

# Transforming healthcare IT with user virtualization



Solution overview

## Today's healthcare organizations face many unique challenges as they race to meet Meaningful Use criteria and other healthcare reforms



Leading organizations are focusing on leveraging the American Recovery & Reinvestment Act (ARRA) stimulus funds to update and transform their IT infrastructure. They are relying on their IT departments to help them cut costs while enhancing services.

The combination of the increasingly complex healthcare ecosystem, demanding users (clinicians), federal mandates, and aggressive deadlines, is placing extraordinary pressure on IT departments to deliver operational excellence with limited budgets and staffing resources. Additionally, preparing an outdated IT infrastructure to support the implementation of a new electronic health record (EHR) system and the latest user devices are proving to be a monumental task for many healthcare organizations.

By focusing on the needs of the user directly, rather than a desktop or device, user virtualization provides healthcare IT multiple solutions to meet today's challenges as well as opportunities to improve patient care and increase operational efficiencies.

### Today's healthcare industry challenges

The rapid change in the current healthcare landscape is unprecedented. Key challenges include:

- Delivering high-quality patient care
- Improving clinician experience and productivity
- Meeting regulatory compliance demands and protecting patient data
- Ensuring availability of mission-critical clinician desktops and applications
- Driving IT operational excellence while lowering costs

As intimidating as these challenges may be, they present an opportunity to profoundly change the way IT works within the healthcare organization. User virtualization, when integrated into a healthcare organization's desktop and application delivery systems can help meet these challenges head on.

### What is user virtualization?

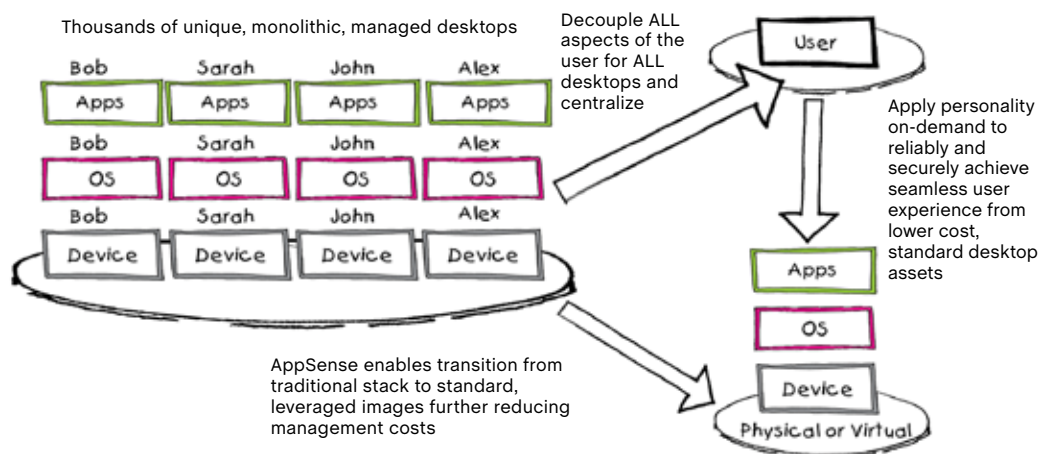
User virtualization ushers in a new era for healthcare IT, by decoupling users from devices, enabling users to work with whichever devices and applications will maximize their productivity, and fundamentally changing the economics of IT.

Isolating user data enables IT to precisely administer users by device, location, or application. The user experience remains secure, predictable, and personalized, with bullet-proof reliability. IT can give users complete freedom of choice to use whichever devices suit them, and deploy a user-specific desktop to any device in any location at any time.

### About AppSense

We are the leading provider of user virtualization technology to enterprise organizations. User virtualization is a way of managing user-specific information independent of the desktop, and applying this information into any desktop (local install, virtualized, published, streamed etc) on-demand. This enables IT to standardize the desktop build, automate desktop and application delivery, and migrate users to new desktops – all while ensuring the user experience is seamless, personal, predictable and easily manageable.

