Before people carried around email-enabled smartphones in their pockets, the hotel room phone was the electronic home away from home. It was, for the time of your stay, the connection to the outside world. It was also a big part of hotel profit, turning the innkeeper into a mini-reseller of long-distance and local services. But the revolution in pocket or Palm-based devices presents a question: is there a future for the hotel phone?

NEC Unified President Jeff Kane announced at Advantage, NEC’s annual dealer conference, that sales in the hospitality market had shot up 63% despite a sluggish economy and other industry challenges. Indeed, hospitality is now NEC’s fastest-growing vertical market. NEC seems to have answered the question about the future of hospitality communications by rethinking the role of telecommunication devices inside the hotel and transforming the room phone into a terminal.

According to Kevin Ruhman, director of hospitality market, NEC, as consumer technology has changed the way people live, it has changed what they expect from their hotels. It used to be that the hotel offered guests an environment that might be a step ahead of experiences at home: better televisions, more options on entertainment and so on. Suddenly a lot of hotels offer a backward experience: televisions that are dated, limited entertainment options and an aging phone from the early nineties. As consumer demands are changing, some chains are coming up with new conceptsto cater to the tech-savvy traveler. Technology offerings are becoming a key to market survival. Hoteliers understand this and are adapting.

Ruhman can remember when the phone was the third-biggest revenue stream in the hotel business. Some people still mourn that loss of income and see the phone as a necessary but unrewarding service, offered mostly to provide safety and give people a direct way to order room service or a wake-up call. But the transformation of the phone means the PBX is not just a switch, it is a communications server. “It’s not just about dial-tone anymore – it converges the many systems that serve hotels, from property management to entertainment.” The new generation of communications servers, such as the UNIVERGE SV8000 series, provides advanced applications and features that enhance worker mobility and the overall guest experience.

See HOSPITALITY, page 2
Ruhman says that NEC is more than a manufacturer. In fact, the company often wraps services such as design, implementation, security and maintenance into most installations. Since hotels often lack a full IT staff, NEC provides comprehensive solutions that are relatively non-labor intensive to manage and maximize property profitability, often by enhancing the guest experience.

NEC's new Desktop IP and Digital Terminals provide a wide range of options to meet a property's needs. The IP terminals, with XML open interface support, offer access to advanced applications and feature-rich content. With customized browser-based content, guests can order room service without making a call, with visuals of what is being ordered on a color LCD touch-screen. The hotel's spa, golf course and other services can be ordered. Airline flight time and status is instantly available. The terminal offers information and services in a format that allows the guest to avoid getting online and having to dig up the right page. It also can allow groups to instantly find out who has arrived and who has checked in.

Technology advancements are enabling improved guest experiences and cost control. A converged environment might mean cost-savings in terms of wiring in a new build. Now guests can get IPTV, video-on-demand, integration of the property management system with the TV (e.g. guests get welcome messages when they arrive), and many more features. By bringing the various systems that serve a hotel, from booking rooms to providing entertainment, the guest experience is personalized. The guest profile can set the blinds and room temperature, and when no one is in the room the same system throttles back the heat and A/C. Convergence means being able to control everything from a single device.

A new five-star hotel in Boston initially looked at NEC for communications servers and in the end turned to them to provide most of the network infrastructure, voice and data. The hotel is utilizing the UNIVERGE DT750 IP terminal with color LCD, MA4000 web-based, centralized communications server management system, and other applications from contact center to voicemail. Ruhman reports that NEC is working on similar projects in New York and Chicago where customers are relying on the company for their complete communications infrastructure design and delivery. NEC Associates and dealers play a critical role in this growing vertical. They often are the boots on the ground, so to speak, knowing the local users and property owners and understanding how to customize solutions and services to the needs of a specific region or city.

Ruhman thinks NEC's emerging dominance in the higher-end segment of the hospitality trade is a natural place. “Hospitality is our DNA,” he says, pointing out NEC nameplate properties such as the Tokyo Mandarin. The company has built an expansive vision of hospitality from that heritage, looking at interoperable environments and more.

For more visit necunified.com/hospitality.

NEC's UNIVERGE phones offer the level of image and the set of services premium hotel customers are expecting.

The UNIVERGE phone becomes a terminal offering guests a high level of access to information. Customers can order many services without having to make an actual phone call.

