24/7 GOVERNMENT

A RESEARCH REPORT FROM
THE CENTER FOR DIGITAL GOVERNMENT

Enabling access to critical information and services anytime, anywhere

Cordell Schachter,
CTO, New York City Department of Transportation
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The days of a 9-to-5 Monday-through-Friday government are far behind us. New service delivery models such as one-stop and smartphone-enabled Web portals, self-service apps and employee mobile devices enable today’s governments to operate 24/7 by improving efficiencies and access to information and services. Emerging technologies hold the promise of enabling continuous monitoring and automation, allowing governments to respond to constituent needs more effectively, without requiring human involvement.

Data from the Center for Digital Government’s (CDG) 2014 Digital States Survey finds the basic infrastructure and technologies that support 24/7 government — such as online payments and mobile-friendly or responsive websites — are commonplace. Additionally, 24/7 government is ubiquitous — it’s working, and it’s working well. Eighty-eight percent of citizens polled in another CDG survey say online government services are easy to use, while 87 percent of business owners and managers say they make it easier to do business with state governments.

Due to constituent interaction and the nature of their mission, some agencies, such as public safety, transportation, and health and human services, have advanced their development of 24/7 capabilities. The next phase will see pervasive adoption of 24/7 strategies by all areas and all levels of government.

The transition to a comprehensive and holistic 24/7 government must not be done haphazardly; it requires careful preparation and a coordinated strategy. The purpose of this Special Report on 24/7 government is to help government leaders evaluate and prioritize the technology innovations that enable them to achieve their goals.

The report will review the results of a CDG survey distributed among government IT and administrative leaders and reveal the prevailing attitudes and trends in 24/7 government. It will also highlight technology advances that enable the extension of 24/7 government beyond current boundaries and discuss their impact on existing infrastructure, which includes a close look at solutions for hardening infrastructure, maintaining security and privacy, and ensuring connectivity.
GOALS

GOALS AND EXPECTED OUTCOMES OF 24/7 GOVERNMENT

Vicki Irey, CIO of Overland Park, Kan., says mobility is driving 24/7 government service initiatives.
Due to the high degree of citizen-to-government interactions at the local level, city and county governments are leading the charge in service availability, followed by state and federal governments. Eighty-six percent of the participants in CDG’s recent survey identified transitioning to 24/7 government as either very or somewhat important. These public sector leaders understand that more flexible government hours and operations allow them to meet citizen expectations, be more efficient, deliver faster services, improve business relationships, and hire and retain quality employees.

Let’s take a closer look at how these benefits are driving the transition to 24/7 government.

**Reaching and Engaging Citizens on Their Terms**

The shift to around-the-clock government began in the last decade, as consumers developed a taste for the fruits of mobility, social media, cloud computing and other technology trends.

The private sector has been more than happy — and able — to respond to consumer demand for anywhere, anytime access to goods, services, content and communication, along with the ability to collaboratively impact and improve customer offerings. And because consumers are also citizens, they have come to expect federal, state and local government organizations to offer the same levels of convenience provided by commercial enterprises.

This consumerization of IT is a key driver of 24/7 government. “We surveyed our citizens and found that 98 percent are connected to the Internet either via a home PC or mobile device,” says Vicki Irey, CIO of Overland Park, Kan., a suburb of Kansas City, Mo., and the second most populous city in the Kansas City metropolitan area. “When citizens have ubiquitous access to the Internet, they have a high expectation that they’ll be able to get to the government services they need easily and quickly.”

Mobility, says Irey, is a key driver of 24/7 service initiatives. “People have to be able to access information on mobile devices,” she explains. “Our strategy is to provide the best mobile experiences for high-value needs, such as making payments and requesting services.”

Like Irey discovered, 43 percent of government leaders surveyed by CDG enable 24/7 citizen self-service with mobile apps and mobile device-enabled Web portals. And nearly 60 percent have established a social media presence for assisting citizens and answering questions outside of traditional office hours.

**The Rise of Telework**

The expectation for always-on government has spread to government workers as well. Why shouldn’t they be able to check and respond to emails from home?

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**Public leaders’ views on the importance of moving to 24/7 government to improve service delivery and meet citizen needs:**

41% **VERY IMPORTANT**

45% **SOMewhat IMPORTANT**

11% **NEUTRAL**

3% **SOMewhat UNIMPORTANT**

Source: CDG 24/7 Government Survey, 2014
In 2010, President Obama signed the Telework Enhancement Act into law in an effort to jumpstart the federal government’s telework availability.

Rep. John Sarbanes, the Maryland legislator who wrote the Telework Enhancement Act, the ability to telework can be invaluable in the event of a government shutdown. “A threat of government shutdown can create disruption, and telework is something that allows you to handle disruption more efficiently and more effectively,” he says.6 If the results from the recent CDG survey are an indicator, governments understand the impact of providing employees with better access to the tools they need to get their jobs done, regardless of time of day or location. Nearly three-quarters of government leaders surveyed allow employees some ability to work remotely, and many of them provide workers with remote access and mobile devices.

The Agency that Never Sleeps

Public safety, transportation and other key service agencies are accustomed to working around the clock. “New York is the city that never sleeps, and neither can our department,” says Cordell Schachter, CTO of New York City’s Department of Transportation (NYC DOT), which manages 6,000 miles of road, 12,000 miles of sidewalk, and more than 700 bridges and tunnels. “We have a 24/7 joint traffic management and operations center with the state police and local city police traffic divisions.”7 Schachter says departments like his are focusing on shoring up mission-critical technology infrastructures to maintain 24/7 business continuity in the event of a disaster. “We have a primary data center and a business continuity center so we can support voice and data communication needs to help recover from disasters, as well as perform our regular responsibilities,” he explains.

Telework improves business resiliency, allowing employees to work from home when inclement weather makes it difficult to commute to the office. Additionally, it allows jurisdictions to reduce carbon emissions as telework decreases or eliminates drive time. For federal agencies, says

NYC DOT has migrated to a new street excavation permit management application. The legacy application did not have resilient communications and was down for a week after the hurricane hit. The new system can be operated from NYC DOT’s main data center and its business continuity center. “You have to look carefully at the benefits of technology investment, especially when there are many funding needs and not enough funds to go around,” Schachter says. “Sandy showed us the importance of investing in business continuity to ensure 24/7 availability of a wider range of applications in the event of a disaster.”

24/7 is Business-Friendly

Always-on government isn’t just for citizens. By making business services such as permitting, procurement and licensing accessible 24/7, governments can develop a business-friendly reputation, which can help attract businesses and increase the commercial tax base.

For example, says Schachter, because Hurricane Sandy took out communications to NYC DOT’s 30-year-old mainframe-based street excavation permitting system, NYC DOT’s IT & Telecom in-house development team ensured its new permit management system — known as NYCStreets, which handles the distribution of 400,000 street excavation permits annually — could be operated from the main or back up data center. “Using NYCStreets, construction and utility contractors can apply for permits anytime, anywhere, using any Internet-connected device,” he explains. “It consolidates workflows and makes it easier for them to do business with us. We learned that it needs to be available 24/7, especially during future recoveries from natural disasters.”

