Redefining IT for Federal Healthcare Agencies

Virtualization solutions for clinicians and patients, anytime, anywhere, on any device

These days, federal healthcare agencies know the familiar feeling of being squeezed from both ends. Demands for improved customer service, patient information confidentiality, compliance with standards, and workplace efficiency run head-first into the realities of slashed budgets, staff reductions, and more. Now more than ever, these agencies need a dramatic solution to meet their unique challenges.
A global leader and the most trusted name in secure application and data delivery solutions, Citrix has established a central presence in the healthcare industry, with the top five global healthcare organizations and the top 15 U.S. healthcare organizations among its customer base. This paper explains how Citrix virtualization provides a pathway toward cheaper, more efficient healthcare IT for federal government agencies, while improving patient care and privacy, reducing staff workload, and providing unlimited data access anytime, anywhere, and on any device.

**Juggling act for federal healthcare IT**

IT departments within the federal healthcare space face a laundry list of daily concerns requiring proactive and reliable solutions to keep up with clinician and patient demands.

**Enabling the mobile clinician**

The mobile clinician needs “follow-me” desktops, applications, and patient data for smartphones, iPads, laptops, tablets, thin clients, PCs, Macs, Androids, and more. They need technologies—including application, desktop, and server virtualization—that provide a high level of data security and are easy and cost-effective to implement and support. They also need excellent reliability and consistent performance across different use cases.

**Keeping costs and complexity low while maintaining high-quality care**

Amid ongoing budget constraints, healthcare providers are looking for approaches that allow for clinical modernization without the trouble and expense of upgrading their entire infrastructure to support new applications.

**Safeguarding patient privacy**

As any practitioner knows, patient data confidentiality is of paramount importance. Consistent information access must interface with data control mechanisms that can be efficiently managed, along with password security and single-sign-on access to Windows, web, and proprietary and host-based applications on a wide range of desktop clients.

**Integrating new technology into work processes**

Even the most well-conceived electronic health record (EHR) adoption strategy can be derailed if doctors and staff do not feel comfortable accessing online apps and information. Ease of use and a reliable experience can help win over staff to a more modern IT system.

**Optimizing productivity through clinical modernization**

Healthcare agencies require a high-level, holistic approach to IT. They need a simple, transparent method to connect information supply with information demand that fully supports IT modernization, while providing the ease of use that workers demand and the data security that the Health Insurance Portability and Accountability Act (HIPAA) and similar regulations mandate.
Improving compliance to meet government regulations
Providers oversee ongoing efforts including maintenance, auditing, and process improvements to ensure continual compliance. Centralization of patient data, encryption of communications, and reduction of data on client devices are ways that the IT organization can reduce exposure and satisfy government-mandated standards.

Achieving ‘meaningful use’ EHR standards to qualify for incentives
To achieve “meaningful use” status for Medicare/Medicaid incentives, eligible providers must implement and use EHR for all patient encounters.

Comprehensive Citrix solution for healthcare
Citrix understands how federal agencies use desktops and applications to operate more efficiently and effectively and develops virtualization solutions based on the needs of healthcare providers and customers alike. Instead of limiting the IT organization to solely modernize systems and optimize business processes for better operating efficiencies, Citrix makes the IT team relevant to the healthcare entity itself, delivering the flexibility to change on demand and across technical, physical, and agency dimensions.

Delivering desktops and applications as a service
Citrix desktop and application virtualization transforms healthcare IT into an on-demand service by centralizing the management and delivery of EHR apps and clinical desktops, easing the transition to clinical automation, and improving clinical outcomes. It simplifies IT operations by managing a single image of desktops, applications, and servers, accelerating app rollouts and reducing IT operating costs by up to 50 percent.

Reducing costs and complexity
Citrix solutions provide caregivers with powerful information-management tools and a centralized architecture that streamline implementation, administration, and support of new healthcare applications such as EHR and computerized physician order entry (CPOE), as well as upgrades and patches. Because desktops and apps are centrally installed, configured, and maintained on the server instead of on each device, IT staff can deploy them in a fraction of the time and at significantly less expense compared to traditional methods.
Facilitating EHR adoption
Rather than having to manage hundreds or even thousands of different devices, IT staff can simply and quickly install and manage a single desktop and EHR application package in the data center. Virtualized desktops and EHR apps can then be delivered in a matter of minutes, and updates can be made instantly throughout a hospital, medical center, or healthcare system.

