

087238928329123918237

69991

Interactive Intelligence's IPA

www.itmag.com

R

A Communications-Enabled

15678236

Business Practices & Processes TMC Labs Innovation

ntersection 618987

GridNode Rue = 0.97 Coordinate value = 0.97 GridNodeBlock GridNode id="node 02" Coordinate value= 1"

TMC Labs Innovation Awards, Part 1

> Lean & Mean High Availability

inuous= 'false'

All-the-servers-you've ever-seen-in-your-life



the contact center

enterprise IP telephony



Look in your server room and they go on forever, all those servers, racks, switches and cooling fans. Not a pretty picture, so picture this. One platform, one application suite and one administration interface, coming together on one network, for every communication function in your contact center. We call our work of art "All-in-one."

Join us for a live online demo of our all-in-one IP contact center solutions... you even determine the content.

Every Friday, 1:00 EST Visit *http://www.inin.com/events* for more information and to register online.

www.inin.com



INTERACTIVE INTELLIGENCE[®] Deliberately Innovative



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

EDITORIAL

Group Editorial Director, Erik Linask (elinask@tmcnet.com)

Executive Editor, Richard "Zippy" Grigonis (rgrigonis@tmcnet.com)

Group Managing Editor, Michael Dinan (mdinan@tmcnet.com)

TMC LABS

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

ART/DESIGN

Creative Director, Alan Urkawich Graphic Designer, Lisa Mellers

EXECUTIVE OFFICERS

Nadji Tehrani, Chairman and CEO

Rich Tehrani, President

Dave Rodriguez, VP of Publications and Conferences

Michael Genaro, VP of Marketing Tom Keating, CTO, VP

ADVERTISING SALES Sales Office Phone: 203-852-6800

Executive Director of Business Development — Central/Eastern U.S., Canada, Europe, Israel, Latin America Anthony Graffeo, ext. 174, (agraffeo@tmcnet.com)

Strategic Accounts Sales Executive — Jaime Hernaez, ext. 217 (jhernaez@tmcnet.com)

Account Executive — Richard Moavero, ext. 134 (rmoavero@tmcnet.com)

SUBSCRIPTIONS

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

Annual digital subscriptions to **INTERNET TELEPHONY**®: free to qualifying U.S., Canada and foreign subscribers. Annual print subscriptions to **INTERNET TELEPHONY®**: free, U.S. qualifying readers; \$29.00 U.S. nonqualifying, \$39.00 Canada, \$60.00, foreign qualifying and nonqualifying. All orders are payable in advance in U.S. dollars drawn against a U.S. bank. Connecticut residents add applicable sales tax. For more information, contact our Web site at www.itmag.com or call 203-852-6800.

EXHIBIT SALES Sales Office Phone: 203-852-6800

Global Events Account Directors Companies whose names begin with:

A-L or #s: Maureen Gambino (mgambino@tmcnet.com)

M-Z: Joe Fabiano (jfabiano@tmcnet.com)

Conference Sales Director, Frank Coppola (fcoppola@tmcnet.com)

About INTERNET TELEPHONY®

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

Iran vs. the Internet

The Zippy Files



une 12, 2009 will go down in history as one of the great moments in history, if only because the Internet demonstrated it could not only withstand nuclear wars and natural catastrophes, but also deliberate attempts by governments to

exercise absolute control over its workings.

On that day Iran held allegedly democratic presidential elections between incumbent both President Mahmoud Ahmadinejad and moderate rival Mir Hossein Mousavi. Both claimed victory almost immediately. The apparent landslide results for Ahmadinejad has spurred charges of voting fraud, protests worldwide, and riots across Iran, which in turn has led the Iranian government to order international news organizations not to broadcast any of the livelier activities, and attempt to cut off the nation's Internet and cellular access by powering down gateways/routers to international networks, removing satellite dishes, and cutting off their version of the PSTN.

On June 13th at 6:00 p.m. in Tehran, all 6 of Iran's regional and global providers connecting Iran to the outside world simply disappeared off of the net. The state-owned Data communication Company of Iran (DCI), normally the gateway for all Internet traffic entering or leaving the country (normally about 5 Gbps upstream) apparently started suffering from some "problems". Iran's primary connections are from CDI through the Asia Pacific region undersea cable operator Reliance Telecom, along with Singtel and Türk Telekom. By doing this, of course, Iran's government was simply be "shooting itself in the foot". Credit card systems, ATMs, electronic commerce of various sorts and even power utilities increasingly rely on the communications infrastructure. Indeed, one pundit has suggested that a recent power outage in Tehran was caused by "unpluging" critical points in Iran's communications networks which carry messages over control channels between power generating and switching equipment.

By June 16, traffic was back to 70 percent of normal.

So what's going on?

Dr. Craig Labovitz, chief scientist at Arbor Networks (www.arborneworks.com) says, "DCI's Internet changes suggest piecemeal migration of traffic flows. Typically off the shelf / inexpensive Internet proxy and filtering appliances can support 1 Gbps or lower. If DCI needed to support higher throughput (say, all Iranian Internet traffic), then redirecting subsets of traffic as the filtering infrastructure comes online would make sense. Unlike Burma, Iran has significant commercial and technological relationships with the rest of the world. In other words, the government cannot turn off the Internet without impacting business and perhaps generating further social unrest. In all, this represents a delicate balance for the Iranian government and a test case for the Internet to impact democratic change. Events are still unfolding in Iran, but some reports are saying the Internet has already won."

The Iranian protests, armed with nothing more than Twitter, Facebook, cell phone cameras and some email, are employing proxy servers to get around government cyberblockades. Some software to accomplish this was developed by a group of Chinese computer engineers in America called the Global Internet Freedom Consortium, now used by over 400,000 people in Iran. Ironically, this free software – called Freegate, appropriately enough (as well as its variant, Ultrasurf) – was originally designed to penetrate the cyber-barriers erected not by Iran, but those of the Chinese Communist Party as part of their censorship of the Falun Gong, a repressed Chinese spiritual meditation group. The software can be transported via a flash drive in one's pocket. When run, it calls upon the Consortium's overseas server that changes its IP address at time intervals too quickly to be blocked, then connects the user to a banned site. Freegate can encrypt emails and it can remove any traces of itself or its activities from a computer. **IT** It's all great – but too bad the other side has guns.

Richard Grigonis is Executive Editor of TMC's IP Communications Group.

Publishers Outlook



iPhone OS 3.0 Review: Batteries Not Included

ith the help of TMC's CTO, Tom Keating, I upgraded to the shipping version of the iPhone 3.0 software before the June 17 general availability date.

The upgrade is easy but it took me about 6 hours to download the new OS, restore the software, load the apps, download the podcasts and sync the photos (then again, I have thousands of contacts and photos and over 50 apps). To my happy surprise, unlike previous upgrades, I didn't have to reenter WEP keys for secure WiFi.

Push email works great and the landscape keyboard in email makes typing on this device infinitely better. It's also less clunky when sending a URL to someone (previously you had to switch from landscape to portrait when opening the email application for a send). Also, when looking at an email list, you can now tell which is a Cc, Bcc or direct send, which is signified by a "To" symbol. Ironically, there is no Bcc symbol, meaning if there is no symbol you have been Bcced. This is an important addition to the OS as quite often mobile devices make it more difficult to know if you have been Bcced, so users can accidentally reply to all without realizing they probably shouldn't.

There is also MMS support but this won't work on AT&T Wireless for now. Copy-and-paste is a much-needed function and works as advertised — the fact that one of the most advanced smartphones on the market "forgot" to add cutand-paste sooner still baffles me.

Spotlight search is another much-needed function — especially when you realize there is no way to organize applications, and is activated when you scroll all the way to the left from the home page. Searches will sift through contacts, programs, calendar, email, songs and other data on the phone but unlike the Palm Pre will not check the web if the device search comes back empty.

Voice Memos are a great addition allowing you to record your voice and send the recordings via email if desired. The improved calendar now lets you add repeating reminders but these are limited to fixed time periods like every week, 2 weeks, month or year. Ideally you would be allowed to enter recurring reminders for selected days — like every Monday or the first Wednesday of the month. Moreover, what if someone wants a 3-week recurring reminder? This was a design decision which delivers most of the functionality you need in a clear and uncluttered interface. Even so, I wish I could set a calendar reminder more than 2 days before an appointment. Microsoft Windows Mobile has had this ability for years so there seems to be no technical reason to exclude such a feature.

Apple took a very good phone and has made it a more credible corporate smartphone, which means Palm, Nokia, Microsoft and RIM should be worried. Heavy iPhone users need not fret about the keyboard as much as before but they should now think about spare external batteries, since enabling things like push email and bluetooth stereo will shorten battery life. Windows Mobile also drains battery life quickly for heavy email users in push mode. RIM devices do much better in push mode and are optimized in many ways to maximize battery life regardless of mode.

You should be really happy with the new iPhone 3.0 software, it is a winner.

GoTo

Table of Contents • Ad Index

GoTo



TMCnet (www.tmcnet.com)

TMCnet EDITORIAL

Group Editorial Director, Erik Linask

Group Managing Editor, Michael Dinan

Assignment Editor, Stefania Viscusi Contributing Editorial: Patrick Barnard, Susan Campbell, Tim Gray, Jessica Kostek, David Sims, Amy Tierney

> TMCnet PRODUCTION Webmaster, Robert Hashemian

Creative Director, Alan Urkawich

Senior Web Designer, Maxine Sandler

Web Designers: Scott Bouchard, Jean Louis

Web Designer, Karen Milosky

Advertising Traffic Manager, Tim Goins (tgoins@tmcnet.com)

MARKETING

VP of Marketing, Michael Genaro Creative Director, Alan Urkawich Marketing Director, Lorna Lyle Marketing Manager, Jan Pierret

FINANCE

Controller, Allen Frydrych

Accounts Coordinator, Mary Hodges

READER INPUT

INTERNET TELEPHONY® 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.

IDENTIFICATION STATEMENT

INTERNET TELEPHONY* magazine (ISSN: 1098-0008) is published monthly by Technology Marketing Corporation, One Technology Plaza, Norwalk, CT 06854 U.S.A. Annual print subscriptions: free, U.S. qualifying readers; \$29.00 U.S. nonqualifying, \$39.00 Canada, \$60.00, foreign qualifying and nonqualifying. Periodical postage paid at Norwalk, CT and at additional mailing offices. Postmaster: Send address changes to: **INTERNET TELEPHONY***, Technology Marketing Corporation, One Technology Plaza, Norwalk, CT 06854 USA.

INTERNET TELEPHONY® is a registered trademark of Technology Marketing Corporation. Copyright © 2009 Technology Marketing Corporation. All rights reserved. Reproduction in whole or part without permission of the publisher is prohibited.

REPRINTS AND LIST RENTALS For authorized reprints of articles appearing in **INTERNET TELEPHONY***, please contact Reprint Management Services at: The YGS GroupToll Free: 800.290.5460 P: 717.399.1900 x100 F: 717.399.8900

e-Mail: tmcnet@theygsgroup.com • www.theYGSgroup.com



FOR LIST RENTALS please contact Glenn Freedman at glennf@l-i-s-t.com or call 516-227-2010 ext. 101.



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







Everything You Need to Know About SIP Trunking

Get the facts about SIP trunking. Learn everything you need to know from the industry's leading experts in these educational seminars, free for all ITEXPO attendees.

Live Demos

Watch as a SIP trunk is deployed live - on-site - in 20 minutes or less.

Tuesday, September 1, 2009

SIP Trunking Professional Development Program Enterprise infrastructure Service provider view

Wednesday, September 2, 2009

Legacy PBX/PSTN and SIP Trunks Security

Thursday, September 3, 2009

SIP Trunk Boot Camp with Ingate Sessions for Carriers

Meet us at the Los Angeles Convention Center

For more information: www.ingate.com/SIP_Trunking_seminar.php

Contents

Columns

- 1 The Zippy Files Iran vs. the Internet
- 2 Publishers Outlook iPhone OS 3.0 Review: Batteries Not Included
- 8 Next Wave Redux High Availability – In the Cloud
- 10 Packet Voice Over Wireless How to Make an HD Phone Call
- 10 Enterprise View Are You a Counterfeit Reseller?
- 12 Integrator's Corner Network Management: Aligning the Toolkit with Business Requirements
- 12 Nitty Gritty Elma's Enclosures with Style
- 16 UC Unplugged Enterprise Transformation: Social Media Meets UC

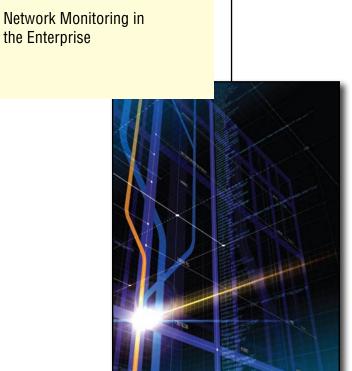
Feature Articles

- 34 Communications-Enabled Business Practices & Processes
- 40 Lean & Mean High Availability
- **44** A Note on Rural Carriers
- 48 Network Monitoring in the Enterprise

Departments

- 14 Ask the SIP Trunk Expert SIP Trunking with a Legacy PBX
- **18** The Channel
 - 18 The Channel Perspective
 - 19 Channel/Agent News
 - 20 Talking with Dan Ferguson, AdvanTel Networks
 - 22 On RAD's Radar
 - 22 Service Provider Insights
- 24 Ask the Colocation Expert What is "Communications as a Service"?
- 26 Industry News
- 4 **INTERNET TELEPHONY®** July 2009

- 32 Open Source 32 Talking with Asif Naseem, GoAhead Software
 - 33 Open Source News
- 46 Editorial Sponsorship Series: Media5 Taking the Myth Out of Mobility
- 56 Special Focus 2009 TMC Labs Innovation Awards, Part 1
- 62 Ad Index
- 64 Final Examination Interactive Intelligence's Remarkable New IPA



34

Cover Story

48







 GoTo:
 GoTo:

 Table of Contents
 • Ad Index



Evolving standards and speech technologies are driving the business case for companies to deploy new speech applications to create additional revenue streams, increase customer satisfaction, and trim costs. Voxeo's IVR Global Online Community on TMCnet is the industry destination for tools, information, and resources for building and deploying enhanced IVR and VoIP applications.

- Hosted and on-premise IVR
- VoIP Platforms
- Free developer tools
- VoiceXML, CCXML and SIP Standards

http://ivr.tmcnet.com



- 0 X

Powered By:



Contents

What's On TMCnet Right Now?

To stay current and to keep up-to-date with all that's happening in the fast-paced world of IP telephony, just point your browser to www.tmcnet.com for all the latest news and analysis.With more



than 36 million page views per month, translating into more than 3.1 million unique visitors, TMCnet.com is where you need to be if you want to know what's happening in the world of VoIP.

Here's a list of several articles currently on our site.

Is There a Broadband Problem? And if So, What is It?

As somebody who lives "out west," attending a broadband policy summit in the Washington, D.C. area is always instructive. Today's event is the "Broadband Policy Summit" sponsored by Pike & Fischer. As you would expect, there's a wide range of views about the extent of competition, and what needs to be done. The Free Press says there isn't enough competition. Verizon and Time Warner Cable obviously say the market is intensely competitive.

www.tmcnet.com/10814.1

Skype, Cablecos, CLECs: The Toyotas of Telecom?

Much the same way the cablecos, Skype, some CLECs, and a few OTT/MVNO operators have made life difficult for incumbents, the Big Three have struggled against the "imports." Aside from the established overseas majors – Toyota, Honda, Nissan – others like Hyundai, Kia and Suzuki have gained notable market share in the past few years. Why is it that these companies can enter the market with continual success, but there is no new blood coming from domestic producers?

www.tmcnet.com/10815.1

If Cisco Is Right about Video Content, Networks Must Evolve

The growth of unmanaged, data-heavy video on the Internet is presenting a major issue to broadband service providers. Analysts say that this category of Internet traffic will grow at a 28 percent compound annual growth rate. Some BSPs have suggested a higher growth rate of 40 percent, while Cisco suggested that video would represent 90 percent of all Internet traffic by 2013. This begs the question, "how will networks evolve to bring management to this tidal wave of media?

www.tmcnet.com/10816.1

Enterprises Showing Clear Preference for Pre-arranged IP Software Support

Our recent surveys conducted with research partner IntelliCom Analytics have been examining how businesses are handling the support of their increasingly sophisticated and complex voice infrastructures. Since the powerful capabilities of contemporary IP Telephony platforms are primarily software-based, last week's survey took a look at how businesses are specifically addressing the support requirements of their communications software. www.tmcnet.com/10813.1

TMC's Whitepapers of the Month

Visit TMCnet's Whitepaper Library (www.tmcnet.com/tmc/whitepapers), which provides a selection of in-depth information on relevant topics affecting the IP Communications industry. The library offers white papers, case studies, and other documents that are free to registered users.

Cloud Telephony for Carriers and Service Providers

In these economically challenging times, many businesses are reacting by hunkering down and looking to reduce expenses. There now exists a great opportunity for innovative carriers and service providers to leverage contemporary information technology to the advantage of a market anxious for cost-effective telecommunications solutions. Cloud Telephony is a powerful new Web-based voice telephony option for the SMB market. www.tmcnet.com/10810.1

Optimize Your Network on a Limited IT Budget

Today, applications delivered over the Internet are commonplace even among small-to-medium sized enterprises but, while deploying applications over the Internet is becoming easier, there are still many concerns about ensuring reliability, performance and security when applications go across the wide area network (WAN). For the IT personnel responsible for deploying, maintaining and supporting these networked applications, there is an increasing requirement to get the highest performance out of network equipment, while simplifying the complexity that causes excess overhead and unnecessary costs. www.tmcnet.com/10811.1

Business Continuation/Disaster Recovery

Be confident your business continuation plan will work when you need it to: Test it with IQ Services' Disaster Recovery/Business Continuation testing services. Disaster Recovery planning is a key element of risk management. Testing your plan before you need to use it reduces the inherent risk within the plan, gives you confidence your plan and sites will be ready and will perform as expected, and identifies areas within your plan that need improvement. www.tmcnet.com/10808.1



This Month's Featured Channels

VoIP Test Solutions



http://www.tmcnet.com/channels/voip-test-solutions

Mobile Unified Communications



http://www.tmcnet.com/channels/ mobile-unified-communications/

Hosted PBX



http://www.tmcnet.com/channels/hosted-pbx





Introducing the IP-PBX Global Online Community

If you are in the market looking to purchase a new phone system, chances are you'll be looking at an IP PBX. The IP PBX market has been growing steadily, which means there are a plethora of choices and options. And, with all the choices you face, it can get quite confusing.

The IP PBX Global Online Community is an excellent resource for companies and individuals who are facing the difficult decision of purchasing a new phone system. This community features breaking news, in-depth feature articles, case studies, links to white papers and webinars... all the information you need if you are charged with learning about the current state of the market and making a purchasing decision.

HTTP://IP-PBX.TMCNET.COM Visit the IP PBX Global online community today.

Featured on IP-PBX Community:

- 🛞 Real-World Case Studies
- 🛞 Breaking News
- (*) In-Depth Feature Articles
- 🛞 Expert Insight
- 🔆 Free Demos and Whitepapers



By: Brough Turner

High Availability — In the Cloud



"Highly Availability" has been a hallmark of the telecom industry for more than a century but the design parameters have changed and not everyone has noticed. With the advent of computers in telecom more than 40 years ago,

software issues became part of the puzzle. Now with the advent of commodity computers and cloud computing services, economic considerations tip the balance almost entirely to software design and yet I still encounter system architects who remain focused on hardware.