HOSPITALITY
Continued from page 2

In addition to the UNIVERGE phones, NEC's desktop IP and Digital Terminals offer a wide range of options to meet a property's needs. The IP terminals, with XML open interface support, offer access to advanced applications and feature-rich content. With customized browser-based content, guests can order room service without making a call, with visuals of what is being ordered on a color LCD touch-screen. The hotel's spa, golf course and other services can be ordered. Airline flight time and status is instantly available. The terminal offers information and services in a format that allows the guest to avoid getting online and having to dig up the right page. It also can allow groups to instantly find out who has arrived and who has checked in.

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CALENDAR

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Focus</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 16</td>
<td>HITEC 2008</td>
<td>Hospitality</td>
<td>Austin, Texas</td>
</tr>
<tr>
<td>October 28</td>
<td>EDUCAUSE 2008</td>
<td>Education</td>
<td>Orlando, Florida</td>
</tr>
</tbody>
</table>

The 2009 NEC Users Group Annual Conference is May 17 – 20 at the Hyatt Regency O'Hare, Chicago, IL

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NEC and Novus

NEC Unified Solutions announced that Novus, distributor of VoIP communications equipment, is now an authorized distributor of Aspire solutions for small- to medium-sized businesses.

“Novus is pleased to become part of the NEC family. We believe the Aspire products complement our existing enterprise offerings and will provide our resellers with the ability to meet the demands of an evolving industry,” said Chris Meehan, managing director, Novus.

With the addition, Novus is now able to move into the unified communications market. It offers managed services, equipment sales, equipment procurement, buy-back programs, repair services, logistics and inventory management, call center management and client consultation, and recently expanded to include data value-added resellers.

Aspire is a telephony system for voice and data network convergence that allows customers to tailor communications by deploying traditional circuit-switched technology, VoIP or a combination of both from the same system. It enables organizations to benefit from the cost-savings advantages of VoIP and implement communications systems that will scale to meet the demands of future growth.

In addition, Novus also will have the option to distribute the UX5000, a next-generation IP communications system that provides enhanced features, functionality and scalability.

For more visit necunified.com.

NEC and IPcelerate

NEC announced a partnership with IPcelerate, provider of VoIP products and technologies. The companies will combine IPcelerate’s Network IP Applications Framework with NEC’s line of IP terminals to deliver new collaboration, productivity and communication capabilities that will enhance the telephony experience of customers across all market segments.

“NEC is pleased to work with IPcelerate to create new solutions that provide a more visual and interactive off-the-shelf experience for voice in the workplace,” said Jay Krauser, general manager, product management, NEC. “Using their comprehensive applications framework, our developers will create applications that are standard offerings on our IP terminals, delivering new levels of business impact for customers.”

Developers already certified on the IPcelerate framework will have the opportunity to design new applications for NEC voice platforms without requiring rigorous re-training.

“The possibilities of unified communications and business telephony are vast; however, the end user experience has yet to realize any significant change,” said Kevin Brown, CEO, IPcelerate. “Our partnership with NEC will add data-oriented visual capabilities to the desktop.”

For more visit necunified.com.

Did you know?

NEC was established in 1899

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A traffic management primer
By Greg Wilson, product line manager, NEC Unified Solutions

The introduction of voice over IP (VoIP) has changed the industry’s century-old view of traffic management. More specifically, VoIP has introduced some complicated challenges to an already complex issue. A Time Division Multiplex (TDM) line that may have connected two PBXs together in the past may now be replaced with a dedicated IP connection. As the number of points of exchange in a communications network increases, so does the complexity of managing the many different types of traffic moving through the network.

Traffic in modern interconnected telephone networks includes many different types, including the UM8500 unified messaging system that we will use as an example.

Why do companies and carriers do traffic studies? The driving factor has to do with cost, as telephone lines and bandwidth can be expensive. An organization only wants to pay for what it needs. But there are other factors, such as service levels and capacity planning, to consider as well.

A company’s communications system is critical to its business and traffic management. Traffic management, in turn, is key to ensuring that communications solutions are running at peak performance. Mastering the fundamentals of traffic management and having the right tools at the ready are crucial for developing an effective traffic management strategy.

The NEC MA4000 Management System has built-in functionality that can assist in the management of both TDM and VoIP traffic. Proactive in nature, the MA4000 can assist an organization in staying on top of its traffic management needs, thereby reducing overall cost as well as providing high levels of service to its customers and employees.

Common Traffic Problems

Over-trunking: If a trunk route has too many trunks in relation to its traffic, it is over-trunked. The organization is paying for lines and equipment it is not using. 

