Toward a More Efficient, Secure, Cost-Effective Government

A shrinking tax base—along with increased taxpayer demands for better service—mean that federal government agencies are placing a premium on making operations run as efficiently as possible. Additional concerns including security risks, disaster response and recovery, a retiring workforce and aging infrastructure only add to the pressure to deliver uninterrupted service on a daily basis.

Citrix helps government agencies and departments overcome these challenges through the freedom of cloud computing—a virtual desktop working environment that stores and manages computer resources on a remote server while providing a flexible and scalable infrastructure. This on-demand service can be easily accessed by any user in an organization, on any type of device, in any location in a rapid and highly secure manner, and all while maintaining employee productivity and low IT costs. Cloud represents a quantum leap forward in achieving federal government mandates to reduce its carbon footprint, realize new levels of cost reduction and provide enhanced data security.

Cloud Computing and the Virtual Desktop

What is Cloud Computing?
Cloud computing is an on-demand, Internet-based form of computing that offers shared applications, resources, software and information to individual computers and other devices as needed, much in the same manner that electricity is provided by a utility. Its innate versatility allows government to respond and adapt to evolving business needs while maintaining value, peak efficiency and simplicity of use.

The Virtual Desktop Solution
Citrix desktop virtualization is an evolving technology that delivers a full, personalized set of applications and other resources to laptops, tablets, smartphones, thin clients and more. Instead of installing and running the operating system and software locally on each PC or other device, these components, plus the user’s personalizations, run on servers in the datacenter. They’re delivered “virtually” to users—either a desktop image is transmitted to the user’s computer, or the desktop is streamed down to the device.

Each time an employee logs on to a government network, a virtual desktop is dynamically assembled in the datacenter utilizing the latest applications and operating system. IT teams can easily and efficiently manage multiple desktops since the virtual desktop solution is centralized on servers. Desktop virtualization also offers the ability to individually tailor the desktop. Certain workers look for simplicity and standardization, while others require high performance and personalization. Customizing the virtual desktop in the datacenter minimizes IT administration and helps to ensure a high level of end-user satisfaction.

For strong security, application data remains in the datacenter behind a firewall, and desktop images are encrypted over the network; even when the virtual desktop is streamed to the device, no data is left behind once the user session ends.

VDI Defined
VDI, or “virtual desktop infrastructure,” is one form of desktop virtualization that Citrix recommends for federal agency and department use—the process of running an end-user desktop inside a virtual machine that lives on a server in the datacenter. VDI is a powerful form of desktop virtualization that enables fully personalized desktops for each government user with all the security and simplicity of centralized management. Many governments host a far-ranging mix of users, including task workers, power users, guest...
workers, contractors and mobile employees, and VDI can be used on a case-by-case basis depending on individual user requirements.

How Server Virtualization Facilitates a Speedy Recovery from Interruptions

One of the most important roles of the federal government is to ensure continuity of operations, including rapid response to a disaster situation. Citrix server virtualization, which allows more than one virtual machine to run on the same physical server, is an invaluable tool for disaster recovery. Provisioning capabilities of a server virtualization solution enable server workloads on a failed system to be restarted quickly on another available server, thus dramatically reducing your downtime.

Through this technology, an IT team can transmit a virtual machine over the network and make it available on another server in an alternate location for employees to access. This capability alone can cut lost time in the event of system failure from days to hours, or less. Server virtualization makes it possible to run multiple, non-compatible workloads on the same server in “isolation,” helping to minimize the number of physical machines that are needed in a disaster recovery facility—or the main datacenter.

Ensuring Maximum Security Through Access Control

In today’s era of computer hacking and cyberterrorism, one of the greatest causes of concern for federal government agencies and departments is data security. The Citrix XenDesktop™ virtual desktop solution creates granular, scenario-based access control which ensures that only authorized users can connect and access specific resources if their role, location, network and specific device allow. A secure ticketing authority also verifies that the user is allowed to login. Once an employee connects, IT can control the flow of data so that only screen updates, mouse clicks and keystrokes— as opposed to actual data—traverse the network. Smart cards are fully supported in XenDesktop, with seamless authentication into applications and device-to-device roaming capabilities. While users are connected, XenDesktop creates secure and searchable visual records of user activity in critical applications; this information can be used for regulatory compliance and litigation support.

Federal Government Operations Made More Responsive and Flexible

Cloud computing and virtual desktop tools allow government agencies to become more adaptive, cost-efficient and secure while responding to the operational challenges of tomorrow. Without disruption to everyday functions, federal IT can provide an expanded range of desktops and applications to employees while ensuring heightened security and cost reduction.

The cloud computing approach accelerates performance and substantially reduces load on servers. Government agencies stand to save millions in management costs over the long run and eliminate data security risks by installing applications in a Citrix datacenter and virtualizing them for end users. What’s more, they can reduce the expense and security risk of typical desktop computing by delivering desktops virtually from the datacenter in a way that improves end-user experience and furnishes a single point of access that customizes access policies based on individual user scenarios.

To learn more, please visit www.citrix.com/federal
Citrix virtual computing solutions help federal agencies build simpler and more cost-effective environments that deliver IT as a service and make it easy for government staff to work in the most optimal way—anytime, anywhere and on any device.

**Citrix® XenDesktop™** is a desktop virtualization solution that delivers Windows desktops as an on-demand service to any user, anywhere.

**Citrix® XenApp™** is an on-demand application delivery solution that enables applications to be centralized and managed in the datacenter and instantly delivered as a service to users anywhere.

**Citrix® XenServer™** is an enterprise-ready, cloud-proven virtualization platform with all the capabilities needed to create and manage a virtual infrastructure at half the cost of other solutions.

**Citrix® NetScaler®,** available as a network device or as a virtualized appliance, makes web applications run 5x better by accelerating application performance, optimizing application availability, and enhancing web application security while substantially lowering costs.

**Citrix® Access Gateway™** is a secure desktop and application access solution that provides administrators granular application-level control while empowering users with access from anywhere.

**Citrix® Branch Repeater™** is a branch optimization solution that provides a high-definition desktop and application experience to branch and mobile users while dramatically reducing bandwidth costs and simplifying branch infrastructure.

**Citrix Receiver™** is a high performance, universal client technology that enables on-demand delivery of virtual desktops, Windows, web and SaaS applications and IT services to any device.

**About Citrix**

Citrix Systems, Inc. (NASDAQ:CTXS) transforms how businesses and IT work and people collaborate in the cloud era. With market-leading cloud, collaboration, networking and virtualization technologies, Citrix powers mobile workstyles and cloud services, making complex enterprise IT simpler and more accessible for 260,000 organizations. Citrix products touch 75 percent of Internet users each day and it partners with more than 10,000 companies in 100 countries. Annual revenue in 2011 was $2.21 billion. Learn more at www.citrix.com.

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