If you're designing a PSTN gateway, it's true you have to terminate legacy trunks, e.g. N+1 redundant T1/E1 lines or 1+1 redundant optical links. And you'd like to minimize costs by favoring N+1 redundancy wherever possible — the larger one can make N, the smaller the relative cost of the 1 redundant (and thus normally idle) component. But the difficult issues in such a design are software ones. How does call control distribute traffic? How does the software continue to function is the presence of processor failures and software bugs? And how do you guarantee data integrity so call processing resumes correctly after failures?

But once you're designing services on IP networks, everything changes. You can assume a reliable Internet backbone, accessible by connecting to two or more backbone providers at different locations. Multiple PSTN wholesalers, each with multiple PSTN gateways, make reliable PSTN connectivity a commodity. And now there are multiple sources of commodity computing available for rent by the hour, e.g. Amazon's EC2 service, Rackspace's Mosso and many others. This means there is no hardware design in the traditional sense — all design issues are software issues. More importantly, it changes the economics and thus the design criteria. With commodity cloud computing, your costs depend on storage used and on hourly traffic levels (as bandwidth is billed by the gigabyte and compute capacity is billed by the CPU-hour). For reliability, identical functions have to be distributed across at least two different cloud vendors and two different access vendors. For management purposes and reliability, the best architecture is one that uses identical execution images distributed across multiple CPUs. This allows the number of CPUs to be dynamically adjusted to match current traffic plus a safety margin. The real design issue is how to do load balancing, but now that we're 100 percent software, there are a number of solutions already in existence and directly applicable, including open source solutions like Linux Virtual Server, Red Hat Cluster Suite and Ultra Monkey. What's more, they run on the same cloud infrastructure. Finally, there's no up front investment in equipment. Today's highly available service can be deployed on a pay-as-you-go basis. This is an exciting new world.

Brough Turner is Chief Strategy Officer of Dialogic (www.dialogic.com).





September 1-3, 2009 • Los Angeles Convention Center • Los Angeles, CA

Communications Conference

The industry's best-attended event attracting thousands of communications professionals seeking new partners and the latest information

- Discover New Solutions
- Establish New Relationships
- Learn How To Select & Deploy
- Meet 1000's Of Partners
 And Suppliers



Diamond Sponsor:



Platinum Sponsors:







CUSTOMER INTER



By: Michael Stanford



How to Make an HD Phone Call

The PSTN is a marvel, allowing anybody with a phone number to talk to anybody else regardless of geography. The system is also antiquated, using technology that delivers sound quality inferior to AM radio. By contrast, Voice-over-IP is techni-

cally capable of delivering better than CD quality sound. For phones this type of capability is often termed "HD Voice".

For a call to use HD Voice, its entire path must be over IP, with no PSTN legs. There are two classes of reason why this rarely happens, technical and business. The business reason is that telephone companies compensate each other for calls on the PSTN. These termination charges are a significant source of revenue for VoIP service providers, and an incentive to favor the old, inferior technology. There are several technical reasons. Convenience of dialing is a debatable one. On the one hand, every phone has a numeric keypad, and phone numbers are familiar to the point that people find them intuitive. On the other hand, email-style addressing of phone calls is widely used by Skype and similar PC-based services. Using email-style addressing for phone calls ("SIP addressing") is problematic with a phone keypad, but modern phones have builtin directories and recent call lists, so most calls can be made this way rather than by having to enter a new address.

Going to SIP addressing guarantees end-to-end IP connectivity and it's easy to do technically: provision your firewall to make your VoIP system reachable over the Internet, then add SIP records to your DNS. Having done that, there is a simple method to allow calls made with old-style phone numbers to complete over IP end-to-end. It is called ENUM. Organizations like E164.org provide databases of IP addresses associated with phone numbers. It is trivial to add your phone numbers to such databases. This covers inbound calls. Then you need to provision your phone system to check an ENUM database when making outbound calls. Again, not rocket science.

If you take the simple steps of adding SIP records to your DNS, registering your numbers in an ENUM database and doing an ENUM lookup on outbound calls, your phone bills will plummet and your calls will sound vastly better.

Michael Stanford has been an entrepreneur and strategist in Voice-over-IP for over a decade. Visit his blog at www.wirevolution.com.

Enterprise View

By: Max Schroeder



A Reseller Educational Series — Are You a Counterfeit Reseller?

There wouldn't be such a thing as counterfeit gold if there were no real gold somewhere. — Sufi Proverb

The above proverb is very apropos for today's value conscious customers who are carefully evaluating both products and the quality of reseller services. Terms like "Gold-level Service" are often used casually and can be misleading. Sometimes a customer expecting "Gold-level" service ends up with "rusty-iron" service.

Service contracts are an excellent source of recurring revenue. Communications are mission critical for most companies so contracts are generally renewed. However, if your company has morphed into "Rusty Iron Communication Services", the result will be cancelled contracts and lost revenue.

Many resellers are reducing their training budgets resulting a lowering of employee skills. Granted, it is expensive to have employees attend technical certification and sales training courses but there are ways to reduce costs and still keep you staff current including:

1. Use a "train-the-TRAINER" program whereby one person gets trained and trains other team members. For best results, select an employee with good teaching skills and schedule the in-house training to immediately coincide with the return of the TRAINER.

2. Utilize the many free or low-cost webinars and other easily accessible programs and resources available.

TMC is a fantastic resource for both of the above. I personally conducted a TMC University Course at ITEXPO East 2009 (minimal cost for conference attendees) and a free sales training course for resellers. Additionally, ITEXPO offers quality time with manufactures, exposure to new product releases and the opportunity to mingle with resellers from varied geographic areas to get a good read on the national market.

TMC's web site is a goldmine of educational opportunities including webinars, podcasts, white papers and videos — Click "Free Resources" at the top of the home page (www.tmcnet. com). Encourage your staff to keep current with the TMC site by periodically selecting topics and conducting a brief quiz. A gift card or other incentive can be awarded to employees who "pass the quiz" or score highest.

Max Schroeder is the Senior Vice President of FaxCore, Inc. (*www.faxcore.com*)



Introducing the VoIP Phone Systems Global Online Community

Voice over IP is transforming the business communications space with immediate benefits, including cost savings, added features, greater functionality, remote access, and more. Finding the right VoIP phone system for your business can be a challenge, which is why FreedomIQ brings you the VoIP Phone Systems community on TMCnet.

> The community presents a reliable resource for your business communications needs, with expert advice and the latest news from the VoIP industry.

http://voip-phone-systems.tmcnet.com



By: Juan Amaya



Network Management: Aligning the Toolkit with the Business Requirements

To serve ever-growing business demands and support new devices and technologies, the network continues to expand in size, services and complexity. Thus, IT

staffs at companies of all sizes — from multinational corporations to government agencies to service providers — are greatly challenged to provide high-performing, available and dependable multi-service network infrastructures that effectively must support a wide variety of business requirements.

To solve these challenges, network operations teams have traditionally relied on tools such as continuous capture, distributed monitoring (probes), flow collection, alarming, analysis and reporting to anticipate impact, proactively monitor performance, accelerate problem resolution, and control network configurations and changes.

Today's network management teams need advanced and often specialized tools to build a solid network infrastructure that maintains desired service levels; tools that provide information to specific groups, such as: Application monitoring, network capacity planning, network performance management, network troubleshooting, VoIP management, standards and regulatory, configuration and compliance, and process automation - root cause analysis. To underscore this point, let's look at application-specific tools like VoIP/IPT. With this specialized technology, network managers can scan all voice communications, detect a drop in the mean opinion score for a particular IP PBX/handset, present voice quality alerts, provide voice quality reports, maintain optimum reliability and provide fault detection and remediation services. This kind of detailed information — not available with traditional network tools — creates built-in service and improves network operation.

Network Management vendors are maturing rapidly and are very dynamic. By employing the right mix of advanced tools, applications and devices, network management can build and maintain solid network infrastructures that support current and future service level objectives and business requirements. Selecting the right network management tools requires strategic — not merely budgetary — evaluation of all the available options, with attention to enterprise-wide business requirements, deployment challenges and the potential impact of governance issues.

Juan Amaya is a network solutions architect and technologist at Forsythe Technology. He has more than 15 years of experience in networking, telecom, security and IT and holds numerous current manufacturer certifications.

Nitty Gritty

By: Richard "Zippy" Grigonis



Elma's Enclosures with Style

Black and white is often a harbinger of "style". One of the greatest social events of the last century was Truman Capote's legendary 1966 Black and White Ball at

New York's Plaza Hotel. Contemporary home interiors often combine black and white with sleek metals.

So, why not black and white computer enclosures? Or colorful ones, for that matter?

Indeed, Elma Electronic (www.elma.com) the great global maker of electronic packaging products, has upgraded its popular Type 15 StyleBox enclosure with several key features, among them more colors, a new handle assembly, 51 different sizes, and a flexible design allowing it to convert to a portable tower.

The StyleBox' new handle design comes in three parts — a top and bottom that attach to the enclosure, and a centerpiece offered in heights from 1U to 7U. The handle pieces come in white, silver, or custom colors (they can be mixed-and-matched for more color combinations). Standard sizes of the new Type 15 enclosure range from 2U to 7U high and widths of 42 HP, 63 HP, and 84 HP. With depths in 245 mm, 305 mm, 395 mm,

or 500 mm, many size configurations are possible, or you can customize. The enclosure's front can also optionally be recessed by 60 mm with reduction kits, which provides space for protecting electrical or optical connectors – and can be provided with or without a perforated air-intake panel or a solid panel. The Type 15 also includes a push-on extrusion that saves manufacturing and assembly steps, and hole locations allow the unit to have mounting feet and a top handle installed. Rotated by 90 degrees and feet/handle installed, the enclosure becomes a portable tower. The enclosure configurations include 19-inch rackmount with/ without handles, desktop with/without handles, portable case

(horizontal orientation), and portable tower (vertical orientation).

Richard Grigonis is Executive Editor of TMC's IP Communications Group.





Telecom Expense Management

Visit the NEW Telecom Expense Management Solutions Global Online Community

Get the latest news and information on managing fixed and mobile communications expenses. The community — sponsored by TnT Expense Management, and powered by TMCnet — allows visitors to connect with industry experts, gain valuable insight into communications management best practices, and increase their understanding of how TEM can impact the bottom line.

The Telecom Expense Management Community will showcase daily content updates, including:

- Informative articles
- Breaking news
- Analyst information
- Case studies
- White papers
- Live event links
- and much more!

Powered by:



http://telecom-expense-management-solutions.tmcnet.com/

Ask the SIP Trunk Expert

By: Steven Johnson

SIP Trunking with a Legacy PBX



To date, most SIP trunking providers and resellers have focused on the opportunity to migrate business customers from PSTN service in concert with an upgrade to a SIP-

ready IP-PBX system. While this focus remains logical and compelling, there is also a significant opportunity to migrate customers who maintain legacy (non-SIP) PBXs and contact center systems.

SIP trunking is an excellent opportunity for businesses to slash operating costs, a particularly compelling idea in today's unstable economic climate. There are a great many companies who have yet to make the switch to an Internet-based PBX. Whether the issue be cost, lack of expertise in making the migration or anything in between, the fact is there is a wide swath of small-to-medium businesses looking to leverage SIP trunks but unable to upgrade to an IP-PBX.

The solution is a SIP-capable Enterprise Session Border Controller (E-SBC) deployed at the network edge between a wide area IP network and the corporate LAN, securely passing SIP signaling and VoIP media streams to and from the corporate LAN. A media gateway resides on the corporate LAN and is connected to the legacy PBX or contact center via traditional T1/E1 trunk ports. The gateway passes the SIP trunk signaling and media from the E-SBC to the PBX by emulating traditional PSTN trunk services.

This setup will allow enterprises utilizing legacy PBX and contact center systems to easily and securely adopt SIP trunks as a replacement for traditional PSTN voice services.

It also presents a significant new market opportunity for SIP trunking providers and their resellers.

Important for success is proven interoperability. Security is in part dependent on truly interoperable solutions. The combined security features of the E-EBC with SIP-to-PBX trunk conversion capability of a media gateway that has demonstrated interoperability will enable a cost-effective, secure and reliable SIP trunk interface for customers.

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





SIP Trunking Global Online Community

http://sip-trunking.tmcnet.com

All You Need to Know About SIP Trunking

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

The SIP Trunking Community is a unique space for:

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

Learn about:

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



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







Copyright 2008 Ingate, inc. All rights reserved.

By: Mike Sheridan



Enterprise Transformation: Social Media Meets Unified Communications

At the recent Sirius Decisions conference, marketers from all over the United States talked about how they are trying to reach custom-

ers through social media. With tools such as Facebook and Twitter, companies have so many more channels to interact with their customers. In fact, I recently read about a consumer who "tweeted" regarding an ongoing Dell computer problem. Dell immediately responded to the consumer's request, resolved the customer's problem and probably earned his continued loyalty through social media.

But the exciting opportunity that social media offers isn't just about another contact center channel but how social media and unified communications can work together to transform enterprise processes. You may remember that in past columns, I mentioned the four destinations of the UC journey — and the different benefits associated with each phase:

- 1. Individual Productivity.
- 2. Workgroup Productivity.
- 3. Communications-Enabled Business Processes.
- 4. Enterprise Transformation.

This phase looks outside the company to enhance communications and collaboration with customers and partners. It enables new ways to collaborate through both business and Web 2.0 tools to increase sales and improve service, accelerate the creation of new products and services, or globalize and virtualize the business. Forward-thinking companies are setting up websites to ask customers to vote for favorite promotions or products, creating online communities through social networking websites for consumers to share their experiences. The natural extension is to enable communication directly between especially influential consumers and company employees (e.g. product management) in real-time using presence and collaboration. Now the customer is in real-time directly engaged in product development! And that's just one example. Critically examining every process that touches customers and determining how best to employ social media tools and UC will be a mandate for many IT and business process owners in the near future. Reaching this final phase of the UC Journey can help you company uncover new capabilities that can bring you good fortune in the form of more efficient business processes and increased ROI from a UC strategy.

Mike Sheridan is Senior Vice President, Strategy and Marketing, Aspect (www. aspect.com). With more than 20 years of experience in telecommunications and technology, Mike serves as a key strategist for Aspect, a unified communications solutions provider. Follow Mike on http://twitter.com/thetravelingCMO.



Colocation and Hosting Global Online Community

Visit the NEW Colocation Global Online Community for the latest news and information on Colocation, peering and more.

Calling all telecom providers, ISP's Multi-service carriers, peering exchanges, VoIP Providers, content providers, internet exchanges, gaming companies, enterprises, financial service companies and others who are interested in learning more about Colocation.

The community — sponsored by Telx, and powered by TMCnet — allows visitors to connect with industry experts, gain valuable insight into communications management best practices, and more.

The Colocation Community will showcase daily content updates, including:

- Informative articles
- Breaking news
- Analyst information
- Case studies

- White papers
- Live event links
- and much more!

http://colocation.tmcnet.com

Sponsored by:







By: Don Witt

Channel Networking Expands Channel Visibility and Sales

Human networking often gets lost in the shuffle when introducing new products and technology but can be your strongest ally. Maybe it is because my daughter is graduating high school, but it has reminded me of my networking that started in the western suburbs of Chicago at Proviso West High school, continued to grow at Western Illinois University and again at Golden Gate University in San Francisco. Networking employs social behaviors that can make or break your company and product.

There are many ways that you can enhance networking for a company. **Newsletters** are one of the traditional methods. It allows you to communicate to those that are already familiar with your company, product and technology. This is a good method to help sell new products to the existing channel.

The **company website** helps you network beyond your current company customer base. It allows those that visit to learn about the company and the company products. It helps create the company image and product branding.

Many companies will set up an **.org or .com url** for an organization or a technology. Then they try to make it a focal point for the group or technology. If done well, this technique will allow you create opt in list of the participants. This allows companies to perform direct marketing to an approved list. It also allows company messages and products to be ever-present on the website as an advertiser at no cost.

Blogs have been incredible for technologists to get the word out about companies, products, or evolving technology. This can be an excellent way for a company to continually stay connected with customers, prospects and to competition. If you are a well-known blogger, you can give immediate credibility to a product. Blogs are mostly text but graphics, video, weblinks and audio features are also used. A place for viewer comments should be a part of the blog as this provides direct feedback on the idea, product or company being discussed.

Companies now find that networking with LinkedIn, Plaxo and others are good vehicles to communicate with direct contacts connected to employees or the company and also a way to expand the reach of the employees and company. In this way you can find out your competition's customers and contact names. One method that is proving popular is to start groups. If the group is well defined and becomes popular, this could be a great way of initiating some word-of-mouth advertising to people of like interest, skill, or authority. It is also a way to keep track on the latest technology, trends, and popularity of the leaders *versus* competition.

Publicity techniques are used to help create product awareness that leads to word-of-mouth advertising. These include:

- Special events
- Contests
- Event Sponsorships
- Surveys
- Testimonials
- To name a few

Publicity is a good tactic since it is generally lower cost, but it can be frustrating since publicity is only covered selectively. Your effort may not receive any coverage. The other disadvantage is that you have no control over how the company, product or idea is presented.

Viral marketing is much like a real virus. It targets preexisting communities or social networks and spreads within the group. Generally, these techniques are short lived. A sample would be sending a free computer game to high school boys. Along with the game might be a control panel that contained a company or product name. Another example would be to distribute a free softphone technology to laptop users. This would keep your company or product name in front of the laptop user when they wanted access to the phone service. It would potentially create pull-through if you also offered VoIP services.

All of these channel networking methods are ways of enabling **word-of-mouth** communications. This is one of the most effective means of promoting a product, a company or to establish a brand name. Normally, you would target the market leaders. With the diversity of the channel, companies need to use multiple methods to establish the pull-through that word-of-mouth advertising creates. It is the personal nature of word-of-mouth networking that makes it so powerful. People are more receptive to products and ideas when they are recommended by a friend, relative or associate. This is why it is so important to have a direct access to a channel as an information source and why companies try to have influence over the channel networking via word of mouth.

Has your channel networking been lost in the shuffle?

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

Table of Contents • Ad Index



www.tmcnet.com/9930.1

CallTower Recognized as Microsoft Gold Certified Partner

CallTower, a provider of managed enterprise-class unified communications solutions, announced it has achieved Gold Certified Partner status in the Microsoft Partner Program with competencies in Unified Communications (UC) solutions, hosting solutions, advanced infrastructure solutions and networking infrastructure solutions.

Launched in October 2003, the Microsoft Partner Program provides a single, integrated partnering framework, which recognizes partner's expertise and rewards them according to the total impact they have in the technology marketplace.

Microsoft said that its Partner Program also delivers more value to help partners' businesses be successful — by providing access, training and support to the partners. With Microsoft Gold Certified partner status, CallTower has demonstrated expertise with Microsoft technologies and has also attained the ability to meet customers' needs in the growing market for on demand cloud-based Unified Communications.

www.tmcnet.com/9931.1

Trapeze Networks is First Polycom VIEW Partner Certified for SpectraLink Release 3.0

Trapeze Networks has become the first Polycom VIEW partner to be certified compatible with Polycom's Release 3.0 features including standards-based quality of service and enhanced security. The VIEW Certification Program provides customers with WiFi telephony solutions using enterprise-class WLAN infrastructure products and Polycom's SpectraLink 8020/8030 Wireless Telephones. In partnership with WiFi access point providers, Polycom tests interoperability and performance to ensure successful VoWLAN deployments.

Aside from testing for interoperability in conjunction with Release 3.0, Trapeze Networks has completed the overall VIEW certification process for Mobility System Software version 7.0.

