxy standards, and a select few have proxy-manufacturer-specific optimizations to achieve the highest desktop connection success rates.

Integrated Collaboration Tools

Today, live collaboration involves multiple parties who can annotate, share the keyboard, and otherwise interact with shared content. The critical success factor is the ability of the solution to provide a complete alternative to an in-person meeting. It is important that shared documents be displayed in their original, high-quality, rich text form, not screen captures from the presenter's computer. And high-end tools should be available, including annotation over live applications, whiteboarding, media sharing (playing movie files), sharing PDFs, and electronic handouts – everything needed for a productive meeting.

HD-Quality Video

Business-grade videoconferencing requires medium and high-quality HD video and, if desktop connections are included, the ability to automatically adjust video quality at all the endpoints in real time.

Latency, jitter and inferior picture quality are visual measurements that any consumer will use to judge the videoconferencing experience. Video quality often suffers further as more video participants or active desktop sharing or other compute-intensive tasks are added. This is particularly pronounced in Flash-based, single-threaded, or scripted solutions. But these problems are easy to overcome via the application of end-to-end parallel processing, variable bit rate encoding (also called scalable video coding), and automated bandwidth throttling – all features of the latest web-based videoconferencing services.

Low Financial Risk

Traditional videoconferencing systems typically require a substantial capital equipment expense and dedicated network bandwidth in the form of virtual private circuits. While the quality of service for this type of system is typically very good, the cost is prohibitive for most small to medium-sized organizations.

Today, variable bit rate, scalable and other dynamic encoding technologies allow HD-quality video anywhere bandwidth permits. The old notion that high quality is the exclusive domain of room-based systems is no longer the case. Consider the costs of installation, maintenance and expansion. Scenarios requiring video routers or other hardware infrastructure incur considerable additional project costs for any potential expansion. Today, however, there are viable solutions where IT managers need not concern themselves with owning, maintaining and upgrading any particular piece of infrastructure hardware.

With cloud computing, expanding a videoconferencing installation is as easy as plugging in a few more peripherals and a license update, resulting in a lower cost of ownership and lower financial risk. Moreover, one can easily cancel a cloud-based online service – not a possibility with large capital equipment expenses for video routers, gateways, media servers, and other infrastructure components required for secure multipoint video with live collaboration.

Telepresence and installed-site systems with dedicated bandwidth deliver high quality for a high price, but recent technology, including HD webcams, variable bit rate encoders, multicore desktop processors and cloud computing enable a select few online services to deliver the same high quality at a much lower price point. **UC**

Allen Drennan is CTO for Nefsis (www.nefsis.com).

With cloud computing, expanding a videoconferencing installation is as easy as plugging in a few more peripherals and a license update, resulting in a lower cost of ownership and lower financial risk.

Top UC Security Issues and Steps to Mitigate Your Enterprise Risk



Collaboration demands, prevalence of handheld devices and increased communication flexibility within enterprises is driving the adoption of unified communications as the main strategy to manage effectively the integration of real-time multimedia communications. Since the benefits of UC are well recognized in the industry, the focus is shifting to a more critical mandate: protection directives that arm the enterprise with countermeasures to limit the threat of failure or a security breach.

by Frank Semmler

A Changing Landscape Increases Vulnerability

In the past, applications were developed and designed in silos, allowing companies to expand their productivity and capabilities. But they were hindered by integration issues with other systems. Today, enterprises demand information to flow across software products and devices. Building a bigger and more efficient network through UC is an advantage when it comes to managing workflows. Unfortunately, when multiple systems are tied together the impact of any type of security breach or attack can be major. Security features and solutions need to be a mandatory part of the UC deployment process. Understanding compliance and corporate governance, limiting potential exposures to security risks and business resiliency all need to be addressed in UC security planning.

Let's take a look at some of the common security objectives: **Availability**

As services are being centralized, availability is a major concern when a business can be harmed by services that fail due to a major security incident. Prevention needs to be the focus; know the alternatives and options when a service or channel becomes compromised. Protection of your data center deployment against

denial of service, spoofing protection, and audit and oversight measures should be employed.

Confidentiality

Granting access can make for more productive employees. However, understanding the impact of unauthorized access to presence data and sensitive information can help prevent unwanted distribution of data. Applying user and device authentication coupled with encryption assures confidentiality is preserved.

Integrity

Service-oriented companies pride themselves on providing real-time information. A two-way channel relies on mutual trust; however companies need to ensure information exchange is valid and hasn't been compromised. This level of security is achieved by using certificate-based authentication wherever possible.

Accountability

Tracking usage of sent and received messages, the amount of voice and video communication efforts and consumption of data from different parties sounds like big brother is watching, but it becomes critical when determining accountability. Enterprises need to be careful about privacy issues. Having identity and access

management in place and deploying security information and event management within the organization facilitates auditing and helps to make users accountable.

Use control

Placing rules and restrictions on data may diminish the user experience, but it can save the company in other areas including budget, legal issues and security of data transfers. Establishing proper security policies, rights management, content security and data loss prevention can form a foundation of controls that if communicated correctly ensures authorized users' productivity within accepted boundaries.

SIP Threats and Countermeasures

To adopt UC successfully, the enterprise must address security risks to limit the chance of failure or security breach, which could potentially damage a company's reputation, not to mention risking vulnerability of sensitive proprietary information. The session initiation protocol is the open standard for real-time communication and is the foundation of UC. To mitigate risks it is very important to protect SIP-based communication and SIP servers from being intercepted, compromised or put out of service.

Setting a UC Security Roadmap

As UC becomes a mission-critical business imperative, setting a clear and strategic security roadmap can form the foundation of an efficient, enterprise IT infrastructure. Anticipating attacks and knowing how to handle them takes pre-planning, strategy and foresight. Below are four key areas to help formulate an action plan.

