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Teamwork of Tomorrow

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The strain that the current economic crisis is putting on governments is well documented. But a bright spot in budget discussions for some agencies has been recent technical innovations that introduce new efficiencies and, in fact, make a positive impact on the bottom line.

A recent survey by the Center for Digital Government reveals that county organizations across the country are saving money and improving services with new technologies. And the solutions being considered at the county level are appealing to all levels of government.

“Governments are consolidating and sharing services to cut down on costs and leveraging new technologies like virtualization and unified communications to capture critical savings,” said Digital Communities Director Todd Sander.

Consolidation is a top-of-mind priority for public-sector decision-makers, as evidenced by federal government data center consolidation efforts, as well as server, application and staff consolidation initiatives going on across the country. Many government entities are also setting aside traditional silo-oriented structures in favor of more streamlined joint ventures in order to share administration and infrastructure costs. Outsourcing maintenance and operations of certain systems to outside vendors is widespread too, proving to be a viable alternative to handling these responsibilities in-house.

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Converging on Unified Communications

One key focus that many public agencies identify for the coming year is unified communications (UC), which direct communications to a user’s most appropriate application or device at any given time. Unified communications allow organizations to integrate real-time communications, like instant messaging and video chat, with non-real-time communications, such as e-mail and voicemail, providing a consistent experience for the user regardless of device or media type.

A major driver for unified communications is the growing mobility of the work force, at all levels of government. Being away from the office no longer means sacrificing productivity. Whether in the field, working from home or traveling halfway across the world, employees can now have the same communications capabilities as someone working in the office. Unified communications enables the real-time redirection of voice, video, text and e-mail to the recipient’s most accessible device at the time.

Governments see unified communications as an opportunity for significant cost savings, as well as a more efficient way of enabling service delivery for their modern work force. Agencies also benefit from deferring system maintenance to outside vendors, reducing demands on in-house staff to maintain these systems.

Sprint Brings Mobility Expertise to UC Market

Communications service provider Sprint is implementing its own unified UC network. Reaping the same benefits as public agencies embarking on this path, Sprint is realizing significant cost savings, reducing maintenance needs and improving collaboration among employees.

“When we talk about convergence at Sprint, we generally mean the coming together of wireline and wireless,” said Bill White, Vice President of Federal Programs at Sprint. “Unified communications could really transform the way governments communicate with citizens.”

Many large public organizations are accustomed to separate technology infrastructures from one department to the next. But these fragmented systems can inhibit effective collaboration. For example, employees at a main government office may use a different IM system than those at certain satellite offices, preventing this type of real-time communication among the agency’s employees.

Unified communications brings real-time exchanges together with more latent communications, like e-mail and voicemail. This consistency across all communications avenues simplifies shared initiatives, speeds decision-making and ultimately enhances service to the community.

Hosted and On-Premise Options Available

Hosted UC solutions eliminate the need for a large upfront capital investment as well as ongoing maintenance expenses. Users enjoy scalability and can deploy the solution very quickly. Sprint’s hosted solutions offer a simple, predictable per-seat pricing model so agencies know how to budget their communications resources.

Public agencies generally prefer a hosted option for its quick deployment, no-surprises pricing and the ability to direct internal staff time toward strategic initiatives rather than system upkeep. Energy savings are also significant with a hosted solution because systems aren’t maintained on site.

On-premise solutions often make sense for larger organizations with more complex requirements. A service provider installs and manages the equipment at the various sites, according to specialized needs.
Uniquely positioned in the convergence marketplace, the Sprint 4G network, supported by 3G backup, enables it to extend its advanced mobile features to the UC platform. While some providers offer mobility features to UC customers, advanced features require app downloads. Sprint’s more robust feature set, however, is inherent in the service, available right out of the box.

Important in disaster recovery and continuity of government discussions, Sprint can also extend all desk phone features to mobile phones, so even if the phone system goes down, calls will still come in to mobile phones. UC users enjoy streamlined communications with internal and external colleagues, with a single phone number that rings at a desk phone or a mobile phone, depending on the employee’s location.

Another communication innovation on the horizon from Sprint is a large-scale network transformation, dubbed “Network Vision.” This next-generation wireless network is expected to significantly enhance signal strength and reach, while reducing energy needs using software-based Internet protocol systems.

**Key changes**

> Network consolidation and spectrum integration: Currently three different networks — 4G, 3G and push-to-talk/iDEN — each use distinct technologies and spectrums; Network Vision unifies all three networks and spectrums with multimodal equipment to support any protocol and purpose.

> Technology enhancement: This one-of-a-kind network combines multiple existing spectrum bands into single bands, allowing maximum flexibility to leverage the optimum frequency for current needs.

**Key expected benefits**

> Enhanced coverage: Dramatic coverage improvements mean consistent, quality coverage across all towers, and seamless transitions from outdoors to indoors.

> Positioned for the future: Existing devices perform better and new, universal devices will automatically access the network through the strongest available signal.

> Environmental benefits: New towers use less space and less power, reducing energy consumption and carbon footprint.

> Radio users: Push-to-talk customers will also enjoy significantly improved coverage, indoors and out, along with major increases in system capacity and network availability.
Sprint's credentials in mobility are well known. When it comes to unified communications, however, the company's own implementation also demonstrates its leadership in the convergence space. Like many public agencies and large companies, Sprint's phone system consisted of a large in-house switching system, connected by a series of local exchange carriers. Sprint needed a better solution to support its geographically diverse and increasingly mobile U.S. workforce, which is 40,000 strong. The new converged communications system offers considerable cost savings and adds numerous capabilities, optimizing opportunities for collaboration.

At the core of Sprint's UC system is its global multi-protocol label switching (MPLS) system. Sprint's award-winning MPLS lets it prioritize voice and video traffic ahead of Web surfing, e-mail and data storage, making the most of available bandwidth according to current system needs. The MPLS system works in tandem with virtual session initiation protocol (SIP) trunking, which allows users to engage in diverse types of communications from almost anywhere. SIP trunking is also highly scalable and eliminates the physical maintenance and local provider contracts that come with local PBX equipment.

“We wanted to do more than just a voice replacement. The presence capabilities and the ability to do video and instant messaging make all of our employees really feel connected to the enterprise, whether they're working at home, traveling internationally or out in the field,” said Josh Morton, Vice President of IT Enterprise Services at Sprint. “Unified communications is what enables us to work this way.”

Staff support needs have changed dramatically with the UC implementation. Previously the company had 30 voice engineers across the country who were responsible for maintaining the company's phone system. Today, a staff of 22 manages not only the voice environment, but also e-mail, video conferencing, instant messaging and presence technologies. Unified communications allow the current support model to be centralized as well.

Many Sprint campuses now utilize open, flexible seating. Because people are no longer tied to a specific workstation, they open their laptop in an available area and get to work. The same productivity level is available regardless of their location. Sprint reports that employee adoption of the new solutions is happening much more quickly than expected.

“Some employees were definitely apprehensive about switching to UC because they were comfortable with our old system,” Morton explained. “We thought adoption might be a slow process, but in fact it happened very quickly. Employees appreciate the ability to work anywhere with an Internet connection and collaborate so easily with other team members.”

Like public-sector groups interested in convergence, cost was another motivating factor in Sprint's decision to unify its communications. Operating expenses alone have been reduced by several million dollars per year, and additional savings have been realized in many other areas as well. All told, Sprint expects a complete return on its UC investment in just 15 months.

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