“As a bonus, it provides transparency for the general public, because anyone can log in and view street construction permits, helping us make sure contractors follow their permit’s conditions,” he continues. “Plus, our DOT project managers and inspectors use it and its data to approve and monitor street excavation work to minimize its impact on the safe movement of people and goods around New York City — our most important job.”

Governments offer the following to support 24/7 employee operations:

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to work remotely</td>
<td>73%</td>
</tr>
<tr>
<td>Mobility and wireless access</td>
<td>66%</td>
</tr>
<tr>
<td>Mobile devices and apps</td>
<td>59%</td>
</tr>
<tr>
<td>Unified communications and IP networks</td>
<td>33%</td>
</tr>
<tr>
<td>ECM and document management</td>
<td>25%</td>
</tr>
<tr>
<td>None</td>
<td>7%</td>
</tr>
</tbody>
</table>

SOURCE: CDG 24/7 GOVERNMENT SURVEY, 2014
Cordell Schachter, CTO of the New York City Department of Transportation, recognizes the importance of 24/7 operations, especially in the wake of a natural disaster.
Based on the agencies CDG surveyed, governments’ 24/7 offerings to the business community are not as mature as their offerings to citizens. Only 52 percent of government leaders surveyed reported providing self-service Web portals for interactions with businesses. Thirty-one percent offer mobile apps and about 38 percent provide outreach via social media. However, 28 percent have no business-facing programs for 24/7 services.

**Save Time, Save Money, Save Trees**

Expanding government beyond the traditional 9-to-5 hours of operation and a 5-day work week doesn’t have to increase funding requirements. Streamlining government services, enabling telework and improving citizen access allows governments to work more efficiently and cost effectively by eliminating paper-based forms and processes and reducing the amount of in-person and phone-based constituent communication.

Robert Paglia, deputy CIO for the Indiana Office of Technology, says the primary purpose of the state’s website, Web apps and mobile apps is to facilitate online interaction between citizens and the state. “We look for opportunities to automate that interaction wherever it makes sense,” he says. “We worked with agencies on strategies to build online forms to replace not-so-smart paper forms. We consolidated forms within state government and developed a tool that citizens can use to find any form, fill it out and submit it to the appropriate department.”

Currently, Indiana has more than 200 online services that automate citizen interaction. “This creates many efficiencies that allow us to save time and money,” Paglia continues. “For example, our employees don’t have to spend time tracking paper forms or ensuring they’re filled out properly, and errors have decreased because all the authentications are done up front.”

### Governments offer the following to support 24/7 citizen services:

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social media</td>
<td>59%</td>
</tr>
<tr>
<td>Mobile device-enabled citizen self-service Web portals and apps</td>
<td>43%</td>
</tr>
<tr>
<td>Automated traffic management and monitoring</td>
<td>24%</td>
</tr>
<tr>
<td>Smart signage and kiosks</td>
<td>21%</td>
</tr>
<tr>
<td>Customer service via 311</td>
<td>12%</td>
</tr>
<tr>
<td>Smart utilities</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
<tr>
<td>None</td>
<td>15%</td>
</tr>
</tbody>
</table>

*SOURCE: CDG 24/7 GOVERNMENT SURVEY, 2014*
Creative deployment of technology is the best way to achieve around-the-clock government — unless you’re willing to risk blowing your budget, confusing constituents and angering employees. From souped-up Web portals that engage citizens and businesses to advanced communication and collaboration technologies that encourage and support telework and field work, a variety of technology tools that enable 24/7 government are at your disposal.

The Perfect Portal: Services, Information and Transactions

Government Web portals and the online tools they host are the foundation of a 24/7 government initiative. Basic self-service online transactions — hunting and fishing licenses, tax payments, driver’s license renewals, auto registration renewals, park reservations — are long-standing staples of a jurisdiction’s online presence.

To take its Web portal beyond the basic online transaction, the state of Hawaii re-launched its website in mid-2013. The cloud-based website, which leverages the state’s existing Web architecture, features a sleek redesign and a completely customizable website experience. Its most unique feature is the integration of gamification elements such as leaderboards and badges.

“[Hawaii is] trying everything to make [the website] simple and easy to use,” says Sonny Bhagowalia, Hawaii’s former CIO and chief adviser for technology and cyber security, who is currently deputy assistant secretary of information systems and CIO at the U.S. Department of the Treasury.
The Aloha State’s vision began as a way to increase online government transactions. With 36 lines of business, 230 business functions and $11 billion in transactions, Hawaii was conducting less than 5 percent of its transactions online.
The state wanted to motivate employees and citizens to use its portal by making it more fun to do government business online. In addition to “gamifying” the website, the state implemented a user interface and design improvements that make the portal more attractive and appealing. “We are taking citizen engagement and user experience seriously,” says Keone Kali, state CIO.10

Five months after the launch of its new website, Hawaii found that its efforts had paid off: online adoption jumped to 20 percent, even though the state had added a barrier of requiring users to create an account.11

Other highlights of Hawaii.gov include:

- User access from any device via secure single sign-on
- History of all personal and business transactions and interactions with the state
- Mobile-first responsive design optimized for touchscreen interfaces
- Advanced search capabilities
- Geolocation mapping service
- Alphabetical listing of all of its 105 online services
- mySavings, a page that shows users how much time they saved by completing online transactions compared to using traditional phone-based or in-person methods12,13

In response to constituent demand, the 24/7 self-service trend is spreading to a broad range of agencies and their specialized customer bases, such as the Los Angeles County Department of Public Social Services (DPSS). “To the greatest extent possible, we’re trying to push services out to our customers instead of having them come to us,” says Michael Sylvester, assistant director of the DPSS Bureau of Contract and Technical Services. “Much of this is achieved through our online portal where we have tools that allow applicants to do a number of things outside of normal business hours without having to engage a county employee.”14

Sylvester says direct customer feedback from walk-in customers led DPSS to create YourBenefitsNow!, through which L.A. County residents can apply for benefits, check the status of their application, verify benefit amount and perform other common tasks that would have previously required a phone call or in-person visit during office hours. “We did some business case studies and focus groups and saw there was a high demand to have an alternative means to walking up or mailing in forms.” According to Sylvester, the initial launch of YourBenefitsNow! led to a 30 percent reduction in lobby traffic. Since the portal was introduced in 2011, more than 300,000 benefits applications have been submitted and the number continues to grow.