1) Perform a Risk Assessment

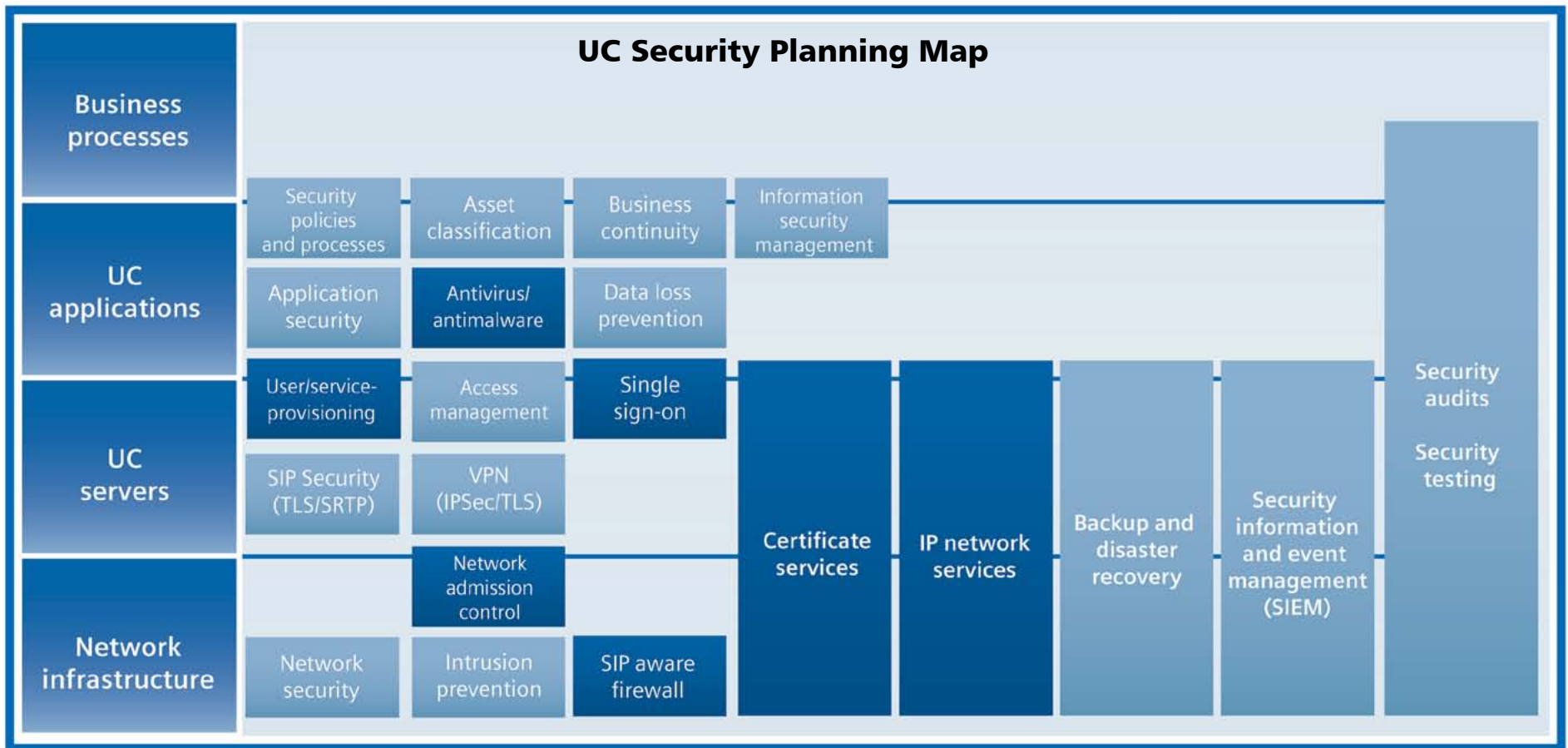
Performing a risk assessment before undertaking a UC project allows you to gauge additional IT requirements

needed to protect the organization from an attack; only then is it possible to take steps to mitigate the risks. This can also help prioritize activities from a risk, budget and resources impact.

Once priorities are in place, an enterprise can define specific security policies for managing the overall UC infrastructure. For example, implementing an identity and access management solution ensures that only authorized employees have the right to access systems. As you progressively work through control measures, you will define UC activities that become part of an umbrella information management program.

2) Partner Provisions

As collaboration with service providers and partners becomes commonplace in a UC environment, communications criteria also needs to be scrutinized from a security standpoint. Clearly establishing an on-boarding protocol and identity provision will allow for increased productivity coupled with an underlying security function. By anticipating the security impact of federated identity on UC communications and real-time transactions, you will gain efficiencies without worrying about breaches or ambush of data.



3) Legal Considerations

The open world of data transfer becomes a minefield for legal issues. As with any other electronic communication tool, corporate messages sent via IM are just as binding and open to litigation as those sent using e-mail. Legally, no difference exists between them; both messages have the ability to be stored, recorded and disseminated. As such, they need to be retained in accordance with government and industry legislation. In the case of a services provider, the liability implies that you have implemented best practice security measures to prevent your organization and your customers from harm while affected by a major incident.

4) Establish Clear Security Management Policies and Controls

Lastly, the enterprise must implement security management policies and controls. Establishing user authentication and a system of controls will help limit threats that can come from real-time communication applications often installed by end users, under the radar of central IT, and thus bypass security and management controls. Programs like unauthorized IM, peer-to-peer file sharing and web conferencing can use highly evasive techniques to circumvent existing security infrastructures such as firewalls. Once policies and controls are in place, they can stop, track or monitor any suspicious or routine downloads via the network that might cause issues.

Moving to a unified communications environment is the future. Working in a secure platform to increase productivity and mitigate risk is more important than ever. When initiating an integrated communications strategy with your trusted UC provider, make sure you account for the implementation of best practices and a comprehensive security plan to protect your business. Taking the right precautions and steps to ensure information integrity can make all the difference in your successful UC implementation. **UC**

Frank Semmler is UC security services portfolio manager at Siemens Enterprise Communications (www.siemens-enterprise.com).

Examples of common SIP threats and countermeasures an experienced UC provider should implement.