Optimizing the user experience
Partnering with Citrix allows agencies to improve both the practitioner and patient experience while keeping protected health information (PHI) secure. Convenience, speed, simplicity, consistency, flexibility, and high quality are all critical to the adoption of online systems that replace paper files and orders. Citrix virtualization gives limitless access from any device, anywhere, anytime.

Addressing government compliance regulations
Citrix solutions enable IT staff to control access to information residing behind the firewall, while giving medical staff the ability to connect to data securely over the Internet. Virtualization features that support compliance include desktop and application processing behind the firewall, standards-based encryption, Secure Sockets Layer virtual private network (SSL VPN) access with advanced access control, password expiry management, enhanced event logging, multifactor authentication, and web application firewall.

Sharing files and collaborating securely
Citrix offers the ability to share data securely with other agencies and reduce staff and clinician training costs and time by providing HIPAA-compliant file sharing and collaboration.

Citrix federal healthcare implementations
Citrix solutions help the following federal healthcare enterprises build simpler and more cost-effective environments that deliver IT as a service and make it easy for clinicians to work in the most optimal way—anytime, anywhere, and on any device.

Veterans Integrated Service Network (VISN)
All VISN locations and hospitals use Citrix application virtualization and delivery for both clinicians and other workers to access their Veterans Affairs health applications (e.g., QuadraMed, VistA) and office applications from anywhere inside the hospitals or remotely.

Veterans Benefits Administration (VBA)
Citrix provides VBA with a standard desktop for its teacher information management system application, used by external entities to support the Post-9/11 Gi Bill (Chapter 33) and for expediting remote training for new hires.

Centers for Disease Control (CDC)
With CITGO (CDC IT on the Go), Citrix enables CDC mobile users to access their published applications and virtual desktops, anytime, anywhere, and on any device.

Defense Health Agency (DHS)
The Application Virtualization Hosting Environment (AVHE) is an DHS initiative to virtualize and centralize major clinical-based EHR applications for delivery to military treatment facilities using a...
software as a service (SaaS) model. AVHE will be used as the mechanism for deployment of applications into all U.S. Department of Defense, U.S. Department of Veterans Affairs, and joint facilities across the federal healthcare enterprise.

**Citrix private healthcare implementations**
Citrix solutions help private hospitals streamline legacy applications, deliver secure mobile use, and access records faster.

**Saint Francis Hospital and Medical Center**
IT leaders at Saint Francis Hospital and Medical Center, an acute care center in Hartford, Connecticut, recognized a growing need to streamline dozens of legacy EHR applications into a unified platform. They upgraded to an EpicCare system running on Citrix XenApp, with Citrix XenMobile providing the security necessary for users to access and update patient records from anywhere, on any device. This virtualized environment facilitates the flow of patient information across the hospital and beyond, helping ensure superior patient care.

**Children’s Hospital of Los Angeles (CHLA)**
As one of the top-ranked pediatric hospitals in the country, CHLA completed upgrades to its Citrix-enabled virtualized environment with high-speed infrastructure, new versions of Citrix XenApp and XenDesktop, and the addition of Citrix NetScaler App Delivery Controller. The results: Clinicians can now access EHR much faster, which improves productivity and patient care.


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**About Citrix**
Citrix (NASDAQ:CTXS) is leading the transition to software-defining the workplace, uniting virtualization, mobility management, networking and SaaS solutions to enable new ways for businesses and people to work better. Citrix solutions power business mobility through secure, mobile workspaces that provide people with instant access to apps, desktops, data and communications on any device, over any network and cloud. With annual revenue in 2014 of $3.14 billion, Citrix solutions are in use at more than 400,000 organizations and by over 100 million users globally. For over 25 years, Citrix has been working with federal, state, and local government organizations to improve performance and efficiency. By transforming the mobile workplace with secure application and data delivery solutions, Citrix provides agencies and departments mobile secure access to government applications, desktops, data, and communications they need on any device, network, and cloud.

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