Similarly, the state of Arkansas’ Business and Commercial Services (BCS) Web portal brings the convenience of 24/7 to commercial entities. The portal serves as a starting point for Arkansas business owners and entrepreneurs.
who can conduct trademark searches, pay franchise taxes, and complete a number of business entity forms and transactions. “Our goal is to offer all government business services online and allow companies to interact with the state wherever they are, at any time of day,” says Daryl Bassett, BCS director.15

The state’s Corporation Filings Automation project automates multiple formerly paper-based forms and saved taxpayers more than $124,000 in the first year. It also resulted in savings of more than 2,000 staff hours, 72,000 sheets of paper and $20,500 in postage.16

Mobile Devices, Access and Apps: Satisfy the Craving for Flexibility

Providing citizen access to government services via mobile devices seems like a no-brainer. But one of the primary challenges state and local governments face is determining whether to implement a responsive, mobile-first website — one that’s designed in HTML5 and adjusts in size and appearance according to user device — or to instead provide access to key services by developing single-use mobile apps.

To ensure the public can access government services after hours regardless of device type or location, more and more jurisdictions are opting for a strategy that includes both. Additional challenges include determining which services are best provided via mobile device, which apps citizens want and need, and ensuring citizens are aware of and have access to these platforms.

“We dabbled early on with a mobile app,” says Overland Park’s Irey. “We found that while people downloaded it, it wasn’t the way they got information. They search on their phone, which takes them directly to the website. So we decided to make the website mobile friendly instead.”

“Before the downturn, there were a lot of applications in each department. But because of our budget, we had to hold the line on upgrades and improvements,” she explains. “Now as the recession is ending, we’re turning in a new direction, and our city manager and council view IT investments as having a high value. So as department applications come due for replacement or upgrade, the application’s mobility factor is key. It needs to be easy for us to write a mobile interface to it, if needed.”

To complement its benefits portal, L.A. County DPSS recently added a mobile app to its portfolio. Like the department’s benefits portal, the mobile app was the result of direct feedback from in-person customers. “The mobile app provides our customers with even more convenience,” Assistant Director Sylvester explains. “Using the app, they can check whether payments have been posted to their account, and they can upload documents directly into their case file using their phone camera.”

And then there’s the dramatic impact of mobility on government workers. Three years ago, after
a 20-year career in the private sector, Jonathan Reichental, Ph.D., began working as CIO for the city of Palo Alto, Calif. He was shocked to discover most city employees still used desktops. “They had desktops because that was the way it had always been done,” he says. “So we started migrating people to laptops — they consume less power, and having batteries helps with interruptions in power supply. And of course, they’re more flexible, so people can work from a variety of locations.”

Jonathan Reichental, CIO, City of Palo Alto

The city also equipped field inspectors in its Development Services Department with tablets that are integrated with the appropriate applications (i.e., inspection, zoning, permitting, etc.), enabling a simple process of viewing, editing and updating cases from the field and reducing the time from application to completion. “Now our employees have the opportunity for complete mobility,” Reichental says. “There’s no constraint on where and when they work.”

Pierce County, Wash., was an early adopter of mobile technologies for improved employee access and productivity, says Linda Gerull, IT director. “Superior and district court judges use tablets to view and mark up court documents,” she notes. “Instead of carrying around folders of paper, tablets allow judges to be mobile and securely manage their case documents from home.”

To ensure employees have the appropriate applications to leverage mobile devices, the county developed a number of very specific mobile tools. For example, using the Road Operations Active Response (ROAR) app, citizens can report hazardous road conditions, which are immediately entered into the county’s emergency operations incident management system. The data can be viewed remotely by county road crew managers who make real-time decisions about deploying response teams during and after regular business hours.

Using a mobile device management (MDM) platform, Pierce County manages and deploys employee apps via an internal app store. “Employees have access to an internal application catalog that gives them a pre-approved selection of apps,” explains Gerull. “We want to provide our users with a selection of apps that can make them more productive, without allowing them unfettered access to a public app store. A review group approves apps based on security, usability, best in class and appropriateness for county use.”
Users can access the approved app catalog via an icon on their home screen, or using MDM, administrators can push apps to individual devices or groups of devices. Administrators can remotely create or change security profiles for mobile devices or wipe devices that are lost or stolen.

**Enterprise Content Management Systems: Automating Content Delivery**

In L.A. County, YourBenefitsNow! is the public-facing arm of the DPSS case management system, which is driven by an enterprise content management (ECM) and document repository platform that automates the ingestion of benefits and eligibility forms and supporting documents and then associates them with an application or an existing case. As part of the automated benefits processing workflow, eligibility documents are scanned or entered as online forms where they can be tracked and reviewed and action can be taken by caseworkers. “We originally deployed the ECM several years ago, simply to create an electronic document repository to replace our physical records,” Sylvester explains. “Once we rolled it out, we realized that we could further integrate it with our online portal to encourage online customer self-service.”

A key enabler of 24/7 government, ECM streamlines employee field and branch office work. ECM links documents with data by connecting existing departmental systems and databases to a central document repository, which can be accessed anytime and from anywhere in the enterprise.

The Pinellas County, Fla., Sheriff’s Department integrated its in-car ticketing system with the county’s ECM platform to improve the traffic citation process. After traffic citations were written, paper copies were submitted to the Pinellas County Clerk of Court for entry into a central repository, a duplicative and time-consuming manual process for office staff that frequently backlogged the verification process and forced traffic judges to rely on file folders full of paper citations, copies of driving records and past citations.

Using ECM in combination with the in-car ticketing system, traffic citation information is now automatically transmitted to the clerk’s office. Traffic officers still submit paper tickets to the clerk, but once the barcodes are scanned, they are automatically verified, dramatically reducing staff workload and ticket processing backlogs. “In the past, thousands of hours each year were spent manually inputting traffic citation information into our repository,” says Ken Burke, clerk of the circuit court for Pinellas County. “The [ECM/in-car ticketing integration] has enabled Pinellas County to reallocate our resources to other areas within our organization.”

In addition, with access to the clerk’s central repository, judges can view relevant documents more efficiently during courtroom proceedings. “At first, county judges were a little hesitant about learning how to use the new system,” Burke says. “However, once we showed them how easy the system is to use and the amount of information that can be presented to them at one time, they quickly realized how valuable this type of technology would be to the courts.”

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The Pinellas County, Fla., Sheriff’s Department integrated its in-car ticketing system with the county’s ECM platform, reducing paper-based workflows and processing backlogs.
Technologies for Keeping the Lights On

True always-on government can be realized through the automation of manual government processes and workflows. Some of these emerging technologies make up the Internet of Things (IoT), tech industry jargon that refers to a network of uniquely identifiable computing devices and sensors embedded in a variety of “smart objects.”

Technology advancements such as connected vehicles, smart meters, alternative energy sources and zero-net buildings are on the cusp of wide adoption in commercial enterprises. The public sector is beginning to experiment with these innovative technologies to automate and simplify the business of government, making their city, county or state more efficient for the citizens who live there.