SIP-BASED ATTACKS

Denial of service

Embedding malicious code in SIP messaging

Registration hijacking or removal

Generate logical error in SIP protocol syntax

Call-flow manipulation attacks

Unauthorized interception of VoIP (eavesdropping)

Redirected voice calls

COUNTERMEASURES

SIP deep message inspection and rate limiting using session border controllers and SIP-aware firewalls

SIP deep message inspection using session border controllers and SIP-aware firewalls

Authentication and signaling encryption

SIP deep message inspection using session border controllers and SIP-aware firewalls

Authentication and signaling encryption

Authentication and signaling and encryption payload

Authentication and signaling and payload encryption



NEW! HOSTED IP PBX SAME GREAT TRUNK

Introducing GO!VBX

The GO!VBX virtual IP PBX solutions includes a comprehensive suite of UC features at nearly 60% less than other hosted offerings. This business ready, all inclusive solution, eliminates the complexity of implementing a phone system.

Featuring:

- Unified Communications
- Scalable to Any Business Size
- Lowest Per Extension Pricing
- Customizable Telecom Usage Plans
- Auto Attendants, Music on Hold
- Powerful User Friendly Admin Portal



Broadvox has a wide range of VoIP/SIP Trunking products to satisfy the needs of any business, from SMBs to contact centers, enterprises and carriers.

Featuring:

- Unlimited Local and Long Distance Calling
- Discounted Toll-free and International Plans
- Porting of Existing Business Phone Numbers
- Broadband Connectivity (T1, DS3, Ethernet)
- DIDs, Toll-free, E911, CNAM, Directory Listing
- Robust and Reliable Survivability Options



Build monthly recurring revenue,
Join our award-winning program!

www.broadvox.com
866.770.9960

Hosted or PBX? How about a Blend of Both?



by Randy
Richardson

Buyers considering a migration to VoIP often hit a wall at the very first turn in the decision tree: Hosted or on-premises? Now, buyers have a third alternative – blended architecture systems – that combine the best elements of both, while eliminating the downsides of each.

Purely hosted VoIP solutions don't require much hardware or installation, so they are often presented as a low-cost, low-effort solution for smaller companies. In many cases, users can simply plug their new phones into a network jack and begin making calls. This plug-and-go aspect of hosted systems appeals to small and mid-size companies with little or no internal IT staff.

But as many users have found, purely hosted IP products have some substantial downsides. These issues often aren't apparent until the system has been in use for a while, since many of the problems are intermittent in nature. Some of the problems users may encounter are:

- No quality of service: Data and voice packets must slug it out for priority. With no PBX to prioritize data traffic, voice quality can suffer. A session border controller can be deployed to solve this problem, but SBCs increase complexity and cost.
- The session initiation protocol used by VoIP telephones does not work well behind firewalls that use network address translation. SIP-NAT problems often

manifest themselves as dropped calls and/or one-way audio.

- Hosted VoIP solutions typically offer very limited monitoring, with finger pointing the likely result when problems arise.
- Most hosted VoIP is sold on a per-seat basis, and many VoIP providers charge an additional monthly fee for features such as voicemail and conference calling. Inexpensive for very small offices, true cost of ownership for moderate sized or larger organizations is usually higher than alternatives.

Many of the limitations of hosted VoIP can be overcome by using an on-premises IP PBX system. These systems typically manage QoS to provide increased call quality, but they add cost and complexity. Despite the added cost – in terms of initial purchase, ongoing maintenance, and power consumption – on-premises systems have their own set of shortcomings:

- Lack of redundancy: Many IP PBX systems offer multiple WAN interfaces to protect against an ISP failure, but they typically have little or no protection if the PBX itself should lose power or suffer a hardware failure. Some IP PBX vendors provide redundancy by using a second, parallel PBX, but this adds substantial cost and complexity.
- Little or no monitoring: Most IP PBX systems have limited monitoring features. Users and system administrators may not be aware of a system outage until they

can no longer make or receive calls.

- Complex and expensive integration of multiple offices: Hosted VoIP solutions excel at uniting multiple business locations under a single dial plan. On-premises systems are less flexible because the call switching is performed in the PBX rather than in the cloud.

A new generation of VoIP products eliminates the problems of

Blended architecture systems combine the best elements of both, while eliminating the downsides of each.