The companies have a deep history of partnering in the telecom space, as the pair has collaborated numerous times in voice over wireless local area networks. In fact, Trapeze Networks was the very first wireless LAN product that was VIEW-certified when SpectraLink launched the program four years ago, according toGeri Mitchell-Brown, Director Of Business Development, Voice Communications Solutions, at Polycom. www.polycom.com

www.trapezenetworks.com

www.tmcnet.com/9932.1

Westcon Guides Resellers through U.S. Economic Stimulus Package Since analysts began unraveling the landmark \$787 billion economic stimulus bill that President Barack Obama signed into law three months ago, much of the focus from the IT segment has been on the healthcare segment. But healthcare isn't the only IT vertical that can take advantage of the new federal funding. In fact, the economic stimulus package is expected to make the U.S. government the world's largest overall IT consumer.

To help its reseller clients navigate the intimidating legislation, Westcon Group, Inc., an international distributor of networking, security, mobility and convergence technologies has launched a new program. This "New Start America" program includes websites from value-added resellers with information on the stimulus funds, local opportunities and white papers that talk about what technologies could see more government dollars.

According to Westcon North America's manager of vertical markets, Ronald Sheps, despite the down economy, there are tremendous opportunities that resellers can seize – with the right tools – in the public sector. "As part of our 'New Start America' initiative, we are educating our resellers on the specific resources available to them, such as Westcon's dedicated Federal, Public Sector and Healthcare sites and our ongoing webinar series," Sheps said.

His group works with enough major IT vendors to have its finger on the pulse of how the economic stimulus package can benefit resellers. Vendors associated with Westcon include Cisco, Nortel, Avaya and Polycom.

www.westcon.com

www.tmcnet.com/9933.1

CA Launches Onsite PC Partner Program 2.0

CA, Inc. hgas announced the launch of its Onsite PC Protection Program 2.0 designed to help onsite PC technician resellers increase revenue without increasing inventory. CA has named Ingram Micro Inc., the largest global distributor of technology products, the sole distributor for the CA Onsite PC Partner 'command center' platform. The web-based platform delivers instant online access to CA's business-to-business Internet security software, as well as solutions for the home and home office.

The platform provides service technicians with a full set of tools and materials to complete a service call, ranging from diagnosing the problem to delivering a solution via a secure website. The site provides on-the-spot access to diagnostic tools for malware detection and system performance testing, which enables faster onsite PC repairs. Technicians can instantly download CA Internet security software solutions from the site, eliminating the need to stock inventory.

The Onsite PC Protection Program offers cash incentives on every product sold. Additionally, Ingram Micro is offering CA Onsite Partners a number of flexible credit and financing options designed to make it easier for channel partners and their end-users to purchase CA products www.ca.com www.ingrammicro.com



Talking with Dan Ferguson, VP & CFO, AdvanTel Networks

S ince its founding by telecom veteran Roger McGibbon in 1984, AdvanTel Networks (www.advantel.com) has installed and integrated thousands of telecom solutions into corporate environments. Headquartered in San Jose, California, they specialize in converged voice and data network deployments from small business telephone systems to international VoIP installations. Their range spans everything from small office solutions incorporating remote users using VoIP to networking a global enterprise to support a follow-the-sun call center. They stress customer service and are said to have a customer satisfaction rating of over 95 percent.

By: Richard "Zippy" Grigonis



With customers ranging from Fortune 100 companies to up-and-coming tech start-ups, its impressive that Advan-Tel's technicians can handle solutions involving security, LAN/WAN design and installation; VoIP and traditional voice solutions; Wireless LAN and WAN, as well as consultation and project management.

Recently Yours Truly caught up with AdvanTel's Vice President and Chief Financial Officer Dan Ferguson, who has 20 years' experience in the telecom industry. Ferguson supervises sales and personally takes part in client relationships with major AdvanTel accounts, receiving feedback from customers and passing it along to the manufacturers AdvanTel represents.

RG: Is AdvanTel a straight reseller, VAR or integrator?

DF: Basically we consider ourselves to be a VAR, a Value-Added Reseller. In some instances we also function as an integrator. We've been an Avaya business partner since 1992 – we deal in the unified communications systems, for example – and we've been a Juniper dealer for 2 years now. The Juniper Networks product portfolio allows AdvanTel to sell deeper into our traditional voice accounts. We now have a compelling data infrastructure story to tell our customers with Juniper's lower TCO and best of class technology. When you combine that with Avaya's superior voice platforms and applications, our customers are now viewing us as a trusted advisor for both their voice and data networks.

We recently ramped up our data business for strategic reasons. When we go out to meet with customers, our main contact is typically an IT director or manager. They've inherited the voice communications infrastructure. When we talk to them in our telephony language and acronyms, it somehow sounds foreign to them. But if we lead the conversation by talking about data and what we can do on Juniper front, that makes the discussion that much smoother, and we find the voice applications to be more of a pull-through.

Our customers these days often bring us in to integrate disparate platforms. We'll put together Microsoft OCS and an Avaya system, integrating the UC applications with the existing data infrastructure. We also sometimes find ourselves integrating voice with video. We're not just a voice VAR or a data VAR. It's almost as if we're becoming a 'convergence VAR' – at least that's what Juniper believes us to be. They were among the first to discover us, a new type of company, the convergence VAR. The UC part doesn't really figure into what they're playing in.

We're based in Silicon Valley and have some large clients. In fact, many of our customers are multinational corporations, based right here in the area. We have some of the largest high-tech companies as our customers. They're typically on the leading edge and they're interested in productivity tools, or enhancements for their employees.

RG: What kind of geographical area do you cover?

DF: We can go wherever our customers call us. We have customers based here in Silicon Valley that have a global presence, which compels us to do business globally.

RG: With IP products, is there more customer 'handholding' or training involved than the older TDM systems?

DF: If we're taking a legacy system and IP-enabling it, typically the owner of the legacy telephony system is the IT manager. They're essentially inheriting it, as I said previously. So it's outside their 'comfort zone' so they're using us as the 'trusted advisor' for voice. Being that we have data expertise as well, they feel comfortable work-

ing with us and sharing their data infrastructure with us. So there are some special skills and knowledge that you need in order to deploy VoIP on an existing data infrastructure. There are certain commands you need to know for Cisco, Juniper, HP or whatever data infrastructure we end up running into.

RG: Do you deal with any open source telephony products?

DF: Yes, in particular we deal with the Asterisk platform Even enterprise customers have experimented with open source IP PBXs. Many of our customers realize that if they go with an open source system, there's no software cost but they also find that what's required to support an open source system over about a 5-year period evens things out. The breakeven point is about 5 years, because you must provide more support for an open source system than you do with, say, an Avaya system or other brand-name system. Open source is generally not a turn-the-key-andwalk away kind of technology. Its support infrastructure isn't up-to-snuff right now, in my opinion. There are some companies that have taken Asterisk and have re-packaged it with perhaps some new code and have bundled it with their own hardware, and typically they provide a service contract with it. Indeed, you generally need to buy such support contracts involving maintenance. There might even be a Moves, Adds and Changes contract in what would be more of a managed services offer.

I've seen a number of large corporations do an open source deployment here and there and they dabble with it, but many are not yet willing to gamble their entire enterprise on it. They'll install it in a building to try it out and see how it works. But if you don't have a bundle, you have to buy the hardware, some of which costs the same as it would in a non-open source system.

RG: So you can deal with any-sized company?

DF: We can handle SMBs and enterprises. In fact, much of our business is in the enterprise sector.

RG: Some of this equipment is becoming more and more commoditized, such as peer-to-peer devices that you'll one day be able to buy at an electronics chain store. Though I imagine larger systems will never become that simple.

DF: Yes, that's because of the feature set required on the enterprise side. It's a more complex installation. And when it comes to contact centers, things can become very sophisticated too. That's where Avaya has market presence and that's how they keep themselves in accounts. They have very strong contact center applications. They often

square off against competitors such as Cisco at expos. Ten years ago, it used to be Nortel and Lucent.

RG: Aside from the size and feature set of some systems, there's the matter of customization, which can go hand-in-hand with integration and general 'hand-holding'.

DF: Yes. There are very few companies out there with the necessary voice-related expertise, along with data and application expertise. That's really the differentiator today. We've seen a number of data VARs attempt to move into the voice arena in the past few years and they haven't done a great job of it. It seems like the voice VARs have an easier time going into the data world than when data VARs enter the voice world. As for the interconnect model - it's dead. Any company out there that has tried since 2003 or so to continue with the interconnect business model is struggling today. When customers need to buy a voice system they typically will either reach out to their carrier - such as AT&T or Verizon – or they'll contact their existing data VAR. And today, the data VAR which only a few years ago couldn't do it, can now provide a voice solution. So we're receiving a fraction of the demand calls we used to get. Customers no longer pick up their phone and calling us to buy conventional telephone systems. That just doesn't happen anymore. Whoever can 'take over' and control the customer's server room will win. That's one thing on which we pride ourselves. We can go in and service anything in a server room for an SMB customer. At the enterprise level, that's not always the case because they typically have a huge data center running mission-critical applications, such as Oracle or SAP. We don't deal with those really high-end applications.

RG: Is unified communications still growing in the current economic environment?

DF: It is. We find that many customers want integration to their existing Microsoft infrastructure. Many customers are spending money with Microsoft to get their OCS technology, but when they got to integrate it with what they have, they don't know how to do it. That's where we come in, to bridge that gap.

RG: I guess certain IP applications tend to attract more business than others.

DF: Oh yes. I should also mention that we're dealing more and more with SIP (Session Initiation Protocol) trunking. SIP trunking is attractive because it avoids PSTN charges. That appears to be a 'killer app' right now.

Richard Grigonis is Executive Editor of TMC's IP Communications Group.







By: Peter Radizeski



Regulation, Please

We are seeing a lot of merger activity at the ILEC level. When are we going to see some regulation?

Many states already have deregulated much of the telecom services from Internet to fiber to value-adds, but some, including SC and Florida, are unregulating local phone service. And the FCC has given up oversight on much of the telecom landscape as well. My beef is that they keep approving these mergers that do not benefit consumers. Maybe Windtream buying CTC and D&E Communications makes sense. We'll see how the CenturyTel-Embarq merger affects consumers, businesses and Agents. My guess: Not positively.

The Fairpoint-VZ deal left consumers holding the bag. Broadband? Maybe with extra stimulus money. Agents? Sorry. We don't need no stinking agents. AT&T-Centennial and VZW-Alltel mergers followed by spectrum, subscriber and asset swaps is daunting to the average consumer. The FTC and Justice Dept. approve these mergers to create "companies too big to fail". When will we learn? It's not the FCC or the State Utility Commissions' job to look out for the Indirect Channel, but these mergers cause havoc. Integration in telecom is a herculean task. A task that most CEO's don't think about or apparently care about as they strictly look at cost-cutting, synergies, stock price and bonuses. America needs a vibrant and flexible communications network. It does *not* have that. AT&T still acts like separate companies with different systems and no integration. It makes upgrading services, especially fiber and Metro Ethernet, time-consuming. While the customer waits months for service, his network is log jammed.

Verizon continues to dump landlines, making a deal today with Frontier to take over 13 states, in an all-stock spin-off move. Verizon will win, but the customers will not be seeing FTTH any time soon. The Broadband Stimulus money has to go to non-ILEC's. PCO, independent ISPs, WISPs and CLECs will be more likely to actually deliver broadband to places outside the top 75 MSAs. These service providers are shovel-ready to build, hang, or light the way to put customers on broadband as soon as possible. American economic future lies with small businesses not Big Business.

Peter Radizeski is head of RAD-INFO, Inc., a consulting agency specializing in the telecom industry.

Service Provider Insights

By: Garth Judge



How SBCs Degrade Network Performance — and What You can Do About It

The controversy over the use of Session Border Controllers (SBCs) in the VoIP industry is well known. One of the biggest

selling features of SBCs is NAT traversal, and many providers hosting services for VoIP devices on the public Internet have relied on SBCs to solve the NAT traversal problem, often deploying SBCs primarily for this reason. However, SBCs come with a host of disadvantages that must be carefully considered.

First, the need for specialized hardware capable of relaying a large number of simultaneous media sessions makes scaling out the service a relatively expensive venture. Oversubscription and redundancy/ failover requirements further exacerbate these costs. Second, SBCs violate the end-to-end principle of the Internet. The lack of end-toend transparency severely restricts the innovation of new features and extensions to the core signaling protocol. If the media relay service is not media-agnostic, you may be stuck with those CODECs and/or media types supported by the SBC. Third, your datacenter bandwidth costs and requirements will increase as a result of the need to relay all media through the datacenter. Finally, the media relay service introduces an unavoidable delay (latency) to the media path. Depending on the architecture and call scenario, a media stream may traverse multiple SBCs. Minimizing the number of relay "hops" on the media path should be a primary goal of any service designer. The opposing, more scalable model to SBCs is to distribute the burden of NAT traversal out to the edge devices. For devices sitting behind non-symmetrical NATs (the majority of NATs), STUN is an ideal solution. Unfortunately, devices behind symmetrical (non-SIP aware) NATs require some form of public media-agnostic media relay service such as a TURN server. If your service model has influence over the customer installation, you may consider deploying SIP-aware NATs/firewalls which also offer important QoS features. The other benefits of SBCs (security, DoS attack prevention, etc.) should not be ignored however, but at the same time, many of these can also be distributed into other parts of the network.

In conclusion: if you are planning to deploy SBCs in order to solve the NAT traversal problem, know that there are many alternative, cheaper, more scalable solutions available that help preserve end-to-end transparency. Many SIP clients these days support a variety of NAT traversal techniques such as STUN, TURN, ICE and uPnP. The challenge is to accurately determine the right solution for each client on the network and, where possible, avoid latency inducing public media relay services.

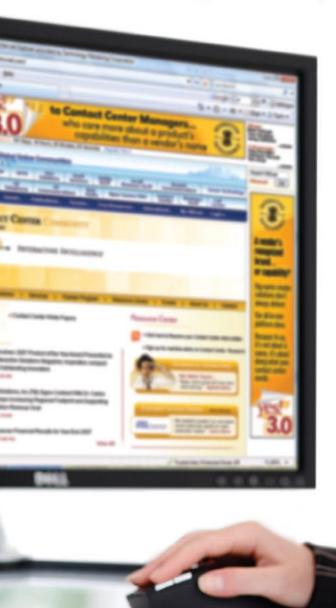
Garth Judge, is Vice President of Research&Development of 8x8 (www.8x8.com), responsible for the development of new features and expansion of all current 8x8 communications.

CONTACT CENTER SOLUTIONS SPONSORED BY:



INTERACTIVE INTELLIGENCE

http://callcenterinfo.tmcnet.com/ Log On Today!



Powered By: TMCnet



By: Rose Klimovich



What is "Communications as a Service"?

The market for Cloud and SaaS-based services is growing significantly because they can be very beneficial in saving upfront capital cost and can grow as you grow. One version of this is Communication-as-a-

Service (CaaS). CaaS allows you to use communication services like VoIP and Unified Communications without the expense of buying and managing communication equipment. This is a very good model for companies with small IT staffs and for those that are growing. Companies like IntelePeer and Cypress Communications offer services that fall into this category.

Internet-based communications are not a new phenomenon. For many years, we have sent video, voice, and data across the public Internet to communicate at a low cost. However, this type of communications has not been the model for business voice communication. Businesses generally have purchased and run their own communications equipment. CaaS uses cloud-based technologies that allow users to communicate – with voice, text, and rich media on a variety of devises delivered as a fully hosted solution. With a CaaS solution, you can leverage enterprise-class communication services without the complexity, cost and time required to build a premises-based solution. CaaS is designed to include a utilitybased pricing model that provides users with a comprehensive, flexible and easy-to-understand service.

The service normally starts by providing reliable basic phone system. Often bundled with the basic service are a handset, local and long-distance voice services, voicemail and some advanced PBX functionality. Additional services can also include advanced Unified Communications functionality such as video calling, web collaboration, chat, real-time presence and unified messaging. The vendor offers this functionality from one or more remote, secure and reliable colocation data centers. These colocation centers are good locations for this kind of service infrastructure both because they provide a good place to host equipment but also because they provide access to a myriad of network providers.

So when you are thinking of upgrading your communications infrastructure, consider CaaS as an option.

Rose Klimovich is Vice President, Product Development and Management, Telx (www.telx.com). Reach her at rklimovich@telx.com





Sipera's FREE UC Security Workshop

Wednesday, September 2, 2009 Los Angeles Convention Center, Los Angeles, California

OK

FREE Workshop at

Project UC, Protect UC: Deploying Low-risk, Secure VoIP & Unified Communications

TELEPHONY Conference & Expo

VoIP and Unified Communications (UC) have long held the promise of dramatically reducing your communications costs. But a common stumblingblock hampering adoption is ensuring that all communications are secure and that they support your information security policies.

This 1-day workshop will feature a series of case studies, panel discussions and practical advice for assessing and improving your security posture for VoIP and UC.

Register Now At WWW.itexpo.com



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

By: Erik Linask



www.tmcnet.com/9806.1 Polycom, Aruba Driving VoIP Over WLAN

It goes without saying the wireless space is among the most exciting and fastest growing in all of communications, with both WiMAX and LTE gearing up for a lengthy battle — despite proponents of each claiming its choice has the clear advantage. Then again, there are those that see a value proposition in supporting both.

Of course, the other side of the wireless market – WiFi – is growing faster than ever as well, driven by the 802.11n standard, which, as Polycom's Vice President for Product Marketing for WLAN Voice Products Ben Guderian noted during a recent video interview, has help ease concerns about the reliability and stability of WLANs.

The benefits of wireless networking in businesses is evident – especially when you consider the skyrocketing adoption of laptop computers, WiFi-enabled mobile handsets, and many other business devices. When you factor in the rise to prominence of VoIP, the development of voice over WLAN technology becomes a no-brainer.

In fact, Guderian notes that Voice-over-WLAN has been a part of Polycom's development efforts for at least a decade, but it's really only now becoming more widely accepted as a viable business solution. Its growth is being driven, he says, by an increase in mobile workers, especially in-building mobile workers, who need to maintain communications with colleagues and customers, but need an alternative to racking up high cell phone charges.

The logical answer is to integrate wireless handsets into their PBX systems.

Several verticals are leading the charge, including healthcare, manufacturing, and retail. Guderian adds that the hospitality industry is also starting to leverage their investments in guest WiFi for mobile staff communications. The idea is to enable immediate access to the right personnel, regardless of where they are on the premises.

Polycom, in fact, takes it a step further, integrating PTT capabilities into some of its SpectraLink handsets, along with text messaging, which is particularly useful when integrated with nurse call systems in medical facilities. As always, of course, integrating third-party devices into communications networks comes with its challenges, since even those built on open standards have a certain degree of proprietary technology built in. To ease the deployment of its SpectraLink handsets, Polycom developed its VIEW Certification Program, which is basically an interoperability testing process between the SpectraLink wireless handsets and WiFi access points.

Last month, Trapeze Networks became the first VIEW partner to be certified with Polycom's latest software, its 3.0 release. This latest version enhances support for standards-based QoS and security protocols, including voice prioritization, power management, and admission control.

Now, Aruba Networks has also achieved VIEW certification with its adaptive 802.11 WLAN, allowing its customers to easily integrate voice over WLAN into their communications processes. In fact, Aruba is the first vendor to achieve 802.11n interoperability with Polycom's VIEW program.