Under-trunking: If the trunk route is under-trunked, customers dialing in could receive busy signals and employees might be unable to dial out. In either case, traffic issues and trunk misconfigurations interrupt the smooth flow of business, which is costly. Customers may become frustrated with your company and switch to a competitor. In this way, under-trunking can damage brand reputation, customer loyalty, and cause a lag in employee productivity.

VoIP traffic problems: Lack of bandwidth across a routed network link causes traffic congestion on VoIP networks, resulting in poor voice quality. While this is not as bad as busy signals on TDM lines, the poor functioning of these networks is not conducive to business. A bandwidth-starved VoIP call sounds choppy, has a great deal of delay or can cause the sound quality of speaking over tin cans and string. None of these symptoms are at all desirable because they lead to garbled and confusing phone conversations and negative reactions on the part of users.

In general, traffic-related problems are costly for your business. And they can lead to lost potential revenue, brand reputation, customer loyalty and productivity.

Proactive Traffic Planning

Proper traffic management requires a lot of empirical data. Communications system administrators use data to control costs, plan for traffic events. In many instances, the desired data may be stored for a year or more depending on the nature of the traffic, future growth plans and ongoing migration projects. NEC’s UNIVERGE SV8000 series and other unified messaging systems have the capability to serve up many different kinds of traffic data. Peg count and call-second usage information are collected for many different uses, including call congestion, station statistics, group usages, attendant statistics, call center information, and more.

Information on IP-based voice devices throughout the NEC communications solutions is another type of traffic suitable for data collection. This information is based on the real-time transport protocol packets that pass between devices during conversations. This data tells an administrator how much bandwidth is currently being consumed by voice traffic and over which network segments that information is flowing. This helps in network capacity planning efforts or in troubleshooting problems experienced with VoIP implementations.

The illustration above depicts an example of traffic peaks on a VoIP network. The chart shows the total number of calls seconds between 7:30 a.m. and 10:30 p.m. on March 5, 2007.

The amount of data stored depends on an organization’s individual business needs. Every business is different. Some may be lucky enough to maintain a consistent traffic volume. More often than not, however, businesses experience peaks and valleys in call volumes. Administrators should plan for these over a full year data set.

Traffic Maintenance

Ongoing traffic maintenance is critical to the success of a well formed traffic management strategy. Thus, an ongoing program of call flow monitoring is necessary in order to ensure that the patterns remain unchanged.

In most cases, you should run weekly or daily traffic reports. In addition, you could perform analysis to ensure no busy conditions are occurring. If they do occur, it is imperative that you check to see that this is not due to a fault such as a downed T1, which would reduce the number of available trunks on the route. If this is not the case, then a traffic problem exists and should be corrected.

Call Center environments are especially sensitive to traffic problems. Thus, an aggressive traffic management strategy should be implemented in call center environments and diligently executed.

Another indication of traffic issues might also be poor voice quality over routed data links for VoIP environments. The voice administrator should be exposed to all transmissions related to that route in order to properly troubleshoot issues or plan for growth.

Tools for Ongoing Traffic Analysis – MA4000

Pursuing a proactive approach to traffic management can be very time consuming if you are working manually. Such a program requires daily analysis of the traffic data on each monitored route. With everything else administrators are responsible for, traffic analysis usually assigned a low priority.

N E C has developed tools that are specifically designed to make the task of traffic management simple and automatic. The MA4000 Management System has the capability of continuously monitoring, collecting and analyzing both IP and TDM traffic data, then proactively alerting administrators before traffic issues can impact the business.

For more visit necunified.com/voip.

NEC and Virtua Health

NEC Unified Solutions announced a large-scale unified communications (UC) deployment with Virtua Health, a multi-hospital healthcare system based in Marlton, NJ. Virtua is implementing an IP communications migration that includes all aspects of the UNIVERGE360 portfolio, from infrastructure and applications to services, ongoing support and monitoring.

Virtua plans to enhance a communications infrastructure of current UC and VoIP systems staff and employees to connect quickly and reliably. It also will leverage UC and specialized healthcare applications to enhance productivity and deliver excellent patient experiences.

After evaluating options, Virtua selected NEC UC and IP-based solutions including the UM8500 unified messaging platform, UNIVERGE360 portfolio for voice and collaboration, and NEC’s Maestro TMS software. 

NEC’s UNIVERGE360 communications model which enables businesses to integrate employee roles with automated business processes.