Machine-to-machine networks. Machine-to-machine (M2M) networks transmit data collected by machines with embedded sensors using high-speed or wireless Internet connections to computers, which automatically control activities and make decisions. The San Francisco Municipal Transportation Agency (SFMTA) recently completed an evaluation of its SFpark program, which piloted M2M technology to quickly identify available parking spaces, in turn reducing traffic and parking citations. M2M networks can also be found in parking meters, government vehicles, temperature controllers, security cameras and more.

Automated traffic management and monitoring. Advanced traffic management systems respond in real time to manage traffic flow. Oakland County, Mich., uses a system that combines camera-based adaptive traffic signals, leased phone lines and wireless mesh technology to send traffic data to a central management computer that automatically adjusts traffic signals to manage congestion.

Smart signage and kiosks. Strategically placed digital signs and information kiosks can help jurisdictions broadcast important information to their citizen and business audiences, even when government facilities are closed. Franklin County, Va., uses digital signage to display county news, events, weather, bulletins and other information in its workforce development facility, government center and a newly constructed library.

Smart utilities. Many municipal utilities have already migrated to smart utility meters that use embedded sensors and two-way communication technology, including mobile, wireless or wireless mesh networks, to automatically transmit meter readings. Santa Clara, Calif.’s smart utility network doubles as the city’s free wireless network.

Building, energy and IT automation. Building automation systems can control security, fire and smoke alarms; IP networks; desktop computers and monitors; window blinds; lights and heating; and ventilation and air conditioning (HVAC) systems. When these systems are integrated, they can help organizations monitor and reduce energy usage and gather insight into building operations and equipment functionality. In 2010, the city of Orlando, Fla., began deploying building automation and controls, along with several other upgrades, which increased energy efficiency by an average of 31 percent during the initial phase.
Desktop Virtualization and Cloud Computing: Enabling Employee Access

To mobilize its workforce, the city of Sparks, Nev., turned to a desktop virtualization technology to deliver desktops and applications as a secure, managed service. More than 150 employees use the solution, which enables each employee to access the same virtual desktop from any device and any location via secure VPN.

The solution simplifies desktop management, disaster recovery and desktop migration, allowing the city to extend the life of its computing devices, says Steve Davidek, IT manager for Sparks. “We’re not trying to make people work more, but we want them to have flexibility to work from where it’s most convenient, using any device,” he adds. “We’re able to support all types of end-user devices, including smartphones, tablets, and thin and zero clients. This gives our PCs a greater lifespan even as application requirements increase.”

Leveraging technology is a more financially prudent approach to boosting call center capability. “It makes sense for us to collaborate with nearby jurisdictions on a project like this,” explains Davidek. “And when collaboration is required, the cloud is a great asset.”

Voice Over IP and Unified Communications: Collaborate and Communicate with Employees and Citizens

Productivity-enhancing Voice over IP (VoIP) and unified communications (UC) tools such as follow-me messaging, videoconferencing and webcasting improve collaboration and communication among employees, particularly when they telecommute or work from the field. UC tools are popular with employees because they aren’t required to associate applications with specific devices or network connections, and numerous multimedia communications tools are unified on a single platform.

For example, UC tools such as follow-me messaging and single-number reach allow users to be contacted through the same number anytime, anywhere. A single phone number “follows” the user by routing calls to the specified device — desktop phone, mobile phone, desktop or laptop computer, or tablet — regardless of location. Similarly, presence software allows workers to specify their preferred communication method and availability and view their colleagues’ status online. Via a click on the desktop, employees can communicate with available colleagues using instant message, video chat, phone or Web conference.

VoIP and UC encourage teleworking and support business continuity. “We’ve had the most success with VoIP in the call center,” says Steve Nichols, CTO for the Georgia Technology Authority. “Our workforce is scattered throughout the state. With a virtual call center running on VoIP technology, call agents can work part time from their homes.”

The current cloud-first trend shows no sign of abating, and cloud-based applications and storage continue to gain traction in the public sector. To complement its virtual desktop infrastructure, the city of Sparks mixes in cloud-based applications, such as its geographic information system (GIS). In the works is a cloud-based business licensing and permitting system, which is being developed in collaboration with Washoe County and the nearby city of Reno.

In addition to making it easier for customers to obtain permits and renew business licenses, the application will also allow staff in code enforcement and building inspections to provide real-time updates from the field using their mobile devices. “We’re not trying to make people work more, but we want them to have flexibility to work from where it’s most convenient, using any device.”

Steve Davidek, IT Manager, City of Sparks
when Hurricane Sandy stranded Morris County, N.J.’s 500,000 residents in their homes without power, the county used social media to maintain open lines of communication.

Using tools that allowed them to prioritize requests for help, the county was able to dispatch critical information to first responders, assist in rescue efforts, and relay information about power and phone outages to the utility providers. In addition, the county sent out updates about road closures, evacuation efforts and shelter locations.

“We got so much positive feedback — it was unbelievable,” says Carol Spencer, digital and social media manager for Morris County. “One poster said, ‘Social media was my lifeline during the storm ... you did an amazing job of keeping everyone informed.’”

Open Data: Unlock Information to Empower Citizens

Because open data plays an important role in the city of Seattle’s strategy to improve public transparency and accountability, it’s

Social Media: Online is Always On

Governments have embraced social media platforms such as Facebook, Twitter, Instagram and Pinterest to improve public engagement, and in the process, they’ve given their constituents another set of tools that increase access beyond traditional business hours.

By eliminating the annoyance of unreturned emails and phone messages, social media empowers the public, helps remove the perception government agencies and workers are unreachable, and encourages citizens to continue their community involvement. Simultaneously, governments become more efficient, effective, accountable and transparent.

Social media can support business continuity efforts by enabling governments to communicate with the public in the event of a disaster. In 2012,
also an essential enabler of 24/7 government, according to city CTO Michael Mattmiller. For example, SeattleInProgress.com, available on the city’s open data Web portal and as a mobile app, allows users to see what’s being built in Seattle. “We have more cranes in the sky than any other city in the world besides Dubai,” he says. “People really want to know what’s being built, especially in their neighborhoods.”

SeattleInProgress.com identifies construction projects on a map and provides the project description and status. Users can download the entire project proposal and architectural renderings, and they can register to receive future project updates via email.

SeattleInProgress.com is just one of the city’s many data sets available to citizens. Other popular datasets include information on 9-1-1 incident responses, code violations, locations of city-owned bike racks and active business licenses, among many others. “Our constituents are very aware of Seattle’s commitment to and investment in open data,” continues Mattmiller. “They use our portals to get information on things they care about without having to call or email the city.”

In Palo Alto, also well known for its commitment to open data, CIO Reichenthal noticed the city’s award-winning open budget platform eased the burden of researching budget information for open records and media requests. “People can get the information they need quickly, whenever they want it, and they appreciate the accessibility,” he says. “Before, it was time consuming for staff and a struggle to get the information out in a timely manner. So it has saved time and helps us demonstrate trust and openness.”

**Broadband Networks: Heavy Lifting Behind the Scenes**

An organization’s ability to run around the clock without interruptions is only as robust as its network infrastructure, the silent workhorse that enables governments to effectively run 24/7. Nowhere is the network more important to always-on government than in public safety and emergency services.