"As more companies right-size their network infrastructure, reducing wired LANs in favor of 802.11n wireless LANs, the need for certified interoperable wireless voice solutions grows," said Manav Khurana, Aruba's head of industry marketing. "Network integrators and customers alike will benefit from the availability of these pre-tested solutions."

This partnership bodes well for Polycom, which recently stated that VoIP is the future, and its VoIP phones were among its fastest growing product lines in 2008. When you factor in the record fiscal Q1 2009 reported by Aruba, which it followed with additional growth in Q2, it can be expected that Polycom will see significant growth in its wireless VoIP phones as well, especially now that they have been certified with the Aruba solutions.

In fact, with Aruba's recent entry into branch office solutions with its Virtual Branch Network (VBN) solutions, it provides an even greater potential customer base for Polycom. The price point of the VBN solutions is also helping drive WLAN deployments, which, as Guderian noted, are becoming more popular, now that the cost is becoming less of an inhibitor.

Erik Linask is TMC's Group Editorial Director.



Global Online Community

Communications as a Service... Driving Innovation and New Business Models

Welcome to the Communications as a Service, or CaaS, Global Online Community



Your educational resource for users looking to learn more about Communications as a Service (CaaS) and how to use this model of software deployment to benefit their businesses.

Access the latest news and opinion shaping this segment of the communications industry.

- Ask the Experts
- Blogs
- Industry News
- Click to Call Access to IntelePeer Experts
- Videos
- Featured Articles
- And More!

ENTERPRISE

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

www.tmcnet.com/9934.1

Polycom & Microsoft Expand Relationship with Polycom CX5000 In a move to further strengthen the companies' relationship, Polycom, Inc. and Microsoft are teaming up to build voice and video solutions for unified communications and collaboration.

Under the agreement, Polycom, the Pleasanton, California-based telepresence, video, and voice solutions provider, has licensed the right to distribute Microsoft RoundTable, effective immediately, the company announced. As part of the distribution deal, the product is being renamed Polycom CX5000 Unified Conference Station and will be available through Polycom and its channel network.

The effort is part of Microsoft's goal to expand the availability of its Microsoft RoundTable product and boost Polycom's portfolio.

The CX5000 allows the firm to better meet the video needs of organizations that use Microsoft Office Communications Server 2007 and Microsoft Office Live Meeting service, according to Computer World. The videoconferencing device broadcasts synchronized audio and video over a standard Windows-based PC. The tabletop device provides a 360-degree panoramic view of meeting participants and identifies individual speakers and broadcasting their image in close-up as they speak.

Polycom CX5000, which will sell for an estimated price of \$4,300, will be available in 27 countries through Polycom's channel partner network. Once the Polycom CX5000 is available, RoundTable will no longer be sold, but Microsoft will continue to support all RoundTable devices it has previously sold, the company said. www.microsoft.com

www.polycom.com

www.tmcnet.com/9935.1

Avistar Launches Visual Insights

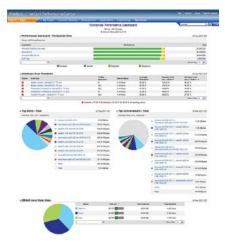
Avistar Communications Corporation has launched "Visual Insights," a program that allows application vendors (or any company, for that matter) to quickly embed/ integrate industrially scaled, pre-proven video and audio features into their software applications. Visual Insights is available to global resellers to introduce to firms that want to expand the capabilities of their internal solutions. It can also be introduced to software application clients that are looking to add powerful visual communications and collaboration to their products.

With the "Prove Before You Purchase" License Credit Program from Avistar, application vendors can experience a new level of visual communications and expand the value of their current software offerings while using integration costs as a credit against future product licenses.

Visual Insights is based on Avistar's awardwinning C3 platform and consists of a suite of embeddable components that provide quick and seamless integration of desktop videoconferencing into any application. Visual Insights components can be embedded without Avistar's assistance. The components can be customized to the software application's look, workflow, aesthetics and branding. With this, application companies like CRM, pharmaceuticals, legal, financial markets, healthcare and manufacturing can now offer seamlessly integrated, high volume video/audio communication to any of their customers. www.avistar.com

www.tmcnet.com/9936.1

NetQoS Delivers NetQoS Performance Center Version 5.0



NetQoS has released Performance Center version 5.0, a product that helps customers get a handle on data collection, analysis, and reporting capabilities in their applications.

The new version includes what NetQoS calls the "Application Performance

Dashboard," a feature that delivers an at-a-glance view of response times per application across an organization. Its repeatable workflow allows users to move from the initial alert view to multi-tiered application analysis to packet details.

Another feature, NetQoS Connector for Microsoft Excel, offers a combination of reports that can be harvested from the NetQoS Performance Center. Also, the Maps with Real-Time Event Notifications feature enables customers to map performance and traditional availability events all in one screen, giving users get a real-time perspective on the health of the entire IT infrastructure and its effect on application performance.

Network engineers also get some useful features such as Advanced Capacity Planning Capabilities which allows users to trend future network use by link, application, and users, all without a specialized, separate capacity management tool. www.netgos.com

www.tmcnet.com/9937.1

Ensim Unveils Ensim Unify Service Provider 4.7.0

Trying to simplify the process of managing unified communications' infrastructure, Ensim Corporation has unveiled Ensim Unify Service Provider 4.7.0. Ensim Unify Service Provider also provisions many additional services like BlackBerry and Broadsoft that are not available as part of the HMC solution, and can add custom services via an SDK, allowing customers to enable additional high-value applications such as VoIP, Unified Messaging and mobility services. It supports Microsoft Hosted Messaging and Collaboration (HMC) improvements, such as Windows Server 2003 (SP2) and SQL 2005 (SP2), as well as Microsoft Provisioning System (MPS) version 2.1, 2.2 and MPS bundled with HMC 4.0 and 4.5.

Features in Version 4.7.0 include application services updates for the latest versions of Microsoft CRM, SharePoint, Exchange 2007, Office Communication Server (OCS) R2, Remote Desktop Services (RDS) 2008, Fenestrae Messaging Server 2008 and BroadSoft BroadWorks 14. It provides features such as mass notification, bulk user de-provisioning, password auto-generation and web services API enhancements. www.ensim.com www.tmcnet.com/9939.1 ooVoo Demos Air To Ground 3 Party Video



ooVoo has announced it has successfully demonstrated its 3 party video and voice capability initiated from the Virgin America Flight 350, while it was in air transit between San Francisco and Boston, to simultaneously contact people in Florida and New York City. Company officials say that its CEO Philippe Schwartz established wireless contact live for a video and voice chat at 35,000 feet between himself, the owner of ooVoo, Clay Mathile who was in Florida, and Lisa Abourezk, ooVoo's VP of Marketing in New York City.

This achievement, company officials say, was a first for the airline and the video conferencing industries, and a select video clip from the 3 way conversation (which also captures Schwartz brandishing his trip information very, very close to the camera), can be viewed on YouTube (see photo). In November 2008, Virgin America launched its "Gogo Inflight" Internet service wherein any passenger with WiFi-enabled devices, such as laptops, smartphones and Personal Digital Assistants, can do things like surf the web, send and receive email, instant-message and access a corporate VPN.

The ooVoo application is a free download and works with a Windows or Mac PC. Up to 6 different people can videoconference simultaneously. It also allows Video conversation recording, and can easily link up with associates who do not have ooVoo installed.

www.tmcnet.com/9940.1

BT Completes Exchange-To-Exchange Cisco TelePresence Call

BT, a provider of communications solutions and services, reportedly has successfully supported an exchange-to-exchange intercompany Cisco TelePresence meeting with a call between a global retail provider and Kraft on the BT Global Video Exchange.

Company officials said that the call between differing exchange networks using BT Conferencing demonstrates the feasibility of intercompany Cisco TelePresence and showcases BT's expanding capabilities in this area. Describing BT Global Video Exchange, officials said that it is a service that allows Cisco TelePresence connections between companies, driving more use and a faster return on investment. BT claims that it alone managed to save \$315 million in travel costs and cut its CO2 emissions by as much as 84,087 ton last year by holding 1,976,438 conference and video calls. www.bt.com

www.tmcnet.com/9941.1

Sellerbyte Launches Ecofiling, a Web-Based Secure Collaboration Service Brisbane-based Sellerbyte announced the launch of Ecofiling, a webbased service which allows users to collaborate worldwide. It provides small- to mid-size businesses with bank-quality data security ensuring secure document access.

This is a Software-as-a-Service (SaaS) application with a friendly user interface, enabling companies to create private workspaces, upload company documents and share large files at the same time maintaining full version control and document integrity. Companies with 50 to 500 users can start using it within minutes. An Ecofiling service account provides 1 GB of storage for each user. Thousands of files can be stored in these accounts which may include documents, presentations, spreadsheets, videos, Webinars, pictures and others. The site ensures security to confidential matters regarding human resources and other financial data. It employs Amazon Corp.'s server infrastructure which enables storing and protection of data.

SERVICE PROVIDER

www.sellerbyte.com

www.tmcnet.com/9942.1

Free Conferencing.com Made Freely Available

Free Conferencing Corporation of America has made its popular FreeConferencing.com publicly available, free of cost. FreeConferencing.com delivers stateof-the-art host web-based channels. It also guarantees users the maximum call participants and maximum granular support via any other free conference service provider.

Free Conferencing Corp. is a pioneer collaborative communications solutions provider, offering solutions to organizations, communities and enterprises of any size. Its networks are completely digitized and built on proprietary media servers.

FreeConferencing.Com offers real time, reservation-less access to an endless number of 6-hour conference calls with web-based host commands. The service employs flash-based web conferencing, enabling users to monitor the conference in real-time from a PC. Caller identification is also possible using this, with optional settings to log in details of callers entering and exiting. Users can also broadcast previously saved audio files from the conference view page during the conference. www.freeconferencing.com



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

www.tmcnet.com/9943.1 Sanyo's SCP-2700 for Sprint

P-2700 for Sprint Sprint Nextel has announced availability of the SCP-2700 mobile phone by Sanyo at its stores throughout West Michigan and Northeast Indiana. The SCP-2700 is a slim messaging device that features a full QWERTY keyboard, threaded text messaging, access to the web, email and

NEWS

a 1.3 megapixel camera. It comes with a large, color LCD screen, with a built-in speakerphone. It is available in Impulsive Pink and Deep Blue designs. The company says the SCP-2700 is best for teens and parents for its text messaging capabilities, including threaded text messaging and a dedicated emoticon key for inserting smiley faces and other symbols users can insert into their text messages and e-mails.

Also, Sprint Family Locator, Sprint Mobile Email Work and GPS Navigation features are included in qualifying plans or can be purchased separately. It also offers easy to text, connect to Bluetooth and access preferred Sprint features. www.sanyo.com www.sprint.com

www.tmcnet.com/9944.1

Sony Ericsson Expands Mobile Java Platform to 3G Segment

Sony Ericsson has announced it is expanding its mobile Java Platform to a much larger global market to drive innovation and create richer user experiences for their customers. The company also has announced it has made further investments in the development of the platform.

The rich and consistent performance of the Java platform has offered great success with feature-rich 3G phones. Officials say that the company is now focused in transferring this fully developed platform to cost-efficient 3G devices, especially in emerging markets like China where 3G roll-out is gaining momentum. The 3G Java phone supports rich features so customers can enjoy a far greater variety of content and applications in the affordable entry segment than ever before, officials said.

Sony Ericsson also recently announced a partnership with GetJar, a mobile app store. As per the partnership, GetJar's library of over 45,000 free applications will soon be linked directly through Sony Ericsson's PlayNow arena, its app store.

In addition, Sony Ericsson unveiled a new handset, the S312, which allows video recording in just two steps. The phone also allows users to share pictures and videos with friends and family by posting them to their blog directly from the phone.

www.sonyericsson.com

www.tmcnet.com/9947.1 Nokia N97 Mobile Computer Available Worldwide



The highly anticipated Nokia N97, Nokia's flagship mobile computer, began selling in June 2009 in more than 75 countries. Along with a tilting 3.5-inch touch display, QWERTY keyboard, WiFi, GPS, Bluetooth and a 5-MP camera, the Nokia N97 offers instant access to the full range of Ovi services.

"The Nokia N97 is an important step towards our vision of delivering a highly personalized Internet experience," said Jonas Geust, Vice President and head of Nokia Nseries. "Fuelled by a multitude of music, maps, games, media and applications via Ovi, the Nokia N97 transforms the Internet into an experience that's completely tailored to the tastes and interests of its owner."

The Nokia N97 is Nokia's first device to feature a personalizable home screen, customizable with a range of widgets which bring live information directly to the device. These widgets include key social networking destinations like Facebook and Hi5, news services like the Associated Press, Bloomberg and Reuters, as well as shopping and weather information. The Nokia N97 is the first device to ship with the Ovi Store, which offers easy access to applications, games, videos, podcasts, productivity tools, web and location-based services, and much more.

www.nokia.com

www.tmcnet.com/9945.1

Xirrus Unveils Portable WiFi Array, for Temporary WiFi Deployment Xirrus, Inc. announced the introduction of a portable, pre-packaged kit which is designed for the rapid and simple deployment of WiFi networks in temporary applications.

Most WiFi networking solutions require different components but the Xirrus WiFi Array integrates everything that is required for deploying a large coverage, high-density network which can support hundreds of clients into a single device. The Xirrus WiFi Array is suitable for portable applications such as disaster response command posts, high density events like conferences and expositions and other short-term events like festivals, markets and fairs. This pre-packaged, self-contained WiFi deployment kit includes 4 or 8 access points, antennas, WiFi controller, switch, firewall, RA-DIUS server, DHCP server and management all in a single device. The kit also includes a mounting tripod, data and power cables and a ruggedized carrying case, said Xirrus officials. www.xirrus.com

www.tmcnet.com/9949.1

NPI Financial Intros Telecom Expense Management Practice

NPI Financial, a spend management advisory firm specializing in technology and transportation savings, has introduced its telecom expense management practice.

The company has provided TEM services to clients for the past 3 years, and recently it decided to formalize a dedicated offering. Company officials say that NPI has been able to reduce telecom spending by 18 to 27 percent on average. NPI's TEM experts analyze clients' telecom spend and securing fair market pricing. They also advise companies on how to maintain strong vendor relationships that are compliant with their contractual engagements. NPI's TEM consulting services include: current environment inventory; billing analysis and audit; rate and pooling plan optimization; total sourcing; and more.

Companies are expected to spend \$140 billion on telecom in 2009, according to a new report by INSIGHT Research. Officials at the firm say businesses are focusing on reducing the rampant corporate overspending in telecom by analyzing wasteful spending, billing inaccuracies and securing fair market pricing with telecom vendors. www.npifinancial.com

www.tmcnet.com/9950.1

Telesoft Expands Leadership Team & Unveils New Brand Identity

Adding to its leadership team of seasoned industry veterans, Telesoft, experts in fixed and mobile Telecom Expense Management (TEM) software and services, has announced the appointment of Kevin Donoghue as President, Jay Lockett as Vice President of Engineering, and Heather Dunn as Director of Marketing. In addition, the company also unveiled its new brand identity which better conveys its value proposition to IT Telecom and Financial professionals.

"I am confident that these executive team additions, as well as new brand identity, will further cement our leadership position in fixed and mobile telecom expense management solutions and drive the next wave of growth for the company," said Thierry Zerbib, CEO and Co-Founder of Telesoft.

The company also unveiled its new brand identity which better conveys its value proposition to IT Telecom and Financial professionals. "In an economy where every dollar is critical, organizations can't continue to manage their telecom expenses with a patchwork of time-consuming and manual processes," said Heather Dunn, Marketing Director for Telesoft. "The goal of our brand change is to better convey the company's vision, strategy, and brand promise to our clients. This means delivering a single management platform for telecom expense management that is highly integrated, scalable, and automated to improve organization's bottom-line by reducing telecom expenses." www.telesoft.com

www.tmcnet.com/9951.1

Hagemeyer NA Uses Cass to Manage Expenses in Telecom, IT and Transportation

Cass Information Systems has announced that Hagemeyer North America is among several key clients who are expanding their utilization of Cass' automated payable services across the enterprise. Hagemeyer North America, with \$1.7 billion in annual revenue, is a business-tobusiness distributor of industrial, safety and electrical products and services.

Initially, Hagemeyer North America contracted with Cass Information Systems for Telecom Expense Management (TEM) services in 2005. Based on the success of this relationship and efficiencies gained through automated processes and savings recouped from invoice audits, Hagemeyer North America began to expand the outsourcing relationship to include managing invoices, producing accurate accruals and controlling expenses in information technology (such as leases and maintenance agreements), and is now moving toward implementing similar Cass services for large freight and parcel shipments.

"Our initial savings in TEM exceeded our estimates," commented Doug Lauer, executive vice president, Information Technology & Supply Chain, Hagemeyer North America. "They took on the administrative burden of process-ing hundreds of telecom invoices each month, found over-charges made by telecom carriers and aligned our charges with appropriate service levels to reduce fees on a go-forward basis. Cass knows our organization and has achieved de-sired results, so it made sense to expand the relationship to the areas of IT and transportation."

www.cassinfo.com

www.hagemeyerna.com

www.tmcnet.com/9952.1

Telwares and Invoice Insight Partner for Enhanced Telecom Expense Management Solutions

Telwares, Inc., a leader in the telecom and IT infrastructure sourcing and expense management industry, today announced they will embed new technology in their solutions portfolio for expense management, supplied by Invoice Insight.

"This technology offers key advantages including wire line and wireless expense management integration, and a comprehensive and intuitive end user portal," said Charlotte Yates, CEO of Telwares. "When surrounded and delivered by the Telwares client engagement teams, it will profoundly increase the standard for value in the marketplace," added Yates.

Telwares will leverage their 15 years of successful experience in strategic sourcing, consulting, and ongoing expense management together with a technology platform that will drive greater expense visibility, and provide automation around key business processes. In addition, clients will benefit from a highly integrated, global telecom and IT expense management solution. As for Invoice Insight, it's a leading provider of fixed and mobile expense and asset management solutions delivered in the Software as a Service (SaaS) model. www.invoiceinsight.com www.telwares.com

Talking with Asif Naseem, President & COO of GoAhead Software

By: Richard "Zippy" Grigonis

ot everybody loves open source – especially those vendors competing for market share who argue that their technology has (at least for the moment) some inherent advantages over such systems.

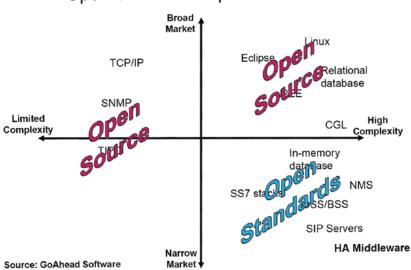
Take for example GoAhead Software (www.goahead.com) and its new SAFfire 3.0, high availability and management middleware that supports the open specifications of the Service Availability Forum, a consortium of communications and computing companies working together to develop and publish HA and management software interface specifications. (GoAhead was a co-founder of the SA Forum.) GoAhead's primary markets are telecom and aerospace/defense. The platform-independent SAFfire supports the SAForum's Application Interface Specification (AIS) and the Hardware Platform Interface (HPI). GoAhead's President and COO, Dr. Asif Naseem (who is also President of the SA Forum), recently told Yours Truly

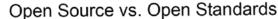
<u>Open Source</u>

what he liked and didn't like about open source technology.

RG: Where do you think open source fits in?