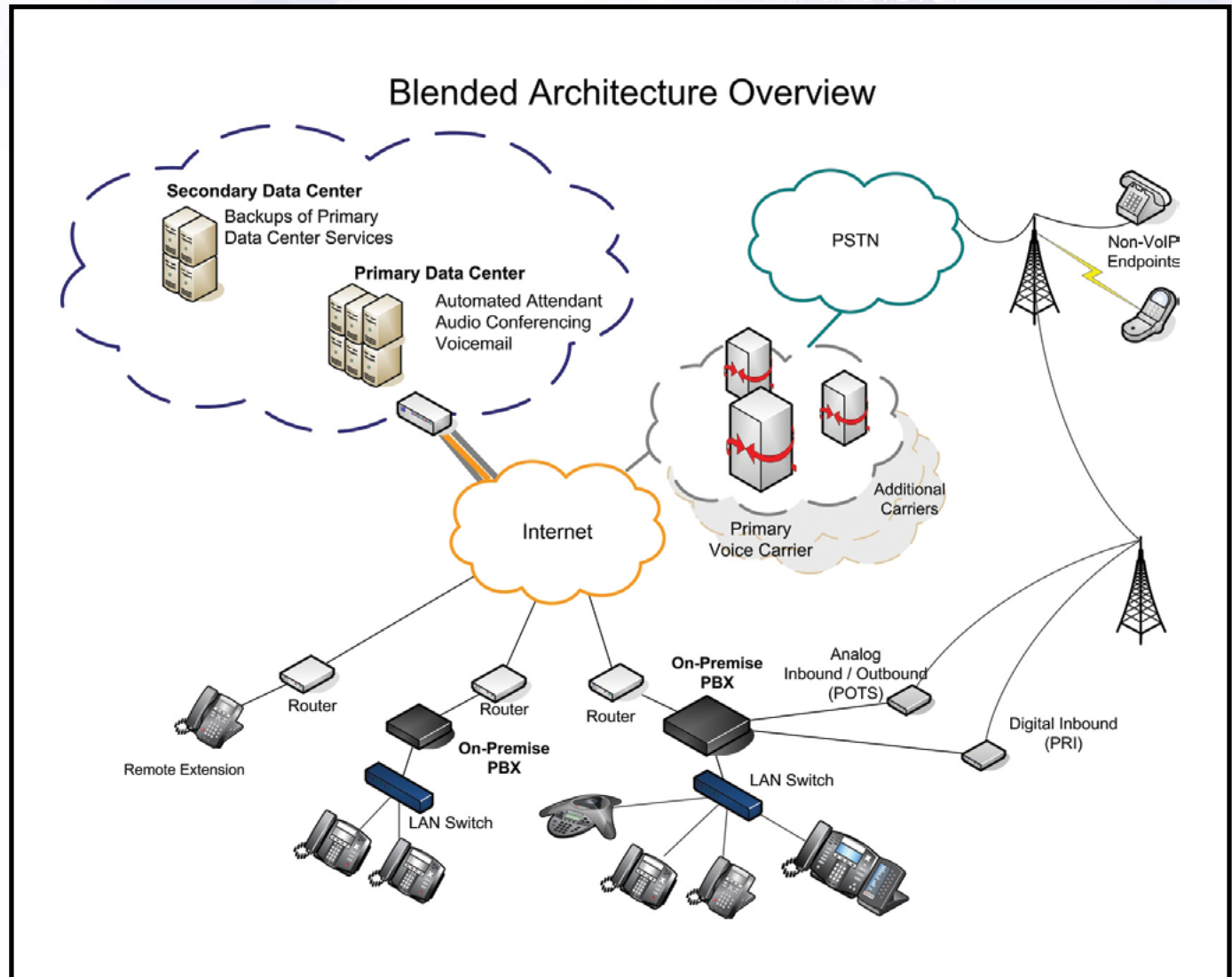
hosted and premises-based VoIP while delivering the best aspects of each. The most advanced of these new generation blended architecture solutions go even further, offering features and capabilities not found in either hosted or premises-based systems. Blended architecture systems combine the cloud-based telephony aspects of hosted VoIP with an on-premises PBX. Capabilities and features vary across vendors, but typical blended IP PBX systems handle call routing and data traffic management chores (including QoS) at the customer premises to provide call quality that is comparable to traditional systems.

While all blended systems use VoIP to connect and deliver telephony services, there are a variety of ways to deliver those services. For example, some systems store voicemail on the PBX itself, while others put the voicemail servers in the cloud. The same is true for other telephony features such as auto attendants and conference bridges.

Cloud-based telephony services – like their data-based counterparts – relieve local systems (and system administrators) of the burden of storing and backing up large amounts of voicemail and auto-attendant recordings. And since these services are in the cloud, they can continue to operate even if the IP PBX itself is down due to power or hardware failure or Internet outage.

Some blended architecture vendors provide 24/7 monitoring and management services with their VoIP offerings. These services provide an additional level of comfort and are especially beneficial for smaller customers with limited IT resources or for bigger organizations that operate a large number of locations. **UC**

Randy Richardson is chief product officer for Star2Star Communications LLC (www.star2star.com).



The Role of the Interconnect Network in Enabling HD Voice Communications

VoIP traffic has been growing exponentially in recent years in both fixed and mobile networks, as both enterprises and consumers seek to improve efficiency and reduce costs by increasing their adoption of IP services. At the same time, the emergence of HD voice promises to deliver on the true potential of VoIP by offering clear and life-like reproduction of audio.

by Mohan Palat

Current narrowband telephone networks can only handle voice in the range of 300 Hz to approx 3500 Hz. Voice outside this frequency range is discarded by the narrowband telephone network, compromising voice quality and degrading voice that is reproduced at the receiving end. The adoption of HD voice in the enterprise and by service providers effectively extends the voice frequency range from 30 Hz to 7000 Hz, which reproduces natural human speech more accurately.

One immediate benefit of this more accurate reproduction of the human voice is the ability to improve voice communication across cultures and countries. Most simply put, HD voice makes it easier to understand voice content despite the presence of different accents during a phone call. As important to improving overall call quality, HD has proven effective at eliminating some background noise, so voice calls from noisy locations are much more intelligible and natural. HD technology takes the stress out of phone calls because the participants do not have to repeat words or sentences, speak loudly, or strain to hear the spoken words. HD voice also makes it easier to identify who is talking during conference calls with two or more participants who have similar voices. In fact, informal surveys have shown that productivity increases when callers are able to hold conversations without asking each other to repeat a word or sentence. In

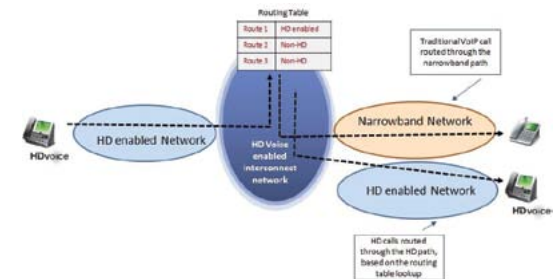
addition, HD makes it easier to comprehend speakers who talk softly during phone conversations and to understand words when more than one person speaks at the same time during a call. HD is useful for speech-to-text applications where speech clarity reduces the number of false translations and improves the user experience.

In addition to the consumer benefits, HD technology offers benefits to service providers and enterprises. An improved user experience often results in longer call duration, leading to increased revenues. Increased customer satisfaction due to better quality of experience reduces churn. HD voice also can attract new customers who are drawn to the service by the promise of better quality voice. Higher voice quality leads to improved brand image, and businesses that rely on call centers will benefit from HD in such ways as improved order accuracy, faster problem resolution and improved quality of experience for customers. This can result in increased business for the company. Finally, HD improves the quality of audio broadcasts, resulting in improved customer satisfaction for such services.