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*www.seattleinprogress.com*

The city of Seattle’s open data Web portal and mobile app provides citizens with an opportunity to review construction projects, download project proposals and register to receive future project updates.
An aging network infrastructure is not reliable for emergency communications and is expensive to support and maintain, as the city of Irvine, Calif., discovered. After a recent upgrade of the network underlying the city’s emergency 9-1-1 and police command center, Irvine was able to enhance its police and emergency response. “We didn’t realize what we were missing before in terms of service possibilities,” says Michael Sherwood, Irvine’s deputy director of city services and technology.

For example, with 10 Gigabit Ethernet (GbE) capability, the city is now taking advantage of video-intensive technologies that, while essential to emergency responders, dramatically increase the network load. The new network also supports the systems responsible for public record searches and other public safety operations. Irvine’s new network supports voice, video and data traffic coming into the 9-1-1 center, a new VoIP system and an upgraded wireless network. “The performance constraints we had with our previous network have gone away,” says Sherwood. “With our video solution, we’ve already noticed a huge impact and robust performance from having 10 GbE connections back to our data center.”

High-speed networks are the foundation upon which governments develop and deploy new services, such as the city of Atlanta’s Video Integration Center (VIC), where the city monitors all city-deployed video surveillance cameras.

VIC, part of Atlanta’s 9-1-1 call center, aggregates the video feeds from more than 1,200 surveillance cameras, most of which are privately owned by businesses, neighborhood associations and individuals. Monitored proactively and reactively on a 24/7 basis by uniformed police officers — and advanced analytical software — VIC serves as a force multiplier, giving the city an additional level of safety beyond traditional police patrols and improves emergency response by providing public safety professionals with information that allows them to better assess, prepare and respond to emergencies.

In the next five years, the city expects to increase the number of VIC-integrated surveillance cameras to 10,000. “Having a reliable network infrastructure is essential for making all camera feeds accessible on demand or in real time,” says Noel M.A. Small, director of telecommunications and network operations for the city of Atlanta’s Department of Information Technology. “Not having a reliable infrastructure would adversely affect response time to incidents and reduce the level of security our constituents deserve.”

In Maryland, seven counties and the cities of Annapolis and Baltimore are working together to ensure 24/7 access to critical government services is never disrupted due to an aging network infrastructure. The Inter-County Broadband Network (ICBN) is planning to lay approximately 1,000 miles of new fiber and incorporate it with 2,400 miles of existing fiber. “Our leased circuits were expensive, and they couldn’t provide the high availability needed to support our emergency services personnel and other mission-critical applications,” says Chris Merdon, CIO of Howard County.

In addition to improving network services, the new network will provide affordable broadband access for 1.8 million households, 71,000 businesses, 450 K-12 schools, 200 government facilities, 15 community colleges, 6 other institutions of higher learning, 40 libraries and 2 health care providers across a 4,200 square mile area.
Change is typically accompanied by challenge, particularly in the public sector. When extending government services beyond traditional office hours, the most pressing challenges include agency policies, managing telework, managing performance outcomes, customer service, IT staffing, security and funding.

**Agency policies.** Agency-wide policy changes may be required to make always-on government a reality. For example, to enable telework, agencies must establish new policies or revise existing ones that impact workers’ ability to telecommute, use mobile devices at home or in the field, and bring their own devices to work.

A few key questions are:

- Which employees, employee roles or departments should have the ability to telework?
- How will telecommuting make these employees or departments more efficient or effective? How will productivity be measured?
- Are there union agreements in place?
- What types of computing devices are available to employees, based on role or function?
- Is telework training required?
- Will employees be required to sign a telework agreement?
- How will workplace injuries and issues be handled for teleworking employees?

- How will field workers be trained to use new devices, applications, systems and workflows?
- When government offices are closed due to inclement weather, are teleworkers excused from work?
- How will government-owned equipment in home-based offices be insured, serviced and maintained?
- What devices will be supported by the organization’s BYOD or mobile device policy?
- How will unauthorized devices and personnel be prevented from accessing sensitive information?

Many collective bargaining agreements already include procedures for developing and implementing telework arrangements. If this is not the case, government leaders should consult with labor unions in advance of developing telework policies and agreements. “Establishing telework and mobility policies is a team effort,” says Dewand Neely, deputy CIO of desktop and support services for the Indiana Office of Technology. “As we are developing these policies, our IT leaders are working closely with line of business managers and leaders as well as legal and human resource teams to make sure to clearly spell out employee and employer expectations on working outside of normal work hours.”

Finally, if social media websites are still blocked to network users or their use is prohibited...
during office hours, it may be time to rethink and revise the agency’s social media access policy.

**Managing telework.** If telework is part of your 24/7 government plan, then managing employee expectations and performance outcomes is critical. “In public safety and utilities, 24/7 support and overtime is a common part of scheduling. They know how to work in that model,” says Palo Alto’s Reichental. “For most other government workers, we’re beginning to see more of an alignment with the flexibility demonstrated in the private sector. It’s really a matter of bringing convenience and choice to employees and employers, not a model for imposing extra work.”

Still, it’s critical to manage employee expectations about using technology to telework or work in the field. This includes developing staff performance metrics. Teleworkers and in-office employees should be assessed and appraised according to the same performance standards. Be sure to set clearly defined, results-based goals and expectations that are observable and measurable.

When developing a business case for telework, be sure to outline expected metrics, including anticipated time savings, productivity increases, reduction in mileage payments, etc.

**Customer service.** How can you ensure your customer service structures will support always-on government without breaking the bank? By using the same technologies that enable 24/7 government to enhance your support structures.

For example, extend call center hours using social media and mobile apps instead of increasing support staff. This strategy can streamline call center staff workloads and enable them to be more productive; it also provides an entry point for jurisdictions without an existing call center to enhance their constituent interactions.

Seattle’s customer call center, known as the Customer Service Bureau, is open during traditional business hours but supplements its services with a number of Web 2.0 tools. The Customer Service Bureau provides electronic service request forms, a mobile service app, information about relocating to Seattle and brochures in 160 languages on its website to help address common needs that occur after business hours.

“Establishing telework and mobility policies is a team effort. As we are developing these policies, our IT leaders are working closely with line of business managers and leaders as well as legal and human resources teams to make sure to clearly spell out employee and employer expectations on working outside of normal work hours.”

_Dewand Neely, Deputy CIO of Desktop and Support Services, Indiana Office of Technology_
IT staffing. Even if agencies have enough IT staff, they should always be on the lookout for ways to use technology to get more bang for their staffing buck. How can they increase service hours without overextending IT staff? The good news is many of the technologies that enable around-the-clock government also make IT staff more productive and efficient.

“Our team took a hit in the downturn, and we had to figure out how to do the same amount of work with fewer staff,” says Davidek from the city of Sparks. “We’re growing again, but we’re still looking for tools that simplify IT management.”