AN: Our new SAFfire 3.0 is a commercial version based on open standards. We do have competition based on open source technology. The subject of opens source pops up in the industry quite often when we talk to potential customers about our offering. They ask, 'Why shouldn't I get open source software, which is free? Why should I adopt your technology which costs money?' With any business model we must look at how 'horizontal' is a particular technology's play; that is, the breadth of its market and the technology's complexity. Protocols such







as TCP/IP, SNMP or TIPC are very popular. They're a horizontal play. Everybody wants and uses them and they're not too complex. In such a technological area the open source model has been successful. It's available to everybody. Open source software versions of these anything are very well-known and people know what they're getting.

Then look at something that has broad market applicability, but higher complexity, such application servers, operating systems such as Linux and carrier-grade Linux, and relational databases. We've seen open source models succeed in this area too.

The area in which we play, however, is populated by things that are very 'niche-y' - technologies of high complexity serving narrow markets, such as in-memory databases. These things have to be very efficient and have a small footprint for a set of applications, be they for telecom, finance, or whatever. OSS and billing systems are pretty complex, but have very specialized application – they're not a horizontal play at all. And high availability middleware, in our view, falls in this category. It's highly complex and the market is very specialized. In this area we see that the open standards commercial model has been quite successful. We've repeatedly tested to see what model works best in these situations, and we continually come to the conclusion that, for this specialized market and complex complex area, following the open standards and commercial implementation is actually the way to go. **IT**



www.tmcnet.com/9953.1

Aastra Announces Two New SIP **Phone Models**

Aastra has announced it expanded its SIP desktop and wireless phone portfolio by adding two new models of SIP phones, Model 6730i and Model 6731i.

The new models offer enterprise-

> grade vanced features and performance that are

typically found in higher priced models. The new models are powered by the openstandards firmware design found on all Aastra 67xi SIP telephones. Designed for both SMBs and home-based applications, the new models have six lines with call display, full duplex speakerphone as well as excellent voice quality, intercom, paging and auto answer features. In addition, they also have XML browser capabilities.

As with other Aastra systems, the new models are interoperable with Aastra's own IP systems as well as other certified solutions, including Digium's Asterisk Business Edition, Broadsoft, Metaswitch and Nortel. Aastra also announced that its 675xi Line of SIP Phones is interoperable with MX-ONE IP-PBX. www.aastra.com

www.tmcnet.com/9954.1

Digium and DOW Form Partnership Digium, Inc., which created and develops Asterisk, the open source telephony platform, has entered into a partnership with DOW Networks. Under it, Digium can take advantage of DOW's overseas reach in Latin America and South Africa.

"As a leading, international VoIP service provider, DOW Networks represents a valuable path to fast growing markets like South Africa and Latin America," said Bill Miller, Digium's VP of product management. "We are pleased to expand our already strong relationship with DOW Networks."

DOW offers international communications and enhanced VoIP services and solutions for call centers, hotels, distributed enterprises and small and mid-sized businesses. Its products include domestic and international toll-free service, SIP trunks, Asterisk-based IP PBXs, hosted predictive dialer software, toll-free numbers and a complete portfolio of call center solutions. DOW serves customers in more than 50 countries and has offices in the U.S., Costa Rica, Jamaica and South Africa. www.digium.com

www.downetworks.com

ad-

www.tmcnet.com/9955.1 Nokia and Intel Team up on Linux Phone OS

Nokia and Intel are teaming up to present another open source mobile phone operating system in hopes to ride some of the wave of popularity for Google's Android OS. The Linux-based operating system will be called oFono, and will be designed for GSM handsets.

www.intel.com www.nokia.com

GoTo

Table of Contents • Ad Index

www.tmcnet.com/9956.1

Sangoma Inside-the-Server VoIP Gateway Supports Analog&Digital Cards Sangoma Technologies Corporation has announced the new release of its NetBorder VoIP Gateway Cards, which is first on the market to support both analog and digital interfaces, is now shipping.

Aside from supporting analog cards, NetBorder Express 2.0 adds a powerful web interface that takes care of installation, configuration, and SIP to TDM gateway management. Customizable tone processing features, and the new management console, all add up to lower-cost, easier deployments for developers and end users. NetBorder Express 2.0-based solutions are unique because the card can reside in the same server as the developer's application, so SIP-based PBX resellers can package sin-

GoTo:

gle-box solutions with an internal gateway. End users with limited VoIP expertise can still implement VoIP gateway functionality. www.sangoma.com

www.tmcnet.com/9957.1

Transverse Introduces SaaS Version of Its Open Source BSS Solution

Transverse, a leader in providing highquality, low-cost, carrier-grade Business Support Systems (BSS), has introduced blee(p) On Demand, the Software as a Service (SaaS) delivery option of their Business Logic Execution Environment Platform or blee(p). blee(p) is said to be the industry's first commercially supported carrier-grade open source BSS solution for communication service providers.

By enabling real-time, web-based access to its comprehensive open source BSS solution, Transverse is providing service providers with a state-of-the-art, cost-effective and scalable means to quickly and easily deploy new services and business models. Because the On Demand model eliminates the need to build, operate and maintain systems on their premises, service providers can avoid significant CAPEX and OPEX costs. www.gotransverse.com

www.tmcnet.com/9958.1

Red Hat Offers New Java Application Platform Products

Open solutions provider Red Hat has expanded its application server offerings to include workload specific solutions designed to provide increased flexibility and choice for enterprise customers. Executing on its JBoss Open Choice strategy, the JBoss Enterprise Middleware portfolio now includes solutions for all of the common Java application workloads; from simple web applications, to light and rich Java applications, to Java Enterprise Edition (EE) based applications.

JBoss platforms also support a variety of popular programming models including Spring Framework, Seam and Google Web Toolkit. With the expansion, Red Hat noted, it now has one of the most comprehensive Java application server portfolios in the industry.

www.redhat.com

Communications-Enabled Business Practices & Processes

By Richard "Zippy" Grigonis

Any people confuse Communications-Enabled Business Practices/Processes (CEBP) with Unified Communications, which industry expert Blair Pleasant defines as "communications integrated to optimize business processes". CEBP early on was associated with accelerating business processes and workflow by reducing human latency, usually via functions ranging from click-to-dial to advanced CRM or ERP apps, to autonomous event-triggered notifications and applications. To do this, CEBP can call upon UC functions running in the business process flow, which in turn can use presence and various communications media to hunt down and notify agents and outside experts if they are not immediately available to further the process at hand.

There is, then, some overlap and even a symbiotic relationship between the two (especially when one has the luxury of defining terms as one sees fit). The Gartner Group defines CEBP (Communications-Enabled Business Processes) as the ability to enable "communications functions to be directly and tightly integrated with the IT systems and applications that individuals may be working with at any time." Yours Truly likes to add to CEBP yet another "P" – Practices. On the other hand, Avaya's original formulation of CEBP, which involved the Avaya Communications Process Manager and Event Processor to monitor events, not always dealt with UC and favored machine-to-human rather than human-to-human communications. The term continues to evolve.

Avaya's Director of Unified Communications Architecture, Lawrence Byrd, says, "The way we view our entire portfolio is that, ultimately, all of communications is realized in some way, at the top level, in various access devices, through screens, interfaces, through integration with Microsoft, IBM or SAP. For us, that's the 'layer' where communications is experienced. Underneath that are things such as collaboration and interaction solutions, which is our entire set of UC and contact center portfolios, but those typically rest on some kind of real-time core communications servers that sort of glue everything together. Historically, that's been IP telephony and, going forward, we believe it's that plus a whole lot more."

Byrd goes on, "Avaya Aura, our new product, takes components we've had for a long time and significantly expands them to be a new foundation for UC and contact center solutions. It includes our flagship product of many years, the Communication Manager that his been our IP telephony foundation,



but Aura expands it with new capabilities, some of which are brand-new and others we previously announced, such as a long-standing application enablement capability that allows you to integrate with a whole third-party ecosystem that can extend and integrate. That obviously that starts to move us into a discussion about CEBP. It includes the presence services that we announced a year ago that aggregates presence from Microsoft, IBM, XMPP and SIP/SIMPLE sources and from all of our real-time phone data, and bringing it all together so that an application can use it. That has relevance for UC, but also in general for smarter CEBP and other applications, but can now use presence to make decisions about what to do."

"Underlying all of this is the introduction of a whole new end-toend SIP framework, which we call Avaya Aura Session Manager," says Byrd. "It's about how everything gets connected. How do systems, users and devices get connected? And how can we change the architecture of communications to be much more flexible in how it allows new UC and other applications to be deployed. So that's what our recent announcement was about. It's built on the premise that today's communications architecture is broken, 'medieval' and it needs fixing, since it acts as an impediment to deploying unified communications in CEBP apps. We've done a tremendous amount of work with our customers to consolidate components, and get down to smaller systems. But customers aren't quite there yet, and generally, for customers of any size, their network tends to be somewhat convoluted. Everything is still tied up with individual systems. I'm sitting here in California, my associate Deb is sitting in New Jersey, and we're connected to different switches and therefore whether or not we have the same application completely dependent on what switch we're connected to. It's the legacy of the PBX era."

GoTo: GoTo: Table of Contents • Ad Index



Join The 8x8 Hosted VoIP Community!

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

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



VoIP Services For SMB & Residential

Log On Today!

hosted-voip.tmcnet.com

"The first phase of VoIP has enabled you to put phones and gateways everywhere," says Byrd, "but all of my context, applications, trunks, dial plans, and information is still locked up inside one system, and each system needs to connect to every other system, and know how to do so, in order for everything to work. This rapidly makes things complicated. So our customers find it confusing just where to plug in UC – they have to plug it in 'everywhere' or differently in each case. They're not even doing IP telephony very well. When we look at how many calls traverse your own network, how many go over the PSTN, how many trunks you have, and what you're spending right now on traditional TDM connectivity, the answer turns out to be a lot. We have one customer looking to save a million dollars a month in costs that you would have thought the first wave of IP telephony would have squeezed out. But it requires every individual system to be separately configured to do that. They have over 200 IP PBXs. We have the good fortune that of course they all come from Avaya, unlike what we see with other customers, but that means, just mathematically, that we would have to configure thousands of IP trunks to mesh them all together which involves making thousands of entries in different systems. Customers by and large haven't done that. They're not taking advantage of keeping calls on-net, sharing resources, hopping off the network in the proper place, and as a result they've not really squeezed the costs out. This becomes a very practical discussion right now in these economic times because customers don't want to hear a lot about new UC or CEBP things. What they do want to hear about is, first, how to save money now. And by the way, 'don't touch anything in our organization.' The approach we've taken resolves that paradox by introducing a middle-tier of the architecture that is how everything gets connected, and we need to normalize all of that occurring over SIP, and then everything will be connected via a centralized SIP core and Avaya will ensure that it's distributed and that it's scalable and secure, and now, as a first step, all of the systems can talk to each other in a standard way. If there's a legacy TDM system, we'll put an easily-deployable SIP gateway in front of it. Now you have a central way in which to gain connectivity benefits and telecom savings, then you can start to do things such as introduce SIP trunking centrally. Instead of going to lots of different places to do things you bring it into one place, the core, and it can be shared across the whole organization, which saves money, then new applications can be introduced to, say, the datacenters and make available such things such as centralized messaging, conferencing and web conferencing, or self-service apps on our Voice Portal product."

Communications in, Costs out

CDW Corporation is a huge (6000+ workers, \$8 billion+ sales) provider of technology products and services to business, government and education.

CDW's Kevin DeMers, Senior Manager for Unified Communications, says, "Trends in CEBP today really involve cost take-out, something that a customer can do that will either take immediate hard dollar costs out their organization or do more with less so that they can accommodate their sales goals and their service goals or just their business initiatives without having to invest in more people, which is usually the most costly resource. Right now what's in high demand are things such as audio and video conferencing. When we talk about CEBP we normally talk about tying in voice, audio, video and data all at the desktop in some type of UC client, but customers are using things such as audio web video conferencing to change the way they work so that they can be more efficient. An example would be a remote sales force that works together as a team that normally has to travel or save their collaboration experiences for specific days of the week, but now they can use audio web videoconferencing on-thefly. This changes the way they work with their customers and the speed with which they can respond, as well as the amount of activity that can be done with a smaller group of people. Another popular trend relates to the customer-facing experience – how can we service more customers without adding more people? That touches the call/contact center area. Also extremely popular right now are self-service applications, utilizing such things as speech recognition that can service a customer without delivering a phone call to a physical call center agent. The capex investment into such technologies usually has a very fast return on investment, and customers can be serviced in a very comfortable way and yet the company can still focus on one's core business.'

"UC as an application on the desktop is also a trend," says DeMers. "It perhaps had more momentum last year than it did going into this year, because of the economic situation. It's a little harder to draw straight hard dollar cost reduction out of that technology. Still, it's very popular – I'd say 1 out of every 4 customers that we work with and usually when we get engaged at my practice level, they've already made a decision or investment to roll out IP telephony so they're a bit ahead of the curve in terms of the overall industry. It changes the way they collaborate internally to serve a customer or simply to get business done."

"In terms of how we engage and what our role is in that process," says DeMers, "we're really there to help consult with the customer to find out what their business needs are. This has been a shift in the way that VARs in general have had to approach the industry. When you're talking about dial tone and voicemail, or PBX, that's a utility that's usually delivered throughout the entire organization as a service, just like when somebody gets a desktop or laptop, they get a phone. Unified communications and specifically CEBP really affects different business units of the organization, so our role is to really work with the different business units and have different solutions deployed for different types of business users. Human Resources will have a different need for CEBP than, say, the sales force or customer service will. But you can't re-





The World's Premier "Pure" SIP/VolP Based Call Recording Platform

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

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

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



http://call-recording.tmcnet.com

ally holistically deploy the same application across the entire enterprise. You have to examine it business unit-by-business unit. That's our role, along with generally deploying solutions that fit those different departments."

A Zeacom Case Study: Tower Insurance

The scary prospect of revamping an existing communications system – such as modernizing a contact center – can be alleviated if you deal with a company that has a wide range of technology and expertise. Zeacom, for example, is known for its Zeacom Communication Center (ZCC), a complete unified communications solution.

Ben Zachry, a Vice President at Tower Life Insurance, is a happy Zeacom customer. He says, "Our aging existing phone system was such that we definitely needed an upgrade, and we also wanted to improve our general communications abilities, since at that time all we had a simple call center that accepted voice calls from our customers. We wanted to gain some advanced features and functions. Prior to our dealings with Zeacom, all of our calls came in, but we didn't have any information about the caller calling. It was very limited, and so there was a lot of time spent initially on a call authenticating the caller and then figuring out what they needed."

"We looked at various solutions," says Zachry, "but Zeacom really had the most complete solution. They were probably the one company that spent a tremendous amount of time on the front-end. I've done enough projects to know that frontend planning has everything to do with success in the end. Zeacom spent a lot of time during the sales cycle understanding our business and what it was we wanted to accomplish. It really helped us understand what solution they had to offer and how it would fit for us. One thing we really wanted to have was an IVR system so customers could perform some self-service. We also wanted CTI integration and do some screen pops or present information to our customer service agents so they were prepared to immediately assist callers. Another area significant for us was the fact that we didn't have very good reporting capabilities on our old system. We wanted to know who was calling us, how much time we were spending on those calls, and if there was an opportunity to provide some self-service options so that our customers service agents could deal with the more difficult calls where a customer must speak with a representative."

"Zeacom could do all this for us," says Zachry, "and one thing Zeacom could do that other systems couldn't concerned our fax-on-demand system. To understand how, you first must understand that we're a life and health insurance company, but our largest segment is acting as a third-party administrator. For large employers that self-insure their medical plan, when their members or employees go to the doctor or hospital, all of those claims come into our office and get adjudicated. Consequently, the calls received in our contact center are really from three sources: first, providers calling to determine if a member is eligible for service, and if so what level of benefit; second, there are member calls wherein they ask if they're eligible or the status of their respective claims, or general questions; third, employers call us since we work directly with them. So many calls are provider-based, and we offer a fax-on-demand system that provides this eligibility and benefits information. One thing we wanted to be able to do was track, monitor and report on that as well. We wanted to treat those incoming lines as if they were being handled by agents, and that was something that not so many systems we looked at could do, but Zeacom could do it, so that was a big plus for us. We could also now do faxing from the desktop.'

"Zeacom offers a sort of 'a la carte selection of functions that you can buy and they're able to package all of their different modules into one system," says Zachry. "You can buy any of the 'pieces' and add on other ones later. That was very attractive to us, and we ended up buying quite a few of the 'pieces'. We ended up replacing our phone switch too, which was not from Zeacom, but Zeacom did provide the IVR, fax solution, standard and customer reporting, and a terrific state-of-the-art voicemail system. We now have a great system, and our business processes are enhanced and accelerated as a result."

Here Comes Communications-Based Process Automation

Indianapolis-based Interactive Intelligence is well-known for its Customer Interaction Center (CIC) IP application suite. Their own approach is to take one step beyond CEBP with what they call Communications-Based Process Automation (CBPA). Their new Interaction Process Automation solution takes the functionality that deals with interactions in a CIC-based contact center and applies those tools to automate business processes in a centralized manner. CBPA and its embodiment, Interaction Process Automation, allows companies to move beyond simple UC and leverage advanced functions so as to have a quantifiable effect on their business.

Richard Grigonis is Executive Editor of TMC's IP Communications Group.

> The following companies were mentioned in this article:

Avaya www.avaya.com CDW Corporation www.cdw.com Interactive Intelligence www.inin.com

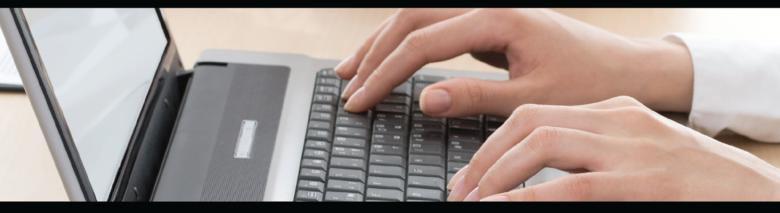
Zeacom www.zeacom.com





THE COMMUNICATIONS SOLUTIONS COMMUNITY

PAETEC



In today's economy, reducing costs while enhancing productivity is the key to success.

Recent business trends across the globe are indicating a "back-to-basics" approach for most companies: reducing costs and increasing productivity are being pushed to the forefront. These two objectives may directly compete with each other unless game-changing technology and innovative solutions are adopted. Businesses are increasingly turning to solutions like converged networks to simplify operations, minimize risk, increase bandwidth capabilities, and reduce costs.

The IP Communications world is being driven on many fronts and at the heart of this activity is a host of Communications Solutions to help streamline operations.



Log On Today!

The Communications Solutions Community is designed to serve as a central resource for this fast-moving market. To stay on top of the Communications Solutions space, bookmark the Communications Solutions Community and make sure to return often for the latest news, trends, and industry-specific content.

- Communications Solutions Latest News
- Product Showcase
- Business Continuity and Managed Services Featured Articles
- Trends, Benefits, and Applications
- White Papers
- Case Studies

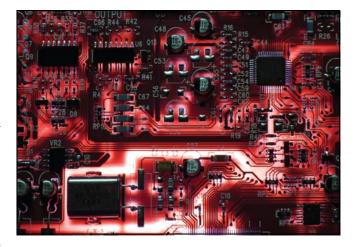


http://communication-solutions.tmcnet.com

Lean & Mean High Availability

By Richard "Zippy" Grigonis

The microcomputer-based computer telephony era began in 1989 when Dialogic introduced the first 12 channel DSP (Digital Signal Processor)-based voice processing board, the first T-1 interface board for voice processing, and the first digital TDM (Time-Division Multiplex) bus for resource sharing, the Pulse-Code Modulation Expansion Bus (PEB). Boards like these from Dialogic and other vendors made it possible for developers to assemble systems for both enterprises and service providers: IVR systems, fax servers, prepaid card systems, international callback systems, inexpensive PC-based phone systems (which ultimately became the IP PBX) with voicemail, auto-attendant and automatic call distribution (ACD), and call centers using PC-based predictive



dialers and PC-based databases that could provide screen pops of customer data to contact center agents. However, concerns were raised over system reliability, or High Availability (HA).