Moving from Standard to HD Voice

HD voice requires the support of both network and the endpoint devices (phones). It also requires the use of specialized HD voice codecs, which are different from the

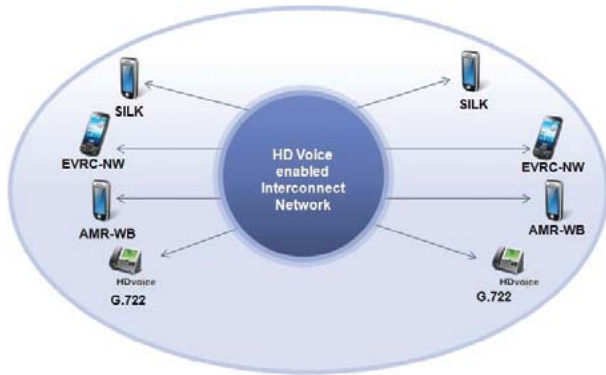
narrowband G.711 voice codecs currently used in traditional telecom networks. The International Telecommunication Union's G.722 codec is the most widely used HD voice codec in telecom networks and enterprises. Since it was standardized in the 1980s, all the patents on G.722 have expired, and there is no license fee to use it, which makes it attractive to vendors. 3GPP-defined AMR-WB (also referred to as ITU G.722.2) is the standardized HD voice codec for 3G/UMTS mobile networks. Patents associated with this codec are still in force, making it less attractive to vendors. In addition to G.722 and AMR-WB, there are a number of proprietary HD voice codecs, such as Skype SILK and iSAC, in use today.



Although most of the discussion on HD voice is focused on devices, codecs and access networks, it's crucial to understand the role the IP core and interconnect network plays in enabling HD voice communications. To establish and maintain an end-to-end HD call, the IP core/interconnect network must enable the interworking of multiple heterogeneous devices and access networks, and it must do so efficiently and cost effectively. To accomplish this, the core/interconnect network must support functions that will ensure that an end-to-end HD voice call has the highest level of quality and operational efficiency, real-time transcoding, media pass-through, and intelligent routing.

Real-Time Transcoding

The interconnect network must provide real-time transcoding between different HD codecs during a VoIP call. For example, if the calling party originates an HD voice call using an AMR-WB phone and the called party is on a G.722 phone in another network, the interconnect network must determine that the two HD codecs are different and provide the necessary transcoding of the IP voice traffic between the two endpoints. Or, if the originating party initiates an HD voice call using a G.722 phone to a person who is on a G.722.1 or G.722.2 phone, the interconnect network must provide real-time transcoding of the G.722 audio to G.722.1 audio, while attempting to maintain the quality of the audio as it transits the network to the terminating device. Without the capability to transcode between the two codecs, the network will downgrade the HD voice call to a traditional narrowband call. Transcoding makes it possible to establish an end-to-end HD voice call between two HD-enabled devices, independent of the codecs being used.



Media Pass-Through

The interconnect network must also support media pass-through, which essentially allows the HD VoIP call to transit the network without transcoding (also referred to as transcoder-free operation). This is useful in cases where the calling and called parties support the same HD voice codec. It is also useful when the service provider wants to reduce the number of transcoding operations by avoiding any trans-

coding until the call reaches the terminating network. As transcoding introduces signal loss, limiting it or preventing it altogether preserves the quality of the transmitted audio signal. By supporting the pass-through mode, the interconnect network can ensure that the HD voice signal maintains the highest possible quality as it transits the network.

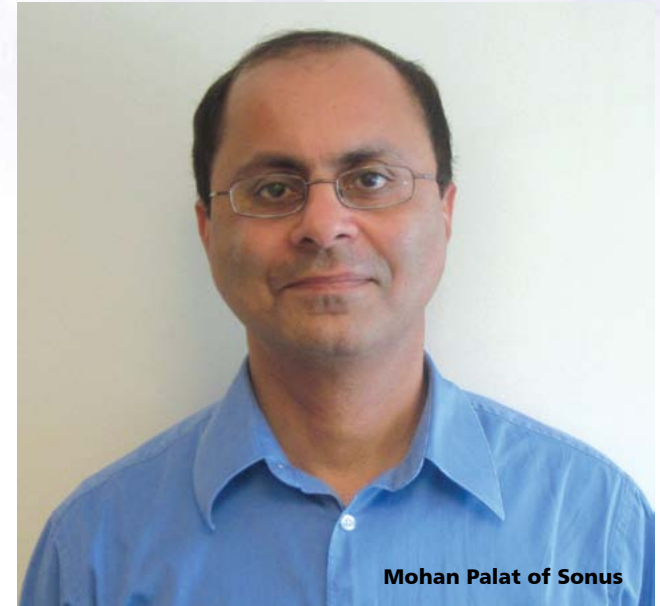


Intelligent Routing

The interconnect network must support intelligent routing of HD voice calls through the network. This requires the selection of an HD-enabled path if the incoming call is HD and a non-HD path if the incoming call is from a traditional narrowband device. This can be accomplished within the interconnect network by maintaining a list of all possible routes along with the HD voice status of each route (that is, if a route supports HD voice). This routing capability can determine the most optimal route to a given terminating device. Without this capability, it is difficult to guarantee that an HD voice call will be routed through an HD-enabled network. Routing an HD voice call through a non-HD path will downgrade it to a traditional narrowband call with reduced audio quality. In fact, this capability is a mandatory requirement for interconnect HD voice calls that involve multiple networks.

Intelligent routing also supports the mapping of codecs when negotiating VoIP SIP setup. This means aligning and selecting the same HD codec types at the calling and called parties and performing media pass-through functions, thereby minimizing the need to transcode the call.

Current solutions in the market generally support transcoding and media pass-through capabilities. Intelligent routing becomes critical, however, when the HD voice call involves multiple service provider networks and transits through an interconnect network. A solution



Mohan Palat of Sonus

based on a second-generation session border controller with advanced features, including centralized routing capabilities, is well positioned to support the HD voice requirements on the interconnect network. So with HD voice, VoIP is no longer just about reducing costs and providing new features like unified communications. It is also about an improved user experience through better voice quality.