As with any healthcare enterprise, Virtua directly links effective communications between employees, patients and their families to administering the best possible healthcare," said Louis Van De Water, vice president and general manager of eastern regional sales, NEC. “They are bringing technology in-house that can help address communication, improved patient care and reduced patient by hospital staff, as well as offering the latest tools to more quickly access people and information.”

Solutions to be deployed include: 

• UM8500 unified messaging system with videomail, find-me/follow-me and ViewCall for desktop call control. 

• UA3200 healthcare attendant consoles that enable greater productivity through convergence of communications and business processes. They give instant access to presence information and specialized healthcare-oriented modules. 

• eThos call center software has IVR applications including reminders that automatically alert patients of appointments and updates them to confirm their appointment, speech recognition, and instant caller information. 

• SV7000 and SV8500 communications servers provide the ability to combine applications such as UC, presence, collaboration and softphones in addition to replaced telephone features.

• OW5000 media server provides presence information and is also the operational platform for NEC’s UC for Enterprise applications. 

• MA4000 enterprise management system has the ability to manage all of Virtua’s communications servers simultaneously with almost no daily interaction required by the administrator.

Virtua’s Managed Services team is monitoring and managing the hospital’s VoIP network using remote managed services as well as providing voice data infrastructure support, allowing for identification and resolution of issues that arise.

Additionally, NEC is installing customer-provider Cisco LAN/WAN equipment.

For more visit necunified.com.
**UNIFIED COMMUNICATIONS**

**NEC and ExpressJet**

NEC announced the completion of the first major phase of ExpressJet’s IP network and unified communications (UC) rollout. The implementation includes an array of infrastructure, applications, services and partner solutions, and is a showcase of the UNIVERGE360 vision launched globally this year.

ExpressJet Airlines engaged NEC to manage its IT and networking installation as the company was building new headquarters in Houston, TX, in 2005. Shortly after deployment, the airline began offering its own branded regional flights in addition to the Continental Express and corporate aviation services it already operated. Upon learning they needed to quickly scale IT resources to regional airports in 13 states, senior managers knew they would need NEC to be a single business communications provider that could help them scale nationwide and grow long-term.

“Without NEC we would need to handle every aspect of our deployment to help us achieve a unified business communications environment,” said Mike Flansburg, senior director of information technology, ExpressJet. “From networks and applications to service and expertise, they continue to be a one-stop resource for us.”

Soon after the first of two UNIVERGE SV7000 communications servers and UM8500 unified messaging platforms were installed at headquarters, the project team learned the company’s plans had been accelerated, calling for an opening of 24 airport sites in just 120 days. Halfway through that project, negotiations resulted in the addition of a substantial number of Delta Connection regional flights. Because tickets were being sold in advance of the openings, voice and data reliability became a critical success factor to the launch of ExpressJet-branded service.

With these requirements in mind, the project team went to work, first securing the core network, then on to the regional sites. Midway through, ExpressJet chose to engage NEC’s Remote Managed Service team to monitor and manage its network traffic from the Network Operations Center in Irving, TX, which also provided support and information for the project team.

Today, ExpressJet’s IP network is managed by two UNIVERGE SV7000 communications servers at its core for full redundancy and reliability. The voice network includes 1,000 NEC IP handsets and 300 digital lines with NEAX 2000 DML for the remote airport locations, a requirement based on the need to provide system redundancy and allow each airport to function independently. UC applications include UM8500 for unified messaging, CalCenterWorX for contact center management, QueWorX for customer service and productivity enhancement, Global Navigator for call tracking and agent productivity, call routing through Voice Recognition and OpenWorX Personal Call Assistant for directory access and personal productivity features. NEC also provides Remote Managed Services.

In addition, the company is now deploying the UC for Enterprise application suite, including UC700 productivity client, OV5000 middleware platform for integrating applications and MA-4000 web-based application for centralized management of the company’s enterprise communications.

For more visit necunified.com.

**SPHERICALL**

**NEC and Cygnus**

NEC Unified Solutions announced its NEC Sphericall software-based solution has been deployed at Cygnus Business Media to help integrate and improve communications efficiency at the nationwide publisher of industry and trade media. The solution helped unify Cygnus’ nationwide office communications, which ran on disparate and difficult-to-manage phone systems. The company and its 550 employees transitioned to a software-based platform and an open set of unified communications features, including click-to-dial and conferencing. It also enabled them to transition to a single telecom service provider with only one in-office operator for its 12 offices. This in turn allowed administrative staff at various locations to focus on more productive activities.