It soon became apparent that readily-available, inexpensive and relatively flimsy mail order PCs were not quite up to the task of running mission critical, revenue-generating telecom applications 24 hours a day. A preponderance of plug-in CT cards would blow out a single small power supply. Round-the-clock disk drive activity would rapidly result in a dead disk drive.

Carriers, service providers and multinational enterprises were more accustomed to the "five nines" (99.999 percent) uptime afforded by the switches in the telecom network. These were based on the performance and safety requirements called NEBS (Network Equipment Building System), originally formulated by Bell Labs in the 1970s, further developed by Bellcore (now Telcordia), and were made public documents in 1985. Thus, when computer intelligence began to be applied to phone calls en masse, in the enterprise, some NEBS-certified, "fault tolerant" computer systems were initially used, but such computers were quite expensive and relatively underpowered.

Around 1993, some people were becoming aware that heavyduty "industrial computers" could be used for such computer telephony applications. These were 19-inch wide rackmounts that had passive backplanes (with 21 or so slots for plug-in boards), redundant disk storage (RAID), load-sharing power supplies and many forced air fans or "blowers", but unlike true fault tolerant systems, they had only one CPU on a single board computer (SBC), instead of two with automatic failover capability. Unlike a true fault-tolerant computer, these devices had a single point of failure – that single CPU – which reduced their uptime to "four nines" or so instead of five. However, such a design greatly reduced the cost of the system, and thus made for reasonably-priced IVR, fax, voicemail, and other computer telephony systems.

Yours Truly, who had entered the telecom media field in 1994, pondered what to call such computers, since it was obvious they weren't "fault tolerant". In 1995, while in the bathroom shower one day (where all great ideas appear), I suddenly realized that Dialogic had used the term "fault resilient" to describe one of their boards. It sounded good, and so I began using the term "fault resilient computer" to describe such heretofore unclassified devices. I even wrote the book, *Fault Resilient PCs.* As it turned out, these devices became the workhorses that ran the applications used in the 1990s computer telephony era.

Back in 1994, when I wrote my first telecom magazine article – that just happened to be on "industrial computers" used in telecom – I covered the products of four companies, and 20 percent of their sales related to telecom. After popularizing the term "fault resilient computer" and covering the industry diligently for the next five years, I found that 80 percent of the fault resilient "bus and boards" market was now telecom-related.

A few months before I wrote my first article on the subject, in early 1994, Ziatech (later part of Intel, now part of Performance Technologies) and six other companies conceived of a new type of PCI-bus rackmount that could be suited for the telecom market. It was electrically similar to the PCI bus in desktop computers, but was ruggedized for telco-related use and supported component hot swappability. Ziatech called it "RuggedPCI" and the specification was limited to the 3U-high form factor. At a September 1994 meeting of PICMG (PCI Industrial Computer





Polycom's HD Voice Community on TMCnet

The gathering place for vendors, service providers, and users of HD Voice and wideband audio IP telephony.

Tap into a vast array of resources helping you select HD Voice services

- Whitepapers
- Podcasts
- Webinars
- Blogs
- "Ask the Expert" Commentary
- Breaking Industry News

http://hdvoice.tmcnet.com



Manufacturers' Group), Dennis Aldridge, a marketing director at Texas Microsystems (now part of RadiSys) didn't like the name "RuggedPCI" since his passive backplane products were already "rugged". Joe Pavlat, then running a company called Pro-Log (later part of Motorola), on-the-spot came up with the "temporary" name CompactPCI, which actually became permanent. Wayne Fischer of Force Computers (now part of Motorola) then began using the abbreviation "cPCI" in his emails and other correspondence. It too became popular.

CompactPCI has had a jolly good run, but telco demands for an even more powerful, high density, and super high availability computing platform led PICMG to develop today's Advanced Telecom Computing Architecture (better known as AdvancedTCA, or simply ATCA) form factor machines.

One of the first companies to take ATCA seriously was RadiSys, which continues to offer its potent Promentum systems. For example, the hefty, carrier-grade, 13U-high Promentum SYS-6016 supports 10 gigabit-per-second (Gbps) switching, packet and media processing over its 16-slot backplane. It comes standard with the Promentum ATCA-2210 10-Gigabit switch and control modules that provide integrated centralized functions such as switching, shelf management, network-timing and system management capabilities. The 6016 is used in 3G wireless and wireline infrastructures for apps such as Radio Network Controllers (RNC/BSC), Media Gateways, IMS (CSCF, Application and Media servers), and IPTV.

The SYS-6016's NEBS Level 3-ready, highly redundant architecture eliminates any single point of failure and enables 5 nines or even 6 nines availability.

To power AdvancedTCA systems at maximum capacity, take a look at RadiSys own ATCA-4500 10-Gigabit Compute Processing Module. A 7th generation single board computer from Radisys, the ATCA-4500 is a single slot AdvancedTCA computer module based on the awesome, single socket L5518 Intel Xeon processor.

The "Middle" In HA Middleware

RadiSys has always been at the forefront of developing systems of high availability. Back in 2006 they partnered with GoAhead software on a standards-based, pre-integrated high availability ATCA solution, an integration of a RadiSys Promentum with GoAhead SelfReliant, standards-based high availability middleware. Later in that same year they partnered with OpenClovis to resell and support OpenClovis high availability middleware and application development tools with the Promentums. By pre-integrating ATCA platforms with such high availability middleware, equipment providers could now focus on building interesting differentiated applications rather than squandering resources developing basic protocols and platform management solutions themselves.

GoAhead Software, of course, is one of the founders of the Service Availability Forum, a consortium of communications and computing companies working together to develop and publish HA and management software interface specifications. In the 'Open Source' column elsewhere in this issue, Yours Truly interviews Dr. Asif Naseem, President of the SA Forum and President and COO of GoAhead Software, which recently released its SAFfire 3.0 high availability and management middleware capable of supporting the open specifications of the SA Forum. The platformindependent SAFfire supports the SAForum's Application Interface Specification (AIS) and the Hardware Platform Interface (HPI).

With SAFfire 3.0, GoAhead has mastered integration with such hardware platforms as the Continuous Computing FlexTCA platforms, the IBM BladeCenter family, and RadiSys Promentum ATCA chassis and blades. SAFfire 3.0 is also pre-integrated with leading software solutions such as Tail-f Systems ConfD network configuration management, Wind River Linux and Vx-Works and MontaVista Linux operating systems, and the Oracle TimesTen in-memory database. Also, SAFfire interoperates with the IBM solidDB in-memory database.

Moreover, the new GoAhead Service Availability Forum Ecosystem (SAFE) Program is a partner program aimed at reducing the time required for equipment manufacturers to deliver mission critical systems and applications. By teaming with major providers of open standards-based, Commercial-Off-The-Shelf (COTS) hardware and software, GoAhead strives to eliminate the risk and cost associated with platform integration and validation.

GoAhead recently named John Hansen as their new CEO and Chairman.

As for OpenClovis, their work on high availability middleware continues to ride the 10+ year wave of open source and COTS technologies infiltrating the world of Telecom Equipment Manufacturers (TEMs) and Network Equipment Providers (NEPs). (Carrier-grade Linux, for example, as well as OpenClovis' own open source HA middleware.) Their OpenClovis Application Service Platform enables developers to quickly add a management and high availability service layer to any telecom design, thus enabling highly marketable, differentiated solutions.

Furthermore, their OpenClovis IDE (Integrated Development Environment) software solution, when used in conjunction with the OpenClovis platform, streamlines the specification of a system's information model, HA aspects and the communication infrastructure. OpenClovis IDE stores all information describing a project in XML files modifiable by the user. Modeling of system resources and relationships are specified using a graphical UML editor.

Richard Grigonis is Executive Editor of TMC's IP Communications Group.

> The following companies were mentioned in this article:

GoAhead Software www.goahead.com

OpenClovis www.openclovis.com RadiSys www.radisys.com

Service Availability Forum www.saforum.org

42 INTERNET TELEPHONY® July 2009



Subscribe FREE online at www.itmag.com



Target Narketing Contresting Industry

Master Agents Agents & Distributors VARS, VADS & System Integrators VoIP Agents Carriers, CLECS & Resellers International Agents & Wholesalers

Email Blasts
Interactive Website

877-867-2553 sales@iagentnetwork.com www.iagentnetwork.com

Publication Partners:











Association Partner:

A Note on Rural Carriers

By Richard "Zippy" Grigonis

elecom service providers – rural or otherwise – are looking for ways to bring next-gen VoIP technology to their customer service areas. They seek a low-risk, flexible and cost-effective way to take advantage the many benefits and competitive advantages of IP-based services, while leveraging their existing investment in legacy systems.

One company serving this area is REDCOM (www.redcom. com), which has designed and manufactured state-of-the-art, high-quality communications equipment since 1978. RED-COM products include public and private network systems, ISDN systems, legacy systems, IP/VoIP-based systems with an integrated SIP Call Manager, Media Gateway, and Media Gateway Controller, tactical systems, programmable platforms, and test equipment. With REDCOM's platforms, even small, rural service providers can follow a phased approach, creating new services at their own pace.

"There are three kinds of carriers," says Klaus Gueldenpfennig, President and Founder of REDCOM, "ILECs, CLECs and pure long-distance type carriers, which I would place in tandem and transmission-type structure, the others being more central office and consumer-oriented. The big surprise is what's not happening."

"The three main business areas we serve are the military, rural/ public exchange and the international market," says Gueldenpfennig. "To a large extent we have a joint hardware platform that essentially is what you today call a softswitch. Incidentally, I challenge you to define what a softswitch really is. Some are 'softer' than others. In any case, we have successfully integrated to install it right now. They want the option to deploy it later, since they tend to not find many subscribers. Part of that is because VoIP phones are much more expensive and they use local power, so you can't power them from the central office. Utility power tends to fail more often in rural areas than in cities."

"So the infrastructure is there: the telephone poles, wires, and everything," says Gueldenpfennig, "but it's very tough to insert new equipment into the rural areas and have it economically absorbed through fee structures. It takes a long, long time out there. But we do have some installations out there ready for IP in rural U.S. areas, Canada and South Pacific areas such as the Cook Islands. They just have to plug in a card, run the software and they're in business. But they have very few VoIP subscribers. The markets are not really that big in rural areas, so they need to achieve some economy of scale by sharing a common platform for many market segments. It'll be a while before we see many VoIP subscribers out there in the rural market. But VoIP will in fact be fairly prevalent in the suburban market." **IT**

Richard Grigonis is Executive Editor of TMC's IP Communications Group.

the so-called 'new' technology in providing VoIP in the same fully-integrated platform as TDM, because the old-fashioned systems aren't going to go away. Many of them are still out there. They aren't any more on a 40-year depreciation schedule, but many people struggle to get them depreciated over 20 years. A lot of them tie into not just the public exchange, and central office, but also what 'hangs around' it, such as the outside plant. When you enter the rural areas, things tend to be spotty - this business of fiber-to-the-home is neat, but you've got to find it out there. We've noticed that although we offer VoIP integrated into the system, providers seem to be very hesitant



Attention Application Developers Worldwide!

WANTED:	An innovative application created using [©] Dialogic [®] products. Originality is a must.
REWARD:	US \$5000 credit towards future purchases, free one-year service and support contract
	and joint marketing opportunities
RESPOND EI:	September 30, 2009

Enter the Dialogic Innovator Award Contest Today!

www.dialogic.com/go/innovate





The Voice Peering Fabric ("VPF") is a private Internet that expands to major U.S. cities and abroad, uniting domestic and international telecom providers to bring the most secure and quality experience for the exchange of voice, video and data. It is a unique environment for enterprises and carriers to buy, sell and peer communications services on their own terms. Businesses now have control over and choices about their communications needs.

Communicate with Choice

Communicate with Confidence



The VPF removes barriers to communications between communities and gives control over how you direct your traffic and how much you pay for it. To find out who is in this new community, visit thevpf.com/members.

Stealth Communications. All rights reserved. Stealth Communications, the Stealth logo, Voice Peering Fabric, VPF, the VPF logo, are either registered trademarks or trademarks of Stealth Communications, Inc. in the United States and/or other countries.



Media5: Taking the Myth Out of Mobility

Mobility has become one of those buzzwords that each person interprets in a different way. And with the way technology is changing, it is no wonder this buzzword has taken on a life of its own. This month I sat down with Marc Skinner, PLM Director at Media5 Corporation (www.media5corp.com) to discuss the Mobility craze, the market conditions, and future trends.

RG: Why has the Mobility become so complex?

MS: Until recently telecommunications focused from the inside out, that is, focusing on the office environment trying to give it a global reach. However, the reality is that the work environment has changed; more employees are working remotely from their homes, hotels, branch offices, in the train, in airports or in many other scenarios; our industry needed to catch up. Our concept of Mobility is actually quite simple; it is thinking globally, it is the ability for employees to stay in contact wherever they are in the world using whatever the device and access methods are available to them. It's complicated though, given the variety of different options with which they are faced in order to become mobile.

RG: What are some of the different options facing the mobile worker?

MS: When we developed the Media5*Boss*-Mobility solutions portfolio, we looked at the needs that the Mobile workforce has, and tried to respond to them.

Productivity and Efficiency Increase. When a worker is outside the office, he needs to be reachable in the same way as if he were at the office. He needs to get access to the same levels of communications functionality both locally and remotely.

Cost Savings. A primary concern to most companies is "How much will this cost?" and "Will it pay off?" A key element to any Mobile solution is the ability to use the least costly network available. For our PBX Extension-to-Mobile solution, this means using VoIP over WiFi when available with dualmode Smartphone's. Studies indicate that 40 to 80 percent of mobile voice calls are made where WiFi is accessible (office and home), so the cost savings can be considerable.

Our Mobility portfolio also brings cutting-edge security and high interoperability mobile SIP client applications, such as the one we just released for the iPhone. Apple has shaken up the mobile industry and Nokia, Google, RIM, Microsoft and others are working hard to win their share of this market. All are putting in place a full ecosystem to ease the development and the deployment of new mobile applications while launching powerful and open platforms.

By Richard "Zippy" Grigonis

With this in mind, we, at Media5, have worked on different, comprehensive solutions to cover the widest range of mobile platforms available, giving the user a wide choice of mobility solutions. By using our award-winning core technology the M5T SIP Client Engine, this powerful SDK takes care of all the portability challenges by each of the mobile OS and platforms.

Comfort. The user must also feel familiar and comfortable with the mobile solution; there is nothing worse for a mobile worker than being told that there is a two week learning curve. The Mobile solution should be a natural extension of their existing enterprise PBX.

Security. In key vertical markets, such as Legal and Financial, solutions need to be secure. Key elements should include functionalities such as SIP over TLS for secure signalling towards the mobile user application, as well as SRTP for secure voice & media transmission. The key exchange mechanism is important to ensure a full, end-toend secure solution. The solution should also offer support for different open standard mechanisms such as SDES, MIKEY or ZRTP.

Convenience / Presence. Presence-aware applications enable the worker to stay in contact wherever they are in the world as if they were at their desk — to be able to use multiple mobile platforms, with one business number, one contact list, one voicemail box and Instant Messaging.

RG: Service providers have been lagging somewhat behind everyone else in terms of adoption. Why is this?

MS: With call volumes moving away from traditional mobile operators, there is the opportunity for service providers to generate additional revenues, especially in the SMB and branch offices segments, by offering value applications and services including:

- PBX-Extension-to-Mobile with/without dual-mode phones.
- Mobile SIP Clients for iPhone, Nokia E, N series, Android Google phone.
- Secure Mobile Communications Solutions.
- Offering both GSM and SIP Services.
- Opportunity to sell more data on the road: through special agreement for lower data rate and pre-configured hot spot at lower rate.
- Providing more components to the core of the enterprise = lower churn rate.
- Generate Enterprise revenues with installation and services.

To learn more about Mobility in the work force and about the Media5 line of Mobile Solutions, visit www.media5corp.com



Introducing the Asterisk Global Online Community

Open Source Telephony is taking the world by storm.

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

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

The community showcases daily content updates highlighting:

- * Feature stories * Breaking news
- * Case studies
- ***** Tutorials
- * Asterisk Developer Blog

* Whitepapers

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

http://asterisk.tmcnet.com



Copyright © 2008 Digium, Inc. All rights reserved.

Network Monitoring in the Enterprise

By Richard "Zippy" Grigonis

etwork monitoring often conjures up such minutiae as router traffic, Quality of Service (QoS), Quality of Experience (QoE), intrusion detection, reporting and alerting on network and systems availability, usually under the control of a friendly, webbased GUI. But in fact the concept of network monitoring is becoming part of a much larger monitoring process that involves the real-time examination and tweaking of the whole business process.

That's not to say that paying attention to details such as QoS and network elements isn't important. Take ADTRAN, a prime supplier of network and communications equipment. Their Enterprise Networks Division specializes in Internetworking, VoIP and IP telephony solutions to help Small-to-Medium-sized Businesses (SMBs) and enterprises implement voice, video, data and Internet connectivity over various kinds of wide and local area networks.

Jamie Britnell, a product manager in ADTRAN's Enterprise Networks Division, says, "Any of our products capable of running voice, such as our NetVanta line or Total Access 900 series, is now subject to our Voice Quality Monitoring [VQM], which moves beyond Quality of Service [QoS] thus allowing the network administrator to examine the full data stream and identify problem areas down to the packet level using a GUI. We saw the need to implement some type of voice quality monitoring as networks transition from just a pure data pipe to more of a mixed voice and data model. Obviously, VoIP is essentially data, but you need to classify that traffic in a different way, and the QoS aspect of it is quite important compared to 'ordinary' data that isn't real-time in nature. So the VQM takes a look into all of the data traffic, and specifically picks out the voice part, and allows you to do network troubleshooting and monitoring of your voice traffic.

Britnell continues: "We look at things as MOS [Mean Opinion Scores], packet delay, jitter, packet loss and discarded packets, using an algorithm that generates that information. All this allows the service provider to look and see what's going on with quality on the customer side. A lot of voice quality monitoring in the past had been in the network, using things such as Brix and Empirix-type probes, and there wasn't a lot being done by the CPE or on-site itself. With our VQM, we integrated all of that technology into the CPE device without the need to resort to some other type of probe at the customer side — everything can now be integrated into the device itself. We put all those features and functionality into our CPE device and we look at both incoming and outgoing RTP streams so you can do real-time measurements for VoIP calls. We look at both RTP streams and we can determine all of the informa-



tion I mentioned earlier related to what's going into and out of the router on the customer side. This allows the service provider to take network monitoring one step further and actually monitor the voice traffic. In looking at the RTP streams, in the stream from the service provider network the call quality could be good but the call quality from the customer side could have some issues. We troubleshoot everything from the CPE device."

"Then there's our n-Command Enterprise and MSP editions of the platform which can aggregate all of the information and help the CPE devices report to us and some third-party application like a Brix or an Empirix so you get a full end-to-end analysis of what's going on," says Britnell. "The n-Command suite of managed services software and network productivity tools for NetVanta and Total Access-based networks helps IT administrators in that it simplifies network operation, device installation and configuration with quick device discovery, global modification of features and Access Control Lists, and you can automate individual or network-wide firmware upgrades, configuration changes or backups. It'll also let you view and report content and historical VoIP performance statistics and generally monitor the overall health of the network by location or customer. But in terms of what VQM does, all you need is a CPE device on the customer side of the router or the IAD, and we calculate that information internal to our MOS. It's not only good for the service provider, but the enterprise customer as well. If a company has an IP PBX or distributed enterprise type of application, they can use this information to determine call quality issues too."