HD voice is expected to revolutionize VoIP, both in the service provider and enterprise markets. Clear and life-like reproduction of audio will lead to increased usage and additional use cases for VoIP. The main impediment to mass adoption of HD technology, however, is simply that the various HD voice services that use different HD voice codecs cannot interoperate with each other. A solution that bridges this divide will help create a truly global HD voice service. **UC**

Mohan Palat is principal product manager at Sonus Networks.



New International Chief at Movius Talks UC

Movius Interactive Corp. recently appointed Howard Shaw as its new vice president of international sales. Unified Communications Magazine recently spoke to Shaw about Movius and his new gig at the company.

by Paula Bernier

For those not familiar with Movius Interactive Corp., what does the company do?

Shaw: Movius is a recognized leader in unified communications solutions for telecommunication providers around the world. Our applications for converged messaging (e.g., unified messaging, voicemail and video mail), unified conferencing (e.g., audio conferencing, videoconferencing and web collaboration) and virtual telephony (e.g., virtual phone and second-line mobile service) enable carriers in established and emerging markets to increase ARPU and market share. By continually innovating new services, Movius transforms the way the world interacts.

Who are your customers?

Shaw: Movius sells solutions to both fixed and mobile telecommunications carriers. These carriers then offer these solutions to their customers. Some tier 1 examples include Sprint in the U.S, MTN in Africa, Orascom in the Middle East, and Telefonica in Latin America.

How and why did Movius get started?

Shaw: The company was formed in 2006 from the merger of IP Unity with Glenayre's Messaging Division.

What has been the geographic reach of Movius up to this point?

Shaw: Movius sells worldwide and currently has deployments in over 75 countries.

What is your go-to-market?

Shaw: Movius sells both direct and through channel partners such as Huawei, Nokia Siemens, NEC, Cisco and Genband.

You joined Movius in April. What were you doing previously?

Shaw: Prior to Movius I was managing director of QPC MEA, a company in the IMS and workforce optimization space. Prior to this, I was vice president for contact center workforce optimization specialists Witness Systems, where I handled sales for Europe, the Middle East, Africa and India. Previous roles have included setting up the Empirix international operations for Teradyne group, international operations for the Ascom Timeplex group, and managing director roles for Northern Telecom (Nortel).

As the new vp of international sales for Movius, what are your goals?

Shaw: Movius has a well-established business with selected carriers and channel partners internationally, but I believe we can expand our operations significantly in the value-added services space by continuing to supply our existing customers with new and innovative solutions on their existing platform base, and in supplying the many new operators around the world with new products to enhance their existing customer offerings. The value-added space is a significant one for the carriers in a highly competitive market and can be the difference between success and failure for them. Movius is at the leading edge of this market. My goal is to ensure the Movius products are always in the minds of the network operators as they plan for their future expansions.

Where does Movius see the best growth opportunities in terms of geography?

Shaw: I see growth in all markets. The services Movius provides are needed by all operators. It's obvious that the emerging markets stand out as areas of potential

very strong growth, and we have very focused people concentrating on Asia, Africa and the Middle East. However, even the mature markets are always looking for competitive advantage, and Movius is ideally positioned to increase its current success in these markets.

Where does Movius see the best growth opportunities in terms of product type?

Shaw: Currently the most interest is coming from our second line mobile service, Side-Line. This enables an individual to have multiple phone numbers on any device with any SIM. It supports both voice calls as well as SMS. It is a great solution for people who want or need a separate number for business calls and another for personal calls but don't want the hassle or expense of carrying multiple phones. This solution is currently in roll out with Telefonica throughout Latin America. We also have a customer in the Middle East planning to deploy this and expect to add more throughout the world as the market for this becomes more apparent.

Where does Movius see the best growth opportunities in terms of customer type?

Shaw: While most of the growth will be with mobile carriers, we do still see opportunities with fixed line and cable operators.

What's next for Movius?

Shaw: Movius will continue to focus on solutions that give people the power to enrich their lives through viable innovations that transform the way they interact with each other. Our immediate focus is in the areas we have already discussed such as second-line mobile service. Additionally we will be introducing more solutions to take advantage of the growth in 4G/LTE networks, including apps targeted for the mobile enterprise such as mobile conferencing and alternative voice messaging solutions. **UC**

UC Magazine Reveals TMC Labs Innovation Award Winners



Unifying voice, video, wireless, presence and other communications technologies, results in rapid communication and improved employee productivity. Unifying and integrating all the various corporate communications types also provide management a holistic overview of the entire corporate communications infrastructure with unified reporting that provides insights into your business communications. We have a variety of different types of innovative winners, including a virtualized IP-PBX, a mobile UC application for the iPhone, a hosted SaaS videoconferencing solution, and a headset gadget that connects to both your PC and office phone headset. This year marks the 12th annual TMC Labs Innovation Awards where we honor products and services that have unique and innovative features that often differentiate them from their competitors.

ADTRAN Inc. Virtualized NetVanta Unified Communications (UC) Solution www.adtran.com

ADTRAN's NetVanta Unified Communications (UC) Solution Suite has been making continued innovations. One of the latest innovations is that NetVanta UC can be deployed in virtual environments utilizing VMware. One core innovative feature is administrative integration with Microsoft Active Directory, allowing IT administrators to manage the entire communications system using the same user accounts and security policies, thereby reducing TCO.

NetVanta's capabilities include voice mail, unified messaging, fax server, and auto attendant, firewall/VPN, interoperability with legacy equipment, and features that enhance communications-enabled business processes. NetVanta UC solutions scale from five to more than 2,000 users per server. If NetVanta UC is used to provide hosted services, the NetVanta UC application is installed on a VM server, and there is no additional equipment required at the customer location. ADTRAN tells TMC Labs, "ADTRAN's Virtualized

NetVanta UC solution addresses a segment of the market that found it cost-prohibitive to implement unified communications. The Virtualized NetVanta UC solution allows businesses to take advantage of unified communications services and better equips channel partners and service providers to offer NetVanta UC as a hosted service, thus extending the use of NetVanta UC even further in the market."

NetVanta UC Server is capable of supporting unified communications on one or more different types of PBXs from most manufacturers, including ADTRAN, Avaya, Nortel, Cisco, Mitel, NEC, and Siemens to provide a centralized UC solution.

