



TAKING AN ENTERPRISE APPROACH TO FEDERAL IT SERVICES — **EXCELLENCE STARTS WITH THE NETWORK**



CHOOSING A FEDERAL IT SERVICES PARTNER THAT MEETS YOUR AGENCY'S EXPECTATIONS

Federal agencies today are focused on evolving their IT infrastructures to keep pace with rapidly emerging technologies and services, as well as diverse user demands. Public sector professionals are exploring options for expanded cloud adoption, enhanced cybersecurity services, optimized data centers, and more flexible, trusted information-sharing environments.

How do these trends impact the Federal enterprise IT landscape? Agencies increasingly are leveraging the expertise, services, and infrastructures of industry innovators to enable the most demanding Federal computing requirements. Modernized agency IT architectures and networks will be characterized by open standards, flexible hosted computing alternatives, opportunities to reduce operating costs, and layers of data, network, and operational security.

As public sector organizations increasingly turn to external computing resources and talent to meet their mission and business objectives, they must be confident that their IT service partners can deliver secure, resilient, scalable, and reliable technologies and services. More specifically, it is imperative that government professionals ensure that prospective service providers can deliver these fundamental components: Carrier-Class Connectivity, data center asset Colocation, Cloud computing options, Cybersecurity expertise and managed services, and proven Commitment to meeting agency goals.

THE IMPORTANCE OF CARRIER-CLASS CONNECTIVITY

Few agencies have the ability to acquire, manage, and maintain the IT infrastructure they need to meet all of their computing demands. Imagine having access to the bandwidth, storage, compute power, and certified security services to satisfy whatever the mission—from routine tasks to the most urgent assignments. It is only by working with a provider who offers the quality and stability of carrier-class connectivity, through its proven infrastructure, that agencies can have access to the resources they need, with the assurance that they will be highly-available, resilient, and flexible.

With its origins in the telecommunications industry, CenturyLink has a discriminating advantage in the information technology services field. With its global network connected to more than 55 technically-advanced data centers built to Uptime Institute Tier 3 level availability (45 in the Continental U.S.), CenturyLink delivers reliable connectivity to more than 30,000 businesses and numerous public sector customers. CenturyLink's network securely transports more than 100 trillion bits of data per second, making CenturyLink a leading provider of global networks, data centers, and robust IT cloud and security services that meet even the most stringent connectivity requirements.

COLOCATION AND FLEXIBLE DATA CENTER OPTIONS

Federal agencies continually are evaluating their data center operations, and many are seeking to reduce real estate, power, staffing, hardware and software, and other related costs. Consequently, many are moving toward more hybrid IT environments, where some of the data center assets they require are provided by trusted colocation and hosting partners. Not only are agencies able to benefit from the extensive expertise of these hosting providers, they are also better able to support their requirements for improving information security, mobility, and disaster recovery.

An experienced data center provider can help its public sector customers evolve their computing environments organically, changing over time to

THE ALWAYS-ON DATA CENTER

In October of 2012, Hurricane Sandy approached the East Coast of the United States, coming ashore in New York and New Jersey. CenturyLink has several data centers based in the affected area that support 24 x 7 global customer requirements. With an established track record for responsiveness—during regular business as well as in emergency situations—CenturyLink pre-planned for staff support, generator fuel, and other supplies necessary to maintain operations. Despite this extreme and long-lasting weather event, none of these data centers went down. For its customers, whose worldwide operations depend on CenturyLink's proven ability to fulfill its customers' expectations, this was a significant and recognized operational benefit.



meet missions as they develop. CenturyLink offers flexible, scalable, and customized data colocation services that are tailored to meet agency operational needs and align with budget and staffing resources. By moving workload to off-premise data centers, agencies are able to accelerate the implementation of services, optimize internal resources, and improve organizational productivity.

CLOUD COMPUTING THAT MEETS AGENCY DEMANDS

Increasingly Federal agencies are adopting cloud computing because it offers cost-effective alternatives to traditional internal IT services. For example, many have initially moved hosted

email services and public-facing websites into the cloud. As security services improve and Federal professionals become more familiar with hosting options, many agencies are evaluating private, community, and hybrid clouds for their workloads. The ability to rapidly deploy applications, make data more accessible to users, and meet surge computing requirements are stimulating ever-expanding cloud implementation.

Given this momentum, what discriminators should be considered as agencies choose a cloud provider that matches their needs? As one seasoned government IT professional, Maj. Gen. (ret.) Dale Meyerrose, former chief information officer at the Office of the Director of National Intelligence, summarized, "...the trends in today's environment, in both the government and private sector, are quite clear. First is the speed to react to user command/user experience; second is the ability to scale across an entire enterprise; and the third is to have the flexibility for capacity, access, and mobility."