"One differentiator we have that makes our products easier to use is our GUI," says Britnell. "Information may be out there in other equipment but sometimes it's not presented in a very intuitive fashion, and that can be a burden for those smaller enterprise customers who may not have a full-time IT staff. So we saw the need to present all of the information in a friendly, accessible, interactive GUI."



Introducing the Small Business VolP Online Community

Small business VoIP adoption is growing, largely because of the cost benefits, but the fact is that hosted VoIP services for small business, like Packet8's Virtual Office, provide much more than cost savings. The greater versatility of hosted VoIP system allows businesses to customize their telecommunications packages to meet their unique needs, but without requiring large up-front expenditures for equipment,installation, maintenance, or IT staff. For the latest news and information on VoIP services specifically designed for the small business market, visit the Small Business VoIP community on TMCnet, sponsored by 8x8. Packet8 Virtual Office is an affordable, robust and easy-to-manage phone solution with all the premium PBX features and functionality of a traditional telecom system.

On the Small Business VoIP Community, you'll find:

- Free consultations
- Feature articles
- Free trials
- Free guotes
- Case studies
- Technology briefs

http://small-business-voip.tmcnet.com





Whose Network is It, Anyway?

It's becoming difficult to talk about enterprise monitoring without talking about what service providers are doing, since network connectivity to partners, suppliers and customers is on the rise. Federating data, SIP trunking and various other practices can sometimes give enterprises the impression that they're in the network business, and the mix and interplay of outside services, overlays and CPE-based technologies adds to the complexity of any given network, making the definition of 'network monitoring' an interesting challenge in itself.

Over at Computer Associates, Steve Guthrie, CA's Product Marketing Director, says, "Certainly there has been a lot going on in the area of MPLS management for service providers and large enterprises. Why is this important? Because in communications service providers are looking at their MPLS backbone as the delivery mechanism for new services, whether it's metro Ethernet of IPTV or video-on-demand, or hosted VoIP applications or even managed services. It's fair to say that MPLS took its time maturing and getting its 'feet on the ground'. But that's behind us now and it's the future of networking. They're even running ATM and frame relay over it. So we see service providers needing good, deep visibility into their core traffic engineered networks and having the ability to rapidly identify where any problem originates and resolve it, because now we're talking about service level agreements, revenue generating services and 'stickiness'. This new technology that we're announcing is the Spectrum MPLS transport manager. I asked an ISP a few days ago what all of this meant to him, and we started talking about the cyclotrons at CERN, which generate a firehose of raw data that is pushed out of CERN and it goes over an MPLS backbone network, and here in the U.S. the Energy Sciences Network receives that data and then pumps it out to Lawrence Livermore or to Fermi Labs, who then process the data and throw it back to CERN with analysis and meaning. If any degradation or outage occurs in the MPLS backbone, then that data will probably never get processed, because there's so much more data coming down the pipe. I don't think they discard it, but they never get a chance to process it. That's why uptime is important to all of our products. CERN's MPLS network has been able to achieve 99.997 percent uptime. Whenever they have an outage, they need to resolve it quickly in order to get that data back into processing mode. They figure that with our CA Spectrum MPLS Transport Manager, they'll reduce the time to repair/resolve by an order of magnitude."

"What does that mean? I'll tell you," says Guthrie. "An easy problem could take 10 minutes to resolve today, but with the CA Spectrum MPLS Transport Manager, it might take as little as a minute. That's the one feature that I think is important on the Spectrum side of the house. On the enterprise side, our CA eHealth Performance Manager helps you improve IT service quality, increase IT efficiency and reduce cost, since it proactively manages performance of the enterprise voice and data networks, physical and virtual servers, databases, and client-server applications. We continue to improve its proactive performance management capabilities for VoIP systems and with our latest announcement we're focused on the Cisco Unified Communications Manager as well as Siemens HiPath." "CA has a third product," says Guthrie. "It's called CA eHealth for Voice. This is a standalone solution that handles IP telephony for Cisco, Avaya and Nortel systems, and TDM or legacy telephony management for Avaya and Nortel. What we're doing with eHealth Performance Manager Release 6.1.1 is that we're moving the Cisco IP telephony support into eHealth and we're adding coverage of Siemens HiPath. There are several reasons we're doing that. First, IT departments are asking us to help them reduce the number of tools that they use. We have clients with up to 58 monitoring and management tools and they're trying to reduce that. Recently we worked with 2 companies. With one we helped them go from 26 to 6 tools, and in the other case we helped them transition from 14 to 7 tools. So there's clearly a desire and trend for IT to reduce the number of tools they use. They tell us that it would be ideal to move IP telephony management into the eHealth product proper."

Brian Bakstran, CA's VP of Product Marketing, says, "Next, eHealth has some very significant built-in intelligence concerning 'time-over-threshold' and 'deviation from normal'. That allows us to filter out what I'll call 'infrequent spikes'. In the case of telephony, the CPU of the call processing server and its memory usage may spike because of a transient high call demand. So you have a CPU that spikes once or twice in any given 1-hour period, say, and you must ask yourself whether that's something you really should take a look at, or is it truly transient and it's going to comeand-go, and it's not going to have an impact on your users. With time-over-threshold and deviation from normal, eHealth is able to filter out those transient events and only alert you concerning what it determines to be systemic events. This is powerful technology based on built-in intelligence, to help IT focus on real problems and not be distracted by the occasional spike or two."

Monitoring as a Service

Minnesota-based Dotcom-Monitor, founded in 1998, was one of the first external monitoring companies. They offer a unified Softwareas-a-Service (SaaS) suite of on-demand external monitoring modular solutions for websites, web applications, business transactions, and Internet network infrastructure. They're experts at server performance monitoring (detection, alerting, diagnostics steps, notification processes) for SLA management and reporting, and volume monitoring in terms of user interface/workflow set up to support various devices. They even have a SIP monitoring tool. Their suite has unified monitoring, reporting, notification, escalation, and analysis options in packages designed to fit just about any customer's needs.

Brad Canham, Vice President of Business Development, says, "Once a company signs up and has our service, they can pick the various pieces of monitoring tools they need to use. It's different than some other companies. It's not an 'a la carte service where you buy, say, VoIP monitoring and that's what you get. We provide the whole suite and then people can use a tool and then stop using it, and then add more tools as they see fit. That is a trend in the industry that makes sense. Companies wanting to use services as they're needed. It's the benefit of a SaaS suite rather than buying a big application and piece of infrastructure to do monitoring."

INTRODUCING THE Next Generation Communications Global Online Community

http://next-generation-communications.tmcnet.com



Transforming communications for a world that's always on.

The Next Generation Communications Global Online Community, sponsored by Alcatel-Lucent and powered by TMCnet, is primed to become the de facto resource for information and news. The community is designed to keep Service Provider and Enterprise decision-makers up to date on the latest trends driving next generation communications.

Be sure to bookmark the Next Generation Communications Global Online Community

Featuring:

- Breaking Industry News
- Ask the Expert Column
- Blogs
- Videocast and Podcasts
- Articles and White Papers
- eNewsletters



"In terms of what we monitor and why, our focus is on server performance monitoring," says Canham. "That's how Dotcom-Monitor was built from the ground up — for IT administrators who are responsible for SLA requirements and server performance. So all the pieces of the product — everything from detection to the diagnostics on the back-end to the notification processes — are very specifically built for SLA management and server performance monitoring. A key piece that makes Dotcom-Monitor a bit different is just the way we manage volume. The Dotcom-Monitor user interface and the way the workflow is set up, are arranged to ensure IT administrators can easily large volumes of tasks and/or 'devices' in a straightforward manner."

Vadim Mazo, President and CTO of Dotcom-Monitor, says, "With SaaS, people come to our website and they sign up for a package of functions and devices they want to monitor. We have servers that keep the data and we have 15 distributed agents around the world, on separate backbones. They give good coverage of the worldwide Internet infrastructure. Those remote agents perform actual monitoring. For example, if you have a website and you would like to makes sure it's accessible from Japan, Germany, Canada, Texas, and so forth, those monitoring agents will perform the actual tests. And so we can help you figure out whether there's a problem with, say, the Asia network."

Dotcom-Monitor's new SIP Monitor for SMB VoIP service manages SLA requirements and hybrid VoIP traffic routes and proactively mimics the end-user's perspective from external locations, rather than only relying on passive internal network analysis systems. It can quickly identify and pinpoint VoIP connectivity error conditions. SIP Monitor is a simple, cost-effective external system, rather than a large, expensive in-house system. Indeed, it can be configured and managed with little or no IT expertise. Moreover, its proactive monitoring ensures that connectivity errors can be addressed before the errors become downtime problems for customers. The SIP monitoring service ensures SMBs can rely on their VoIP systems, VoIP service providers can monitor their infrastructure, VoIP wholesalers can monitor service provider connectivity and reliability, and VoIP VARs and managed service providers can count on client uptime and revenue.

Seeing the Forest from the Trees

As perhaps the world's leading provider of broadband satellite services, networks, and products for enterprises, governments, small businesses, and consumers, Hughes Network Systems, a subsidiary of Hughes Communications, offers complete turnkey solutions, including program management, installation, training, maintenance and support for professional and rapid deployment anywhere, worldwide. Their Network Operations Center is staffed by engineers who monitor customer networks 7x24. It's all backed by an extensive field operations organization that provides quick service to all Hughes customers.

Hughes Network Systems' Doug Medina, Senior Director of Marketing, says, "I'm on the B2B side of our business. Since 1985 we've been servicing large enterprise customers. Walmart was one of our first customers and still is. Our strength is providing managed network services to large, distributed enterprises in North America, such as BP, Sonic Restaurants, Exxon, Blockbuster, and so forth. The come to us because we can securely and cost-effectively interconnect all of their distributor branch locations back to their headquarters through a network management portal we call a Customer Gateway."

"Everyone thinks we're the satellite guys," says Medina. "That's true. If you're a consumer who can't get on the Internet because you can't get DSL or cable, HughestNet is one company you'd approach for satellite service. On the B2B side, we've not only done satellites since the late 1980s, but we've also added a whole LAN-based suite of services. So not only do we sell broadband satellite, but we also offer cable, DSL, T1, 3G wireless and so forth, all under one network management umbrella. The way the service is delivered, everyone of our large enterprise customers gets the portal access, which is not too originally-named the customer gateway. It's a managed network portal. For example, if you're BP, you can get online and see your 12,000 locations. It doesn't matter whether they're on DSL or satellite, it doesn't matter. You can see just with one view a U.S. network and all the locations with nodes in greed, red or yellow, depending on whether they are on DSL or broadband satellite. The first tier help desk can set trouble tickets. They can go in and actually see pictures of their installations. They can also see moves, adds and changes. They can also obtain performance and management capabilities. For example, you can see the top 20 applications that are running across the network, and you can get an idea if one site is very 'chatty' or using more bandwidth than you anticipated. You can 'drill in' and take a look at it and get network reports and graphs to determine what applications are running and why the thing is using bandwidth at 3 a.m. when that shouldn't be happening. That's our Customer Gateway Portal. One of its claims to fame is that it is totally agnostic to the underlying broadband infrastructure."

"As for trends," says Medina, "our customers, particularly when deploying large networks, and opening stores, for example, want the ability to schedule installations, schedule maintenance and see a picture of what the installation looks like in case there's a problem. Since they're doing tier 1 help desk and we're tier 2 in support of their tier 1 help desk, they're keen on that capability, because it acts as their eyes and ears out there. They can see a photo of what the installation is supposed to look like when its finished, and if there's any problem they may tell a non-technician out at the store to plug something in, jiggle a cord or check to see if a particular light is on. You can also check to see if a site is using backup communications. Some of our customers actually buy dual paths, such as a landline connection and a wireless overlay connection."

Monitoring Not Just Your Network, But Your Business Too

As business processes become communications-enabled, the formerly simple act of network monitoring becomes part of a larger overall monitoring activity involving the whole organization as a system.

For example, Nimsoft Monitoring Solutions (NMS) offers technology for monitoring the performance and availability of your entire IT infrastructure, both physical and virtualized. NMS strives to achieve ease of use and speed of deployment in

BlackBerry.

Mobilize Your PBX Office Phone. Smartphone. Unified.

Introducing the

Fixed Mobile Convergence Global Online Community

Fixed Mobile Convergence addresses the growing demand in today's business environment for seamless connectivity between fixed and wireless communications services. It is the ultimate convergence of all voice, video, and data communications, independent of location, device, or access technology.

The Fixed Mobile Convergence Community, sponsored by Research In Motion and powered by TMCnet, is your resource for staying up to date on the latest news that's important to optimizing your business' communications.



Community Features:

- » FMC Showcase» Ask the Expert» Feature articles» White papers
- » RSS feed for FMC news

http://fixed-mobile-convergence.tmcnet.com

Powered by:

Sponsored by:



BlackBerry.

BlackBerry®, RIM®, Research In Motion®, SureType® and related trademarks, names and logos are the property of Research In Motion Limited and are registered and/or used in the U.S. and countries around the world. Used under license from Research In Motion Limited.

monitoring, even when confronted with monitoring requirements ranging from emerging companies having a few servers to an MSP managing several network operations centers, or a Fortune 100 enterprise seeking to monitor vast mission-critical business services and the entire infrastructure. To that end (and also expanding on the idea), the Nimsoft Monitoring Solution consists of an integrated event, performance and availability, end-user response, service level and Business Service Monitoring (BSM), with bi-directional data integration into related applications such as CMDB (Communications Management Database) and service desk. Nimsoft's broad approach means that they're really presenting a business service and can aggregate data across various disciplines.

Among the many functional modules in Nimsoft portfolio, the new Nimsoft BSM Express can put IT infrastructure performance into a business context by monitoring key performance indicators of business services, and presents these metrics along with user experience and infrastructure health information, thus providing actionable insights into how to tune IT performance so it enables maximum business productivity. BSM Express thus shows how well IT services align with business goals, enabling the business to quickly visualize the health of their services and to account and measure the financial impact that poor performance or downtime have on the organization.

Nimsoft's product suite also offers monitoring solutions for verifying SLAs, databases and applications, the latter giving administrators a complete, multi-layered view of their such apps as Exchange, Active Directory, VoIP, Apache, Tomcat, JBoss, Websphere, Weblogic, Citrix, and many others—as well as .NET, J2EE, and custom applications. Nimsoft can do everything from provide a picture of host server performance metrics to metrics on the actual performance experience end-users have, which aides in troubleshooting issues. (User experience is measured with both active and passive solutions, which can be used individually or in tandem.)

NMS' single, administrator-friendly console monitors all core server resources and aides in centralized management of remote processes and services. Administrators can also leverage monitoring data using real-time alarm dashboards, performance trend reports, and SLA compliance reports. NMS "dashboards" can yield a single view of such metrics as help desk call statistics, application performance metrics, IT resource utilization, and much more. NMS dashboards can be accessed remotely via the web.

Chris O'Connell, Director of Product Management at Nimsoft, says, "We've been in the business for 10 years and have 800 customers, 200 of which are MSPs, a fact of which we're quite proud. Then there are all the different verticals such as banking, government, retail, and so forth. We're also quite proud of our three-tiered architecture, unlike that of many of our competitors. It's very modern, 'lightweight' and adaptable. Our open application interface even enables you to code the agent probes. As IT gets closer to the nature of a business and everybody is paying attention to where the dollars are going, many of our customers have been asking us about Business Service Management. They want to allocate resources and processes to what they're doing in terms of their business. They want to prioritize all of their IT based on the business, and not just some of it. Many customers ask for this technology. Back in July 2008 Nimsoft acquired a company called Indicative Software which had some great technology in the area which we adapted and have launched a new product called the Soft Monitoring Solution with BSM Express. Customers have the infrastructure and the applications, but now they need to understand how it all relates to the business process. They not only need a nice dashboard, but they need to be able to break out the data by the components of the supply chain. They need more information than just, 'is the network and the applications running on it healthy or not'. They need to understand how the components are performing based on IT. The middle level executives and administration people are being squeezed by the CIOs and by the lines of business to deliver on the ability prioritize IT and show in the boardroom what IT is doing for the business and how it reacts to business challenges. It's been an interesting year as we've been building our product line."

"It's all about visualization, as well as separation and aggregation of information, and also of dynamics," says O'Connell. "This isn't business intelligence where you run a report every night. This is a real-time dynamic where customers need to know what's going on right now. They don't have the luxury of waiting 24 hours or running reports. We see that there is a play where customers having 1,000 or so employees are really demanding this type of technology. Interestingly, MSPs are serving their own customers by delivering service portals, as it were, and they're looking for something like BSM to plug into that portal so that they can be more transparent to their customers and show how they're delivering on the contract that they signed with them."

Getting Lost in the Machinery

What started out as a look at enterprise network monitoring progressed to an examination of how service providers and enterprises deal with each others turf, and finally how monitoring has become integrated into monitoring and regulating the health of the whole business itself. All systems are ultimately open systems, and interact with other systems, making network monitoring merely one interesting facet of a much larger working environment.

Richard Grigonis is Executive Editor of TMC's IP Communications Group.

The following companies were mentioned in this article:		
ADTRAN	Hughes Network Systems	
www.adtran.com	www.hughes.com	
Computer Associates	Nimsoft	
www.ca.com	www.nimsoft.com	

Dotcom-Monitor

www.dotcom-monitor.com





Welcome to our online community.

The Broadvox IP Communications Community at TMCnet

The World's Ultimate IP Communications Resource +

- --- Get SIP Trunking Solutions
- --- Find SIP Origination and Termination Solutions
- → Focus on SMB and Enterprise VoIP News and Solutions
- → Discover VoIP News and Commentary from Major OEMs and VARs
- --- Explore the Largest Collection of IP Communications White Papers and Resources on the We



http://ipcommunications.tmcnet.com

IPMANADVENTURES.COM

IP COMMUNICATIONS

Presenting the 2009 TMC Labs Innovation Awards, Part 1

By Tom Keating and Richard "Zippy" Grigonis

Innovation is defined as the introduction of a new idea into the marketplace in the form of a new product or service, or an improvement in organization or process. TMC Labs has been testing, examining, and reviewing products since 1994. The favorite part of our job is seeing new products and technologies, as well as improved versions of the classics.



2009 marks the 10th anniversary of our TMC Labs Innovation Awards. TMC Labs is proud to announce our 16 picks for this year's awards, published in two parts. The individual write-ups will appear in alphabetical order — beginning with Cypress Communications through LifeSize Communications in this issue, and Microsemi through Zed-3 in our next (August 2009) issue.

Once again, our congratulations to those companies that continue to make this industry interesting for all of us.

Cypress Communications C4 IP www.cypresscom.net

First released in mid-2006 and continually updated and enhanced since, Cypress Communications' C4 IP provides small-to-medium enterprises (typically having 50 to 100 seats in 2 or more locations) with advanced hosted enterprise-class communications services without the complexity and time required to build a premises-based solution and without the capital investment. (Although targeting SMBs, C4 IP has been used in a record-breaking hosted VoIP/UC deployment for a legal firm having 2,800 handsets across 11 offices.) C4 IP goes beyond hosted VoIP, providing voice and data access, phones, collaboration and video services, unified messaging and sophisticated PBX functionality. C4 IP is supported by LAN/WAN management, a 24/7 fully redundant national VoIP network, hightouch customer service and a robust business continuity architecture. Since C4 IP is an outsourced solution, customers won't waste time and money tinkering with it. (It would take an entire article to detail the immense functionality of C4 IP and the ultra-reliable network that backs it up.)