Digium Inc. Switchvox www.digium.com

Switchvox is Digium's flagship IP PBX product built on Asterisk that gives you out-of-the box unified communications capabilities, including Outlook integration, mobile features, VoIP, fax, chat, video calling, conferencing, contact center, and unified messaging.

Switchvox SMB hardware appliances are available for small (up to 30 users), mid-size (up to 150 users), and larger (up to 400 users) SMBs.

Of course, Switchvox supports auto provisioning of popular IP phones, including those from Polycom and snom. Switchvox has free iPhone and BlackBerry apps that allow users to place calls directly from their cell phone as if they are calling from their office extension. The information-packed Switchboard provides an interactive dashboard view into call control, phone book, presence, chat, profile information and any other third-party web application. Users can manage their voicemail, custom greetings, reports, and call routing settings (find me, follow me) as well as Outlook contacts, mail and calendar integration and mobile phone integration. Switchboard also provides real-time call control and can interact with other users' calls that they may have permissions over (monitor, whisper or barge in on queue members they manage). Callers can even create video panels within their Switchboard for full video and audio conferencing collaboration capabilities.

When a user's phone rings, panels in the Switchboard can automatically show CRM data such as from Salesforce.com or SugarCRM, geographical location using Google maps, or any other relevant data.

Asterisk explains to TMC Labs, "With the open API, Switchvox is the first premises-based IP PBX to easily integrate with any third-party web application from key business applications like Microsoft Dynamics CRM or social media contacts. Mashups between Switchvox and these applications take minutes to create and implement, allowing users to see relevant data about their callers. Users can query any database and pull pertinent information from third-party applications with each incoming or outgoing call. In CEBP-fashion this application integrates easily with Switchvox's IVR to establish call strategies optimizing business processes. Digium makes this feature available to every

user at no additional cost, really allowing businesses to create a phone system that works for them and improves their ROI.”

In the last six months, Switchvox has added mobile integration with the iPhone and BlackBerry applications and enhanced security for Switchvox, including requiring stronger passwords for the user and phone and stronger DOS attack prevention mechanisms (bad IP address blocking).

**Fonality
Fonality Heads-Up-Display Mobile
www.fonality.com**

Fonality Heads-Up-Display (HUD) Mobile is a UC smartphone client application that connects your phones, desktop and important business applications into a single, unified interface. Fonality Heads-Up-Display Mobile extends their desktop version of HUD to your iPhone or Android smartphone to increase productivity and the ability to seamlessly work from anywhere.

HUD gives users the ability to call, e-mail, send a text, chat, and leave a voicemail from one easy-to-use platform. Displaying color-coded real-time updates, users can instantly know who is available, who is on a call, and who is in a meeting. Users have the ability to determine how they wish to be contacted, by directing calls to either their office or mobile phone. Fonality HUD gives users the ability to work from anywhere, as long as they either have an Internet connection or access to a mobile device. Integration of the users' Google and Microsoft Exchange contacts allows for a simplified integration with their current contacts and the ability to click to e-mail and click to call.

HUD Mobile gives agents and managers simple usage by allowing them to log in and out of queues from their mobile devices. Managers can leverage real-time presence indications to monitor their agents, and record calls even when they are not in the office. Fonality Heads-Up-Display mobile edition is the first UC mobile client that provides rich real-time presence and contact center features for the SMB audience. According to Fonality, users can leverage the desktop client of HUD, the soon to be web-based version of the same client, or HUD mobile.

Company	Product	Website
ADTRAN Inc.	Virtualized NetVanta Unified Communications (UC) solution	www.adtran.com
Digium Inc.	Switchvox	www.digium.com
Fonality	Fonality Heads-Up-Display Mobile	www.fonality.com
High Speed Video	ClearVision	www.hsvideo.net
Presence Technology LLC	Presence Hosted Contact Center Suite	www.presenceco.com
Toshiba America Information Systems	Strata Meeting	www.telecom.toshiba.com
ZoomSwitch	ZoomSwitch ZMS20-UC	www.zoomswitch.com

**High Speed Video
ClearVision
www.hsvideo.net**

ClearVision is a managed SaaS-based enterprise-grade videoconferencing platform offering a standards-based and cross platform software-based alternative to more expensive hardware-based alternatives. It delivers enterprise-grade video communications and desktop telepresence as an end-to-end managed service, and supports advanced collaboration features.

ClearVision is designed to work with any web cam-equipped PC, giving it fully featured videoconferencing endpoint capabilities. The collaboration features include instant messaging, desktop sharing and document sharing integrated with ClearVision video communication features. Standards supported include H.323 and SIP signaling, H.263, H.264 and H.264SVC, H.460, and H.239.

High Speed Video explains, “ClearVision is the first enterprise-grade standards-based SaaS videoconferencing platform. We are

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.com

Alcatel·Lucent 

also the first to provide completely software-based endpoints that can be integrated with existing/legacy videoconferencing and telepresence systems already in use by enterprises. ClearVision promises to truly democratize videoconferencing for the first time. The High Speed Video ClearVision Platform utilizes a proprietary transport methodology to ensure security, reliability and performance around the globe using existing IP network infrastructure.”

Their product works with all standards-based legacy systems, including legacy H.323 conferencing systems. Since it is service based, customers don't need a specialized IT staff to manage it. They explain, “This combination of software and service also allows us to constantly upgrade the service with the latest technologies and support the latest devices (such as smartphones and tablets) that enterprises, government, education and health care industries may adopt. As a result, the risk of obsolescence is eliminated. The solution is completely disruptive because it offers all the features of systems costing 10 to 100 times more in TCO without any limitations over such systems.”

It features full HD, full-motion, low-bandwidth multipoint video communication that can support any kind of endpoint (PCs, laptops, mobile devices, tablets, etc.) as well as traditional telepresence room infrastructure. Also, ClearVision sessions can be set up within minutes across legacy systems and ClearVision endpoints – virtually on-demand. In the last six months, the company has added full 720P HD resolution, chat, and a VoIP softphone. The solution uses the Internet leveraging 300 to 400kbps connections, and the service is available for \$100 per user per month, or less in volume.