“Desktop virtualization not only allows employees to telework, it also makes it easier for our staff to manage endpoint devices,” he continues. “We can meet employee expectations without increasing IT staff workload. In fact, this helps reduce it.”

“It’s the same for cloud-based applications,” Davidek concludes. “We don’t own the server or software and we’re not responsible for repairing it or upgrading it. That’s one less thing IT has to do. It frees us up to focus on more important tasks.”

Security. When employees access government data, systems and applications from home or the field, higher levels of security are required. “With the evolution of mobile device models and operating systems, security is a constantly moving target,” says Indiana’s Neely. “The top priority is to ensure lost or stolen mobile devices can be tracked or wiped to give us the safeguard of knowing we’ve removed government data.”

Beyond MDM platforms — the key technology for securing mobile devices — mobility initiatives require government agencies to proactively develop and execute a single security policy for wired/fixed and wireless/mobile devices for more efficiency, consistency and control.

Key security components must be in place from day one so workers can telecommute and citizens can make business transactions without putting confidential government data or personal financial information at risk. “Network, data and device security is big and is a constantly changing challenge,” says Overland Park’s Irey. “You don’t want IT to be the roadblock that slows everything down, but at the same time you have to protect your assets.”

Foundational security elements, such as firewalls, intrusion detection and data leak prevention, are invaluable. Security professionals should evaluate the use of data-driven network security tools, such as log management, event correlation, intrusion detection and prevention systems, security information and event management (SIEM) platforms, and big data security analytics.

Protect servers and client endpoints with enterprise-class security tools such as advanced anti-virus and anti-spam protection; content filtering that identifies and controls the flow of sensitive data; Web gateway security that protects against malicious software, spyware, botnets, viruses, malware and other threats; and rapid data and system recovery.

“We can centrally manage endpoint security for all the endpoints in the county,” says Jeff Porter, platform technology director for Fairfax County, Va., which deployed a desktop virtualization solution to enable its employees to easily telecommute, work from the field and compute from multiple devices. “We have centralized reporting. We’ve turned on device control to block USB storage devices in certain situations. [The security tools are] helping us mitigate risk while remaining flexible.”

Funding. Finding funds in the era of “doing more with less” is always a big challenge for government organizations. “Funding begins with a business case,” says NYC DOT’s Schachter. “You have to be able to present the value that you’re going to return for a particular investment or series of investments.”

IT teams are well aware of approaches such as managed services, cloud computing or other
options for converting technology costs from capital to operating expenses. Collaborating with neighboring or regional organizations may also make sense in some situations, particularly when using cloud-based solutions.

Projects such as transaction-based portals can be self-funded without the use of tax dollars. In this approach, governments charge a small fee for online transactions, primarily those targeted at high-volume business users, and reinvest those fees in the technology infrastructure.

Finally, be creative with funding. For example, many of Pierce County’s mobile apps were developed in partnership with student interns from the University of Washington-Tacoma Institute of Technology. Pierce County’s IT staff provides the development platform, tutorials and coaching, and interns learn how to use mobile software development tools and build smartphone apps.

“This is a win-win program,” says CIO Gerull. “The county increases the number of business smartphone apps and interns have a working app to show when they interview for a job. It’s a great way to get extra capacity in our organization and develop technology at a lower cost.”

“Funding begins with a business case. You have to be able to present the value that you’re going to return for a particular investment or series of investments.”

Cordell Schachter, CTO, New York City Department of Transportation
1 Plan. Develop a solid and strategic business plan. Assess your organization’s current position in terms of 24/7 service availability. What services would be best provided on a 24/7 basis? What are your strengths and weaknesses? What policies or hurdles stand in the way of moving to a 24/7 service model? Develop a business case to demonstrate the necessity, benefits and cost savings of the proposed solutions, and share it with all key stakeholders, including employees and constituents.

2 Research. Determine what services should be available beyond current hours. Resist the urge to go with your gut instinct (or your manager’s gut instinct). Instead, analyze available data to determine your constituents’ current pain points. Seek citizen input to determine what services they want to see online and offered 24/7. What do residents complain about on social media? What do they tell the service people behind the walk-up counter? What existing services and technologies are being underutilized?

3 Prioritize. Based on the agency’s core mission, strategy, goals and service areas, prioritize constituent pain points and begin working on plans to eliminate them. Focus on these key initiatives, being careful not to fall into the trap of trying to deliver something for everyone. For each initiative, have clear objectives and stated benefits. Let these business needs drive technology choices.

4 Partner. For any technology initiative, it’s important to reach out and communicate with key stakeholders. Ensure they understand the challenges and the role of technology in solving them. Build relationships with department directors and executives — listen to their needs and brainstorm ways to help them. That way, when you ask for funding, you’re doing it together — as partners.

5 Pilot. Develop a pilot or beta program and test, test, test before moving toward a full launch. Usability testing with end users is essential to ensure the application, website or portal design and content are right for citizen use. Proceed incrementally through each phase of the pilot, taking time to evaluate, modify and re-deploy where required. If a service doesn’t work at launch, it will take a while for citizens to warm up to it. And nothing sours constituents more than a new government system or technology that falls short of expectations, wastes taxpayer dollars, sullies agency reputation and reduces customer satisfaction.

6 Measure. Before launching new initiatives, develop benchmark measurements — customer satisfaction, website traffic, in-office foot traffic, missed after-hours phone calls, etc. — that can be used later to gauge program success. Monitor program efforts and regularly report on the results. These metrics will show strengths and weaknesses and allow you to adjust the program as necessary.

7 Experiment. Last but not least, don’t be afraid to experiment!
CONCLUSION

GIVE THE PEOPLE WHAT THEY WANT

When it comes to 24/7 access, does your agency rise to the occasion? As citizens, businesses and employees demand 24/7 access to the tools they need to conduct government business and do their jobs, the public sector must implement comprehensive, technology-driven initiatives that ensure anytime, anywhere access, time- and cost-saving workflows, and streamlined citizen services.

For citizens and businesses, around-the-clock government is the expected response to the blurring boundaries between the public and private sector. For ease and simplicity, citizens want their government transactions and interactions to merge seamlessly into the time-saving, convenient, online and mobile workflows and processes they’ve established in their dealings with the private sector. Around-the-clock government holds the promise of more equitable models of public engagement that increase constituent satisfaction and improve agency productivity.

A 24/7 workplace provides government employees with the same conveniences their colleagues in the private sector have come to take for granted: anytime, anywhere access to the systems, applications, devices and data they need to do their jobs with more efficiency and flexibility, from everyday email and word processing to specialized applications and field work. Of course, employees don’t want to literally work around the clock — but they do want the flexibility and convenience of telecommuting from home, checking their emails in the evening or working on an important project at the local Starbucks.