“Since deploying NEC’s solution, we’ve seen significant productivity improvements. Call volume on our network has increased tenfold, largely because more people are using the click-to-call and conferencing capabilities rather than relying on cellular or third-party conference lines,” said Eric Kammerzelt, IT manager, Cygnus. “We were looking for a cost-effective and easy-to-manage solution and it has integrated our communications so we now spend less time managing the system and more time concentrating on our business.”

NEC Sphericall runs on industry-standard servers across existing data networks without expensive proprietary hardware and offers flexible scalability, integrated communications and low cost of ownership. Cygnus currently uses it for click-to-call, conference bridging, call recording, four-digit dialing, unified messaging and presence. They can now train IT staff to manage the system in-house and it becomes more redundant every time a new server location is added because each is a copy of the original.

For more visit necunified.com.
**Educate**

**NEC and UNM**

**NEC** announced that the University of New Mexico (UNM) is installing the UC for Enterprise suite and modular IP terminals in a strategic deployment that includes the university’s top administrators and department heads.

“Our goal in deploying IP and application-based communications is not only long-term investment protection but also building on our NEC infrastructure to make communications on campus more intuitive and convenient through productivity applications, such as UC for Enterprise,” said Mark Reynolds, Associate Director, ITS Communications.

For the deployment, NEC’s UC for Enterprise suite has been installed in conjunction with a UNIVERGE SV7000 IP communications server connected to the university’s two existing NEAX 2400 IPXs via the Fusion Call Control Signaling solution. This upgrade enables all of the university’s IP-PBXs to function as one.

**For more visit necunified.com.**

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**Case Study**

**NEC and NM Credit Union**

**NEC** Unified Solutions announced that the New Mexico Educators Federal Credit Union (NMEFCU) has begun unifying its business processes for enhanced customer service and internal communications using IP-based UNIVERGE infrastructure and productivity-enhancing unified communications applications.

“Staying with NEC long-term has been the wisest move. They’ve continually helped us respond to challenges and we have benefited from their migration path and IP telephony’s value proposition,” said Kevin Murphy, vice president of information technology, NMEFCU. “By migrating our communications infrastructure to IP, we improve the user experience with productivity tools such as unified messaging, plus we simplify the management of our systems and save costs by eliminating a T1 line at nearly every branch location.”

Serving more than 100,000 members statewide, the credit union had been using a NEAX 2400 digital PBX system since the 1980s. Over time, it served Albuquerque headquarters and 12 branch locations well. But by the early 2000s, they had explored options to modernize communications and were ready to execute the first IP telephony rollouts.

Their IP communications solution consists of the NEAX 2400 IPX with Fusion Call Control Signaling, which allows the system to network between offices. They also added solutions developed by third-party vendors participating in the UNIVERGE Solutions Partner Program.

“With our UNIVERGE360 communications model we’re helping customers improve their own business processes with the next generation of NEC communications infrastructure and applications,” said Don Fiorentino, vice president of western division sales, NEC. “NMEFCU is able to enhance communications with a blend of UNIVERGE technologies and the same reliable switching infrastructure that served them well for 20 years.”

**For more visit necunified.com.**

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**With NEC’s Hospitality Solutions, You Never Have to Leave Your Guests Unattended**

Why stress over a communications system that makes you work harder than it does? Why deal with the confusion of a group of unrelated systems? For a truly natural unified communications experience, NEC has the perfect solution – UNIVERGE®360.

Through UNIVERGE360, NEC offers a vacation from the complexity of meeting guests’ growing demands for instantaneous, interactive service, NEC provides hospitality solutions that address every dimension of a property’s communications needs. After all, uniting people, devices and business data makes businesses more efficient, responsive and agile.

See www.UNIVERGE360.com today to see how NEC can help you make your communications world a simpler, better place.
Paint Your Enterprise a Deeper Shade of Green with NEC’s Communication Solutions

NEC’s latest communications advances can help your enterprise reduce its environmental impact. We have the tools to enable your business to become more efficient while help reduce CO₂ emissions and waste.

Assured Mobility, UC for Enterprise and other advanced applications reduce the need for business travel and make telecommuting easier than ever. Using these solutions helps reduce auto and aircraft fuel usage – and the damage that they do to our environment.

Our solutions can also be implemented using your current hardware, so the amount of waste produced by moving up to NEC is minimized. And by using the softphones included with many of our solutions rather than plastic handsets, you can reduce waste even more!

At NEC, we are committed to providing environmentally friendly communications solutions that increase enterprise efficiency.

See more about our green initiatives at http://www.it-eco.net/en
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