Presence Technology LLC **Presence Hosted Contact Center Suite** **www.presenceco.com**

Presence Hosted Contact Center is a hosted all-in-one suite offering rapid integration with call center applications, lower TCO, and the ability to choose modules as needed, such as outbound, inbound, IVR, routing, e-services, recording, back office tasks, and reporting. The Presence Agent is a web-based system so all the agent needs is a browser, thereby enabling home-based agents as well. All other components, such as servers, gateway, etc., sit at the hosted location.

The Outbound Dialer, IVR, intelligent routing, database and recorder are all located in the hosted facility. Presence offers contact center services as needed, either on site, deployed as a hosted contact center service, or in a combination of both.

This hosted solution covers the gambit of automation, multi-channel, blending, predictive dialing, and quality recording requirements necessary in contact center environments. It also includes a powerful routing engine that takes into consideration business rules as well as service levels. It also has a fully integrated scripting tool, which can be used for outbound, inbound, multimedia and back office services. The outbound dialer offers three different automated dialing modes: preview, progressive and predictive.

Toshiba America Information Systems, **Telecommunication Systems Division** **Strata Meeting** **www.telecom.toshiba.com**

Strata Meeting is a meet-me audio conferencing and web collaboration solution available in a compact server appliance or a larger 1U rack-mount server. It's compatible with Toshiba's Strata CIX family of IP business communication systems, and is available from eight to 24 ports.

Toshiba's Strata Meeting solution gives users of Toshiba VoIP systems the ability to create web meetings either scheduled or on the fly with audio conferencing, audio conference recording and desktop sharing. Toshiba explains, “Strata Meeting is one of the few meet-me audio conferencing products that also includes web collaboration capabilities at a price point suitable for the SMB.”

It features reservation-less and scheduled meet-me conferencing for fast start up of conferences and easy scheduling, and an easy-to-use web interface to enable moderators to schedule conferences. A Conference View shows moderators the participants that are in their conference and enables the management of individual participants. Participants can be muted, disconnected, or transferred to another conference for a sidebar conversation. Moderators and participants can also control the conference via DTMF. It also has Outlook Calendar integration, web-based reporting, as well as moderator and participant codes for security and

control. One important feature is its built-in audio recording capabilities for later playback. It also sports built-in chat capabilities.

ZoomSwitch **ZoomSwitch ZMS20-UC** **www.zoomswitch.com**

Many companies have a large investment in wireless or corded office headsets and don't want to make a huge investment in new UC headsets that work with both a PC and the phone. So how can they leverage existing headsets in a new UC infrastructure? Well, ZoomSwitch's ZMS20-UC solves the problem by allowing them to connect current headsets into their small circular unit. And, because it's USB-based, it also connects to the PC and is detected as a USB audio device, including playback and microphone.

With the simple press of a button users can switch from PC to phone audio. A mute button is the only other button on top of the unit, making this a very simple device to use. It also includes a volume control on the side that amplifies the sound on the USB side, and a compatibility switch that includes normal, HIC (Avaya phone), and Cisco mode.

The product is intended for use with popular UC applications like Microsoft Office Communicator, Cisco IP Communicator, IBM Sametime, Avaya One X, Google Voice, Skype and others. Introduced in late 2007, the original ZoomSwitch was the first product of its kind to hit the market. Now, the ZMS20-UC offers greater compatibility with phones and headsets, and adds critical features like volume control and mute. The product includes compatibility with most office headsets, including Jabra, Plantronics and Sennheiser.

The ZMS20-UC not only enables companies to leverage their existing investment in desk phones, wired and wireless headsets, but users can keep their favorite, most comfortable, and most ergonomic devices that they've become accustomed to. In the last six months, the ZMS20-UC Rev. A added a compatibility setting for the Avaya HIC cable, a new protective circuit, and stereo mixdown to listen to both channels of PC audio. **UC**

Tom Keating is vice president, CTO and executive technology editor/SEO director of TMC.

OUR CUSTOMERS

SERVICE MILLIONS WITH OUR COMMUNICATIONS PLATFORM

INTERACTIVE INTELLIGENCE®



Are you **intelligent** yet?

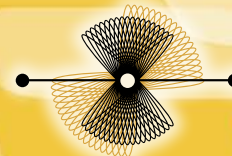
“We needed a future-proof contact center platform. The Interactive Intelligence team provided a flexible multi-channel, multi-feature, multi-everything communications solution that will grow with us.”

–**Doug Scheid**,
IT Sr. Director
CAPITAL

Credit card issuers trust their cardholders will be well-served by the outsourced customer care offered by Capital Card Services and their busy U.S. contact centers. Capital’s 200 agents field millions of cardholder interactions each year through the unified IP business communications platform from Interactive Intelligence.

Capital Card Services joins more than 4,000 other organizations that depend on the Interactive Intelligence all-software, multichannel communications solution to efficiently handle a high volume of interactions. From this single platform, Capital can add new capabilities to their contact centers without worrying about integration or hardware headaches.

Visit **www.TheIntelligent.com** to learn how community members like Capital Card Services use the Interactive Intelligence solution to successfully meet their service guarantees.



INTERACTIVE INTELLIGENCE®

Contact Center
Enterprise IP Telephony
Business Process Automation

www.TheIntelligent.com

MessageStats®



Reporting is Common. Intelligence is Priceless.

Reports deliver data. MessageStats *maximizes* your Exchange and Unified Communications investments by delivering the intelligence you need to gauge messaging system efficiency. The result? Now you can reduce UC costs and improve performance. That's why administrators managing more than 15 million users trust MessageStats.

Unified Communications magazine says that "Quest has proven they are committed to quality and excellence while addressing real needs in the marketplace," and has awarded MessageStats the prestigious "2010 Product of the Year" award. See why. Read "Reduce the Costs and Improve the Performance of Your Exchange-based UC Environment with MessageStats" at www.quest.com/Intelligence.



Microsoft Partner

Gold Independent Software Vendor (ISV)
Silver Unified Communications