But always-on government is just beginning. As technology evolves, 24/7 government operations will need to integrate new trends. In the future, how will governments use technologies such as unmanned aerial vehicles (drones), 3-D and 4-D geospatial imaging, 3-D video, predictive algorithms, augmented reality, and virtual or modeled worlds?

It may sound far fetched, but 20 years ago, so did 24/7 government. As everything becomes connected and mobile, expectations of government will continue to change, and innovative new technologies will continue to provide the public sector with the opportunity to deliver more and better services more efficiently and at a lower cost. 

For ease and simplicity, citizens want their government transactions and interactions to merge seamlessly into the time-saving, convenient, online and mobile workflows and processes that they’ve established in their dealings with the private sector.
"People have to be able to access information on mobile devices. Our strategy is to provide the best mobile experiences for high-value needs, such as making payments and requesting services."

Vicki Irey, CIO, City of Overland Park

"The demand for anytime, anywhere access requires new thinking about the foundational network infrastructure. New networking technologies make responsive networks possible while actually lowering taxpayer cost."

Mark Molitor, Regional Vice President, Enterprise Sales, Ciena

"Citizens now expect that their interactions with government agencies will be managed securely — and that their data will be kept private and safe. Government CIOs and agency IT directors should start taking proactive measures to ensure citizen data privacy."

Chris Oskuie, Director of Solutions Marketing, Brocade

"You have to look carefully at the benefits of technology investment, especially when there are many funding needs and not enough funds to go around."

Cordell Schachter, CTO, New York City Department of Transportation

"Mobile devices have now become the predominant method for connecting online — they’ve already eclipsed all other vectors — which is dramatically changing the way citizens, businesses and employees communicate and share data. If a mobile device isn’t cloud, I’d be hard pressed to define what is. So that’s really the business case for cloud visibility, enablement and security: whether we’re ready or not, the cloud here to stay. The key is to expand where it makes sense and control where it doesn’t."

Kevin Jones, Director, Public Sector, Skyhigh Networks
“To develop the applications and systems that drive today’s fast evolving anytime, anywhere government, progressive agencies are migrating away from legacy telecommunications infrastructures that constrain truly scalable network growth. They are tapping into the rapidly growing Metro Ethernet services market, and in doing so, creating a technology infrastructure that provides a broader, more scalable spectrum of services to their constituents while also increasing efficiencies in their operations.”

Chris Prekopa, Director of Sales, State and Local Government, Comcast Business

“Government IT organizations are recognizing that mobile devices transform business processes, reduce operating expenses and improve productivity. Policy, technology and funding must support the goal of enabling government employees to accomplish missions more effectively through mobility, which in turn has a huge impact on citizens.”

Garrett Hicks, State & Local Government, AirWatch by VMware

“‘We’re not trying to make people work more, but we want them to have flexibility to work from where it’s most convenient, using any device. We’re able to support all types of end-user devices, including smartphones, tablets, and thin and zero clients. This gives our PCs a greater lifespan even as application requirements increase.’”

Steve Davidek, IT Manager, City of Sparks

“In public safety and utilities, 24/7 support and overtime is a common part of scheduling. ... For most other government workers, we’re beginning to see more of an alignment with the flexibility demonstrated in the private sector. It’s really a matter of bringing convenience and choice to employees and employers, not a model for imposing extra work.”

Jonathan Reichental, Ph.D., CIO, City of Palo Alto

“To have true 24/7 operations, you can’t rely on paper. Ensuring employees and citizens have access to the information they need from any location at any time requires digitized information. Another way this enables 24/7 government is by increasing business continuity in the event of a disaster or emergency.”

Tim Finnegan, National Sales Director, SLED, OpenText

“As citizen expectations have changed, citizen engagement has evolved from one-way to two-way. It has evolved from a long wait for a response to an immediate response. This can be achieved not by hiring more employees or being open for longer hours, but by leveraging collaborative, mobile and cloud technologies.”

Dux Sy, Chief Technology Officer, AvePoint Public Sector
Why Governments Must Implement an Enterprise Mobility Strategy in 2015

As mobile device usage becomes more pervasive among state and local governments and citizens, public leaders recognize the need to fundamentally shift IT strategies, priorities and budgets to support 24/7 operations. Although many agencies recognize the benefits of going mobile, most are concerned with the security, budget and compliance risks associated with a mobile workforce. AirWatch® by VMware® enables state and local governments to realize the powerful effects of adopting an enterprise approach to mobility with a user-friendly Enterprise Mobility Management (EMM) platform. By adopting an EMM solution, governments can:

1. Improve Device, Network and Application Security
   - Adhere to government regulations with FIPS 140-2 encryption
   - Prevent data loss with advanced data loss prevention capabilities
   - Automate device compliance to monitor against threats
   - Configure certificate-based access to VPN and Wi-Fi networks
   - Enable multi-factor authentication
   - Disable native browsers and whitelist IP addresses
   - Secure internal and public applications
   - Enable secure content sharing and collaboration
   - Prevent copying and pasting or forwarding of email

2. Improve Operational Efficiencies
   - Reduce operating costs with mobile technology
   - Increase telework opportunities for employees
   - Manage a fleet of devices through a single Web-based management console
   - Manage laptops alongside smartphones and tablets
   - Support any size mobile deployment and scale as needs grow
   - Preserve investments with integration into existing infrastructure
   - Deploy within the cloud or on premise

3. Improve Employee Productivity
   - Launch or maintain a BYOD initiative
   - Eliminate paper-based reporting processes
   - Simplify communication and reporting for field workers
   - Enable secure content sharing and collaboration
   - Capture and send data, photo or video from the field
   - Provide employees with access to mission-critical apps

4. Improve the Citizen Experience
   - Process and secure mobile payments
   - Empower citizens to perform services at mobile kiosks
   - Improve communication and updates

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AirWatch® by VMware® empowers governments to leverage mobility to increase productivity, improve agency missions and communicate with citizens better than ever before. AirWatch addresses the unique security requirements and resource challenges surrounding public sector enterprise mobility and enables government agencies to implement scalable EMM solutions that extend to users, devices, applications, content, data, email and networks.

To learn more and receive a free 30-day trial, visit: www.air-watch.com
Using **Digital Information** to Power 24/7 Government

**Our citizens already live in a digital age.** They expect 24/7 services from their government but meeting those expectations can be challenging. For departments and agencies, digitizing operations securely and at a reasonable cost means harnessing the explosion of information in emails, digital documents, media and paper.

Making information from all sources easily accessible to employees and customers on any device, 24/7, is dependent on finding the appropriate data. To find data quickly or automatically and route it effectively, information must be governed. Properly governed data can not only meet your immediate operational needs but can be analyzed to help identify inefficient operations, synergies among functions and services that should be moved online, as well as clarify unmet citizen needs. Transparent to your agency users, governance enables these capabilities while also mitigating risk, embedding records compliance, automatically preserving unstructured content records and disposing of them as your agency’s policy dictates.