DiamondWare, LTD DiamondWare www.diamondware.com

DiamondWare provides a unique audio mixing engine. They take individual audio streams in from each unique user, blend them together as appropriate (they can do this with

thousands of audio streams) and deliver them to any number of recipient parties. The earliest user of this technology has been the U.S. Special Forces – they use it to distinguish the radio traffic from multiple teams of warfighters in the field. Indeed, DiamondWare can be utilized by the military, virtual world companies, game companies and enterprises. Many of them recognize DiamondWare's capabilities that duplicate in the digital world the audio experience of voice to which we're all accustomed. These include: Life-like sound using 32 kHz stereo (a phone call is 8 kHz monaural, which is only 1/8 of the audio information); 3D sound unique to each listener, which gives the feeling of knowing exactly where each party is situated; and having the conversation volume be louder as you move physically closer to the party you're speaking with (just like being at a cocktail party, you can distinguish voices by location and the closest voices are loudest). This client/ server technology can be offered as both a hosted and a premise product solution.

Dotcom-Monitor Dotcom-Monitor: SIP Monitoring www.dotcom-monitor.com

Although more and more organizations are adopting VoIP with its signaling based on the Session Initiation Protocol (SIP) - such services are bandwidth and delay sensitive. Indeed, VoIP calls rely on some multiple network components outside of company control. Fortunately, Dotcom-Monitor's SIP Monitoring is an online monitoring service that proactively determines the ability of VoIP infrastructure components to support VoIP calls. The SIP-based monitoring service acts as an end client, periodically placing VoIP telephone calls to a specified number and checking the call results. You just provision SIP Monitoring as either an extension or a client on your VoIP system and configure it to call a specific number using a specified SIP server with certain parameters. VoIP system service failures can be discovered by the proactive SIP-based monitoring system and the resulting error report helps to pinpoint where the error condition is occurring.



CELEBRATE TEN YEARS OF ASTERISK[®] @ASTRICON[®]

SPONSORS









Infradapt.













THE ASTRICON® EXPERIENCE

THE CONFERENCE

In it's sixth year, AstriCon is the official conference for the wildly popular Asterisk[®] PBX and telephony platform. The conference includes a wealth of information whether you are getting started with Asterisk or have already discovered the power. AstriCon attracts hundreds of developers, system integrators, resellers, carriers and enterprise Asterisk users from all around the world, to converge at the same time under one roof.

The 2009 event is focusing on **"Asterisk in the Enterprise"**, and will include these exciting conference tracks:

- Enterprise/Government
- Technical
- Commerce (Day 1) / Cloud (Day 2)
- Carrier/Call Center



THE EXHIBITION

Dozens of products have been based on the Asterisk code, and hundreds of products and services have been created to expand on the power of Asterisk. The AstriCon exhibit hall brings together the leading products from a wide range of categories: endpoints (phones), gateway hardware (cards and standalone devices), software add-ons, embedded solutions, and Internet telephony services.

If you'd like to exhibit at AstriCon, please contact Joe Fabiano at jfabiano@tmcnet.com or +1 203-852-6800 x132.

THE MEETING PLACE

You will not find a greater mix of individuals than at AstriCon. From code gurus to venture capitalists to social activists, AstriCon brings together an astounding and vibrant mixture of perspectives, goals and outlooks. With organized group meetings, birds-of-a-feather sessions, an all-conference party, a job fair, and all-night coding sessions in the Code Zone, AstriCon is *the* place to connect with the Asterisk Community.

REGISTER WITH DISCOUNT CODE "ACO9" AND SAVE 15%!

WWW.ASTRICON.NET

Empirix Hammer Edge www.empirix.com

Hammer Edge represents the next generation of testing technology for service providers, network equipment manufacturers and large enterprises that deploy devices, services and/or applications on nextgen all-IP networks. Hammer Edge grants the ability to understand the effect of normal and harmful data traffic on real-time services of voice and video in both secure and unsecure scenarios. By emulating realistic behavior of users (agents and customers), devices and network topologies, all at high capacities, and predicting the realistic user experience of pre-deployed multiservice networks and services in a very simple and effective manner, Hammer Edge improves test productivity, product quality, time-to-market and revenue, as well as reduces the risk of SLA penalties. It can test various edge devices, including: session border controllers, firewalls, security gateways, and perform deep packet inspection. A Fortune 500 utility company is using Hammer Edge to connect multiple call center sites together, resulting in a 25 percent improvement in agent efficiency.

Ericsson

SM480 Metro Ethernet Service Transport Platform www.ericsson.com

Ericsson's SM 480 Metro Ethernet Service Transport platform serves as the basis for Ericsson's metro solution targeting wireline or converged operators. Thus, the SM 480 ultimately serves business service providers, residential service providers, peering exchange carriers, and mobile backhaul providers. By delivering a combination of large-scale IP/MPLS transport and granular service level agreement capability, service providers can leverage the network economics of Carrier Ethernet while migrating from legacy connectivity (such as ATM) to an IP-over-Ethernet packet-based infrastructure without costly "forklift upgrades". The SM 480 doesn't erase-andreplace transport networks, but is a complement to them. The SM 480 supports E-LINE capacity (via VLAN or MPLS VLL circuits) that's 4 to 8 times greater than its competitors.

Grandstream Networks GXV3140 IP Multimedia Phone www.grandstream.com

Grandstream has added to its line of innovative, SIP-enabled, IP voice and video products with the GXV3140 IP multimedia phone, which combines advanced real-time video conference capability with popular web and social networking applications. It features an advanced 1.3 megapixel tilt-capable CMOS camera (with privacy shutter), a 4.3-inch, 480x272 digital color LCD screen, dual Ethernet ports, SD and USB ports, a stereo headset jack, TV-out, stereo audio-out, and a full duplex speakerphone. This web-friendly device even supports a full HTML web browser, IM with Yahoo/MSN/Google, and 1-touch instant access to thousands of Internet radio stations, streaming audio/video, popular online music networks such as Last.fm, Yahoo Flickr web photo album, personalized RSS feeds of news/weather/stock/currencies (based on automated detec-

tion of the user's location), calendar, alarm clock, and works in 9 languages. Indeed, it's difficult to figure out what the GXV3140 doesn't do. It runs out of the box with zero configurations, letting you make video calls almost immediately. The GXV3140 also incorporates Grandstream's interesting peer-to-peer technology, so you can connect with friends and family via high-quality realtime videoconferencing over any distance for free.

Juniper Networks TX Matrix Plus www.juniper.com

Service providers and web content providers will be hard-pressed to find another company that can provide the core IP network virtualization capabilities with the scale and efficiency of Juniper's TX Matrix Plus, a multi-chassis core routing system architecture designed to support up to 25 Tbps of capacity by integrating up to 16 T1600s into a single multi-chassis routing node. The TX Matrix Plus works with the Juniper Control System (JCS) 1200 (the industry's first control plane scaling system) to allow the virtualization of routing systems, networks and services The TX Matrix Plus/JCS 1200 combination can be carved out into many individual (up to 32), fully secure virtualized routers. Each of these individual routers can operate entirely independently, running separate services and service characteristics (e.g., bandwidth speeds, quality of service), and even multiple versions of an operating system. They also may perform the functions of multiple network elements (which otherwise would require separate devices), such as traffic aggregation and core routing. Importantly, all of this can be managed by different organizations within the same network operator, eliminating the organizational barriers. Moreover, TX Matrix Plus delivers up to 25 percent more routing capacity in the half the footprint, and with up to 40 percent less power than competing solutions.

LifeSize Communications Inc. LifeSize Room 200 www.lifesize.com.

The new version of the LifeSize Room 200 High Definition videoconferencing system provides standards-based 1080p30 for the highest available resolution and 720p60 for the best motion handling with half the latency. The embedded 6-way HD CP (Continuous Presence) Multipoint Control Unit (MCU) supports all video modes including 1080p30 and 720p60. (Both multipoint options come standard with LifeSize Room and are made complete with transcoding support.) The MCU also supports conferences with up to 4 visible participants and 6-way HD VAS (Voice-Activated Switching) multipoint. Moreover, Room 200 comes standard with transcoding and all digital I/O, in a unit less than half the size of competing solutions. The fully integrated system delivers clear video clarity and HD audio for conferencing using less than 1 Mbps bandwidth. Now just about any organization can enrich its meetings by sharing documents and data quickly and easily.

Tom Keating is TMC's CTO. Richard "Zippy" Grigonis is Executive Editor of TMC's IP Communications Group.

GoTo: GoTo: Table of Contents • Ad Index



VoIP and CDW. Together they equal improved ROI.

HP ProCurve 2910al-24G-PoE+ Switch

- High-performance, scalable, enterprise-class, gigabit-to-the-desktop switch with 10G uplinks
- Enables enhanced convergence solutions using PoE/PoE+
- Easy to deploy and secure to the edge
- Ideal for converged enterprise edge, data center top-of-rack and
- remote office deployments
- Supports a maximum of four 10 Gigabit Ethernet ports, with optional module



Nortel Business Communications Manager 450

- Supports up to 100 users with the base model and up to 300 users with the new pluggable Capacity Expansion Card Business Communications Manager hardware components—including the base function tray, chassis interface board and capacity expansion card—simplify installation, connectivity and expandability

Call CDW for pricing CDW 1591911

Cisco[®] IP Phone 7941G

- Identifies incoming messages and categorizes them for users on the screen
- Configuration can be either automatically or manually set up for Dynamic Host Control Protocol, Trivial File Transfer Protocol and Cisco Unified CallManager

Call CDW for pricing CDW 918815

We're there with the Unified Communications solutions you need.

If you're looking to reduce costs and work more efficiently, there's no better way than a VoIP or Unified Communications solution from CDW. One of our telephony specialists will review your specific processes and assess your specific needs to provide you the best possible solution. All your systems and components will be pre-configured before they're shipped, and we'll even provide onsite installation. From start to finish, nobody does VoIP and Unified Communications better than CDW. So visit CDW.com and start saving today.

CDW.com 800.399.4CDW



Offer subject to CDW's standard terms and conditions of sale, available at CDW.com, ©2009 CDW Corporation

The Right Technology. Right Away."



Call CDW for pricing CDW 171195



July 15, 2009 • 2:00 pm ET/ 11:00 am PT

Digitalk Multiservice Platform Driving Down The Cost Of Ngn

Sponsored by:



TELECOMMUNICATIONS EVOLVED

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

July 30, 2009 • 2:00pm ET/ 11:00am PT

How Contact Center Customer Satisfaction Impacts the Bottom Line

Sponsored by:



http://www.tmcnet.com/webinar/cfi-group

Host Your Own Webinar!

Archived • View Today!

The Leading Edge: Open Text Fax Server Does FoIP Right!

Sponsored by:



http://www.tmcnet.com/webinar/dialogic3

45792356424024579

46215785424662





Value in the Clouds: How Carriers Can Grow Revenue with Cloud Telephony

Sponsored by:



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



4579235642402457

57854246

Advertising Index

4GWE Conference
Asterisk Community47 http://asterisk.tmcnet.com
Astricon
CaaS Community
Call Recording Community37 http://call-recording.tmcnet.com
CDW59 www.cdw.com
Colocation Community
Communications Solutions Community39 http://communication-solutions.tmcnet.com
Contact Center Solutions Community23 http://callcenterinfo.tmcnet.com
Dialogic Innovator Award Contest
DIDXchangeCover 3 www.supertec.com
Elma Electronic

Fixed Mobile Convergence Community53 http://fixed-mobile-convergence.tmcnet.com
Greg Manhoff
HD Voice Community41 http://hdvoice.tmcnet.com
Hosted VoIP35 http://hosted-voip.tmcnet.com
iAgentNetwork
ifbyphoneCover 4 www.ifbyphone.com/cloud
Interactive IntelligenceCover 2 www.inin.com
InGate SIP Trunking Seminar
IP Communications Community55 http://ipcommunications.tmcnet.com
IP PBX Community7 http://ip-pbx.tmcnet.com
iqservices
ITEXPO

	http://ivr.tmcnet.com
2	Media5 Corporation14 www.media5corp.com
1 85	Next Generation Communications Community
13	SIP Trunking Community
4	Sipera Security Workshop25 www.itexpo.com
2	Small Business VoIP Community49 http://small-business.voip.tmcnet.com
.3	Stealth Communications/VPF45 www.thevpf.com
5	Telecom Expense Management Solutions Community13 http://telecom-expense-management-solutions. tmcnet.com
.7	TMC Channels Corner24 www.tmcnet.com/channels
2	TMC Webinars
.9	VoIP Phone Systems Community11

IVR Community.....5

Integrated Marketplace

Call/Contact Center Solution Providers: Looking for a strong professional sales leader to boost your sales quotas?

I have extensive experience with all aspects of running a successful sales organization. This includes building and training a sales team, developing a CRM strategy, developing a VAR channel, developing a marketing campaign, forecasting, and closing the sale.

While successfully selling a call recording and CRM solution, I have established strong relationships with IBM, Avaya and some of the Avaya Partner network. I have also established partnerships with workforce management and IVR companies. My career includes over 10 years of technology sales and sales leadership with both software and hardware providers.

Please contact: Greg Manhoff • 224-805-6294 • gmanhoff@att.net My Profile and a few recommendations can also be found on the "LinkedIn" network.





Monitor your IP Communications Solutions with 24 x 7 calls that:

- Behave like real customers
- Measure and collect accurate, customer-focused data
- Trigger immediate notifications if something goes wrong

Contact IQ Services for a HeartBeat™ quote today -- 612.243.6700

www.iq-services.com

To Advertise in INTERNET TELEPHONY Magazine, Please Contact:

Anthony Graffeo

Executive Director of Business Development — Central/Eastern U.S., Canada, Europe, Israel, Latin America (203) 852-6800 ext. 174 agraffeo@tmcnet.com Jaime Hernaez Strategic Accounts Sales Executive (203) 852-6800 ext. 217 jhernaez@tmcnet.com

62 INTERNET TELEPHONY® July 2009



September 1-3, 2009 · Los Angeles, CA

Get Ready To Lead The 4G Wireless Evolution

- LTE
- WiMAX
- 4G Devices Broadband Stimulus
- Applications
 Backhaul Strategies
- Advocacy
- IMS

- White Spaces
 - Video



Register at www.4GWE.com

Register before July 3rd, 2009 and save on all conference passes!!







Interactive Intelligence's Remarkable New IPA (Interaction Process Automation)

By Richard "Zippy" Grigonis

There are many examples of business processes that occur in any organization, regardless of industry: Human Resources (involving processes such as change-of-address, employee onboarding, termination, departmental transfers, etc.), IT (involving help desks, change management), Finance/Legal (new partners, equipment purchases, new customers, expense approvals), Sales/Marketing (lead management, campaign management, collateral publishing, proposal management), Service/Support (RMAs, support ticket processes, etc.) and so forth.

There are also examples of business processes that are specific to a particular industry: Insurance involves processes relating to PIN changes and claims processing. Healthcare involves processes relating to patient access and revenue cycles. Financial services involve loan origination and credit fulfillment processes. These are all people-powered processes. And when people are involved, latency and human error occur.

This led Indianapolis-based Interactive Intelligence (www.inin. com) to take a step beyond conventional ideas regarding Communications-Enabled Business Processes (CEBP) to develop a new concept, Communications-Based Process Automation (CBPA) and an accompanying product, Interaction Process Automation (IPA), to be generally available in Q4 of 2009.

CBPA and its embodiment, IPA, provide the automation of core, people-centric business processes using existing, proven communication technology and yet is not all that complex, requiring less customization than legacy business process management suites. With its ability to ability to prioritize, route, escalate, and track each step of the process flow, CBPA eliminates latency in processes, minimizes human error and delivers the hard ROI long-sought by unified communications developers.

Interactive Intelligence is well-known for its Customer Interaction Center (CIC) IP application suite. Since the company is a master in the contact center area, their IPA solution takes the functionality that deals with interactions in a CIC-based contact center and applies those tools to automate business processes in a centralized manner, thus moving beyond simple UC and leveraging advanced functions so as to have a quantifiable effect on their business. It uses contact center-style queuing and routing provide a flexible distribution of process work. It uses presence to indicate availability for a work assignment to speed processing time, and it has real-time supervisory monitoring to provide visibility into the step of each work process. VoIP provides location-independence, and everything is recorded for compliance and regulatory purposes.

Is there a viable link between communications and business processes paradigms?

Joe Staples, Senior Vice President of Worldwide Marketing for Interactive Intelligence, says, "In a recent poll by IDG Research, 88 percent of CIOs and IT people interviewed agreed with the statement: 'The biggest return on investment from business process automation comes from eliminating latency in processes and minimizing human error.' Then they asked them what best described the relationship between UC and business process automation. 50 percent said 'I see where communications technology could be used to automate business processes,' and 37 percent said 'I see where it could be incorporated into process automation applications.' So 87 percent show a nice link between UC and business process automation, something we also found encouraging."

"So we think we're on the right track when it comes to benefits of the solution that we're working to provide," says Staples. "It comes down to making the process more efficient, eliminating latency in the process, minimizing human error, and ultimately helping companies do more with less required resources. That delivers the 'hard ROI' that unified communications has sought from its beginnings."

Staples and Interactive Intelligence may be onto something. As the Yankee Group published in its report, "The Coming Shift from Contact Center Server to Anywhere Enterprise Business Process Controller" (January 2008): "We envision that business processes will be integrated into communications processes so that communications servers actually manage and control the process itself." Or, as Jim Burton of UC Strategies says, "The automation of key business processes is where enterprises will find the UC ROI they are looking for."

Or, as Joe Staples says, "We've now developed a technology product that actually provides the automation of core peoplecentric business processes. We utilize proven communications technology that we've developed over the past 15 years, and we've also taken an approach that is much less complex, requires less customization than some of the legacy business process management suite products that require hoards of consultants and big design sessions and has really been a stumbling block because they've been so expensive to implement."

As examples, Interactive Intelligence shows how their CBPAinspired IPA could reduce the time required to process an insurance claim from three weeks to one week; decreased the time it takes for a sales lead to be distributed to a sales person from 28 hours to two; or reduced the cost of on-boarding a new employee from \$800 to \$200.

It looks like Interactive Intelligence's idea of CBPA and its incarnation, Interaction Process Automation, provides the hard ROI that UC has lacked. It squeezes costs out of critical business processes, reduces human error and decreases the time it takes to complete any given business process.

Richard "Zippy" Grigonis is Executive Editor of TMC's IP Communications Group. Millions of phone numbers, over 10,000 telecom companies, over 50 Countries, One Place



World's Largest DID Phone Number Trading Platform



Corporate Headquarters: 6005 Keating Road, Pensacola, FL, USA ZIP 32504

www.supertec.com

🖂 sales@didx.net 💃 +1-850-433-8555

The Sky's The Limit

when it comes to features you can offer your customers.



Cloud Telephony for Carriers

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

- Offer more features your customers want
- Dramatically lower up-front costs (no investment in switch hardware and software)
- Low risk investment with minimal commitment to get started
- Complete installation in just days so you can offer your customers new features fast
- Add new services that generate more revenue from existing accounts
- Offer more services to WIN NEW BUSINESS

Let Our Anyphone Technology Features Complete Your Platform:

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

>ifbyphone | Call 888.832.4962 | ifbyphone.com/cloud

Visit us at OPASTCO's Summer Convention and Tradeshow