In response to its customers' demand for enterprise-grade cloud computing, CenturyLink has focused on developing a robust cloud infrastructure and efficient management tools. Consequently, CenturyLink recently was recognized by Gartner, Inc., as part of its "Magic Quadrant for Cloud Infrastructure as a Service." In fact, CenturyLink is positioned in the "visionaries" quadrant in Gartner's Magic Quadrant report, which notes, "... the most visionary providers tried to provide customers with capabilities beyond mere infrastructure rental, reinventing the relationship between infrastructure, applications, and management."

Effective computing environments offer seamless, end-to-end integration of cloud and network assets, with all services hosted on and delivered from the same infrastructure designed with reliability, resilience, and restoration capabilities. As Steve Alexander, senior vice president and chief technology officer for Ciena, observed, "You cannot build a cloud without a network; the network is your connection to the cloud, and it's the quantity and quality of that connection that's going to determine the end user experience."

UNMATCHED CYBERSECURITY SERVICES

There is no more overarching consideration in Federal IT today than the demand for secure computing and information-sharing environments. It is with this priority in mind that the U.S. Department of Homeland Security (DHS) has implemented its next generation of government-wide cyber security protections, the Einstein 3 Accelerated (E³A) initiative, which is focused on the "deployment of intrusion prevention systems across the Federal enterprise." This program offers to all dot-gov domains advanced cybersecurity, offered as a hosted managed service, which uses classified signatures that are not available in the commercial marketplace.

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In parallel, the DHS has developed the Enhanced Cybersecurity Services (ECS) program, "a voluntary information sharing program that assists critical infrastructure owners and operators as they improve the protection of their systems from unauthorized access, exploitation, or data exfiltration." Started as a pilot project, ECS has been expanded to cover 16 critical infrastructure sectors across the nation.

To support both of these fundamental cybersecurity initiatives, DHS selected CenturyLink's network, data centers, and experienced staff to deliver these capabilities as managed security services up to and including the classified level. By partnering with CenturyLink, DHS is able to tap into the capabilities of a global Internet Service Provider (ISP) with extensive experience in designing and engineering network traffic to meet unique mission needs, operating a carrier-class routing

infrastructure, managing advanced data center resources, and providing cleared cybersecurity staff needed to deliver the most sensitive of agency information-sharing from the data center to the network edge.

In addition, as a global carrier, CenturyLink has continued to focus on developing managed products that deliver the next generation of cybersecurity technologies and techniques that are needed for agencies to defend their users from the sources of attacks, well before threats reach their infrastructure. As envisioned in the E³A program, the objective is to detect and mitigate malware before it enters an agency's architecture, and before it does harm. By offering advanced security services closer to the adversary, CenturyLink enables better situational awareness for Federal agencies with more predictive, pro-active cybersecurity information.

COMMITMENT TO CUSTOMER EXPERIENCE

To forge a viable and lasting partnership, there is no substitute for meeting customer expectations by delivering reliable, secure, and highly-available services. Reliable measures of a proven IT services provider include its track record with its long-term customer relationships and its commitment to innovation and performance.

From its roots as a rural telephone company founded in 1930 through its evolution into an internationally-recognized telecommunications company, ISP, and IT service provider, CenturyLink has not lost its focus on customer satisfaction. More than 45,000 employees around the globe, CenturyLink offers integration, reliability, and resilience through the expertise of its technical and managerial personnel. In the public sector, CenturyLink has a dedicated team focused solely on government programs and requirements, with particular expertise in supporting the U.S. Federal Government.

OPERATIONALIZE YOUR AGENCY IT

Smart Federal agencies focus on and invest in networks and information technology services that not only meet their expectations, but also have the ability to evolve into the future as their mission requirements change. With this in mind, CenturyLink brings its formidable expertise and trusted, resilient, and agile IT services to its public sector customers. With a focus on operationalizing IT capabilities into fixed price products, CenturyLink solutions meet customer cost and performance objectives. CenturyLink offers a comprehensive portfolio of managed computing services to civilian, intelligence, and defense organizations worldwide. ■

As the third largest telecommunications company in the United States, CenturyLink is committed to meeting the communications missions of the government and is recognized as a leader in the network services market by technology industry analyst firms. The company is a global leader in cloud infrastructure and hosted IT solutions for enterprise customers. CenturyLink provides data, voice and managed services in local, national and select international markets through its high-quality advanced fiber optic network and multiple data centers for government, businesses and consumers. The company also offers advanced entertainment services under the CenturyLink® Prism™ TV and DIRECTV brands. Headquartered in Monroe, La., CenturyLink is an S&P 500 company and is included among the Fortune 500 list of America's largest corporations. For more information, visit www.centurylink.com/gov.