OpenText solutions are helping state and local governments across the country by:

- **Improving their security posture.** Security remains a primary concern for state and local government decision-makers. OpenText enables you to eliminate duplicate sources, secure data inside your firewall or cloud, locate and guard personally identifiable information or classified information, and maintain a clear audit trail to prevent a data breach or loss.

- **Enabling data access.** Properly maintained data can provide unique insight into agency operations and simplify daily activities. OpenText’s powerful search capability improves the accuracy of your litigation, investigation or audit results. Our auto-classification frees up employee time while dramatically improving retrieval accuracy, and automatic holds on pertinent records protect your litigation posture.

- **Distributing accurate information to the correct parties, at the right time.** OpenText’s solutions protect and organize data, streamlining and simplifying the distribution of information to decision-makers. Moreover, because mobile access is critical to 24/7 services, employees, constituents and agency partners are able to securely access the information they are authorized to view on any device at any time.
Data Privacy: High-Speed Network Encryption for 24/7 Protection

Security and Privacy Remain the No. 1 Concern For State and Local Government CIOs. When operating in a digital environment, especially one that provides around-the-clock services, it is imperative sensitive public sector and citizen data is protected. Four primary rules for data privacy can help ensure your agency’s information is protected:

1) Privacy cannot be assumed. Conducting business online can be risky — citizens expect their data to remain private and governments have an obligation to meet this expectation. State and local governments can have a false sense of security regarding their private network. However, with Brocade’s hardware-based encryption solutions, decision-makers can rest assured sensitive information is secure.

2) Data privacy must be pervasive. Protecting data can no longer be a task that is added after the launch of a new initiative, or tacked on as a siloed service. Data privacy must be an inherent aspect to every 24/7 initiative. Brocade offers network solutions that include built-in encryption, creating the optimal embedded data protection solution.

3) Privacy solutions must be easily deployed and managed. The most effective data privacy solutions are those that can be easily deployed and managed without specialized knowledge. Brocade’s scalable solutions integrate with existing management and deployment configurations, offering a secure and streamlined process for implementing and maintaining data protection.

4) Data privacy should not degrade the end-user experience. Protecting citizen data and improving citizen interactions with government agencies should remain equal priorities. Privacy solutions, like Brocade’s, should provide seamless, end-to-end protection without slowing down or impeding the end-user experience.

Brocade offers routers equipped with high-speed encryption technology that meets the federal government’s encryption standards (Suite B). This embedded security feature protects data across the network and ensures attackers do not gain access to critical data during an attack. With industry standard authentication solutions and the ability to secure all data in flight across a jurisdiction’s network, Brocade ensures all citizen-to-government transactions are protected.

Challenging the Status Quo
Brocade challenges the notion that encryption is complex, expensive and results in degraded performance. Brocade’s encryption solutions:
- Offer high-grade, Suite B AES 256 bit encryption at the lowest cost per bit
- Provide data privacy for all data without degrading performance
- Protect data without compromising performance, encryption capabilities, complexity, deployment or cost

To learn more, visit: www.brocade.com/networksecurity
High-Performance, Scalable Network Infrastructure for Around-the-Clock Government

Providing services on a 24/7 basis is becoming the new normal in government. However, it is nearly impossible without fast, scalable network infrastructure as the foundation for the technologies that enable this transformation. With a robust infrastructure in place, governments can better collaborate with other departments, agencies and jurisdictions; improve citizen service; and provide employees remote access from the field — no matter the time of day.

Providing Reliable Communications
The city of Ogden, Utah, recently received a reminder about the importance of high-performance, reliable network infrastructure. With 80,000 existing residents, and the potential for rapid growth, local decision-makers recognized a need to invest in the city’s IT infrastructure, including network capacity. The city’s existing legacy T1 lines were no longer sufficient for handling government services.

Comcast Business helped resolve the city’s network infrastructure challenges and enabled improved citizen service by providing a faster data transmission between sites with no increased costs. After the upgrade, firefighters, who often lost contact with dispatch due to legacy infrastructure, gained the ability to maintain constant contact with local dispatchers and police officers stopped experiencing slow file downloads while in the field. The robust infrastructure also allowed the city to enhance other 24/7 services such as GIS mapping and provide information about park services and road closures due to construction.

Connecting Government and Citizens
The Prince William County Department of Parks & Recreation (PWCPA), located in northern Virginia, conducts business in 20 locations to stay connected with and provide top-notch service to residents. However, as the department grew and additional programs were added, day-to-day operations slowed down due to an unreliable connection. With a limited network infrastructure, personnel were unable to register students for daycare, camps and other community activities. Additionally, access to emergency information was unavailable when time was of the essence.

Comcast Business helped PWCPA create a cost-effective, robust network infrastructure, which resulted in increased performance at 19 of the organization’s business sites, with plans to connect the remaining office in the near future. Employees in human resources, finance and payroll can now access critical company files as needed without issue. With the upgraded network infrastructure as its backbone, PWCPA also launched a new application for recreation management that allows employees to reserve facilities, register customers and report incidents, among other capabilities.

Meeting Constituent Demand 24/7
With fast, scalable network infrastructure, municipalities across the country, like the city of Ogden and Prince William County, can provide the 24/7 services their constituents demand while increasing collaboration and supporting the technologies that enable around-the-clock government.

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Law enforcement, social services and other government agencies rely on a 24/7 government by Citrix

Law Enforcement
Police officers, sheriffs and probation officers need access to Criminal Justice Information System (CJIS) data quickly. In the past, this was a challenge as agents would call a dispatch center and ask for Criminal Offender Record Information (CORI) to be relayed verbally, which was a time-consuming and often ineffective method.

Thousands of Department of Justice (DOJ) personnel and their Law Enforcement Agency Partners (LEAPs) now use Citrix XenMobile to secure access to DOJ applications on government-issued smartphones and tablets. Special agents and police officers in the field can access criminal records on any authorized mobile device utilizing the Citrix solution, which is available to all DOJ LEAPs, to comply with state and federal regulations.

Social Services
Social workers, case workers and health care personnel require speedy access to data that is typically confidential, mandating a solution that keeps the data secure in a central location. Oftentimes, case workers resort to hand writing notes while making home visits, which requires manual input later and results in a duplicative documentation process.

Countless state and county agencies across the U.S. use Citrix XenApp and NetScaler to provide secure, remote access to their case management applications. This enables social and case workers to input data in real time on laptops and tablets, allowing them to effectively manage their caseload and paperwork. These low-cost devices can quickly be replaced if damaged or stolen, without the risk of data loss or compromised confidential information.

For examples of how a secure mobile workspace has transformed government operations, contact stateandlocal@citrix.com or David Smith at 301-280-0805.
SPONSORS

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Caroline Brown is a writer and researcher specializing in communications for technology, government, education and science organizations. She has worked for several years in both corporate and non-profit communications. Her educational background includes an M.A. in Journalism and Mass Communication from the University of North Carolina at Chapel Hill. Caroline currently resides in California.

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