The evolution to componentized desktops:



# Transforming healthcare IT with user virtualization



[AppSense.com/healthcare](http://AppSense.com/healthcare)  
[iwanttoknowmore@AppSense.com](mailto:iwanttoknowmore@AppSense.com)

## User virtualization key benefits for healthcare



### Delivering high-quality patient care

User virtualization enables a consistent and seamless clinician experience across a range of desktop and application delivery mechanisms, regardless of the device or location. This enables IT to deliver clinical information management applications to every device within and even beyond the physical hospital facility and provide improved, predictable and responsive application access to clinicians.

For example, a clinician may need to access a patient's medical record using a virtual desktop or terminal server at the hospital and subsequently view updated medical information from their personal office using a physical desktop. The consistent and seamless user experience delivered enables easy and accurate access to patient data, regardless of the clinician's location or device. This allows for quick and informed decision-making and also improves patient safety by reducing medical errors.



### Improving clinician experience and productivity

User virtualization improves logon times and enables faster application launches. IT can provide an optimized, responsive and high-performance environment by streaming the user personality on-demand and across platforms. Better application performance consequently leads to improved clinician experience and productivity.

Furthermore, by dynamically delivering security settings based on parameters such as location, device and user groups, clinicians can now easily and securely provide patient care in a mobile work environment.

**"AppSense has allowed our physicians to experience a consistent and stable workstation every time they logon. The desktop performs exactly the same despite the PC's year or model."**

Nick Volosin, ISS Director of Technical Services, Kaweah Delta Health Care District



### Meeting regulatory compliance demands and protecting patient data

User virtualization solutions enable healthcare organizations to adhere to industry regulatory and compliance standards such as Health Insurance Portability & Accountability Act (HIPAA) and Payment Card Information (PCI), by ensuring that both patient and payment information are protected with appropriate safeguards in place. IT can selectively restrict user access to applications that contain HIPAA and PCI data and log actions of employees as well as lock-down users to prevent them from being able to print, save, or otherwise take confidential data off-site.

By dynamically delivering security settings based on parameters such as location, device and user group, a high level of security is achieved in a very mobile work environment, allowing IT to provide continued, seamless and remote access to systems and data, while adhering to regulatory and compliance standards.



### Ensuring availability of mission-critical clinician desktops and applications

Given the nature of the services provided by healthcare organizations, there is increasing dependency on the continuous availability of IT systems. User virtualization can serve as a strategic IT tool by enabling business continuity in the midst of disruptive events. IT is enabled to transition to a backup Disaster Recovery desktop infrastructure while preserving the clinician desktop experience and applications. This results in zero downtime and productivity loss.

Further, IT can deliver significant helpdesk efficiencies through tighter change control, self-healing of many common user personality issues, and fast recovery from other issues through user personality snapshot/rollback capabilities. The ability to standardize the desktop and apply user personality on-demand also greatly reduces the traditional downtime associated with OS migration and PC hardware replacement.



### Driving IT operational excellence while lowering costs

User virtualization accelerates the implementation of and compliance with government-mandated new technology programs such as EHR and other Health Information Technology (HIT) initiatives to help healthcare organizations leverage federal stimulus funds and avoid penalties tied to the timely implementation of these systems.

It also enables IT to implement industry best practices that transform existing infrastructure optimization levels toward a more dynamic, core infrastructure model whose benefits include:

- Improved logon times and faster application launches
- Optimized resource utilization and user experience on shared server-based computing infrastructure
- Lower storage costs for virtual desktop infrastructure deployments through a personalized experience standardized, non-persistent desktop images
- Increased responsiveness to security configuration changes and vulnerabilities

Finally, user virtualization enables a user-centric view to devices, thereby removing the burden of per-device, per-desktop management. By managing the user independently of the device or platform, large complex IT projects can be implemented faster and easier, at significantly lower costs and with much better results.

**"The user virtualization solution from AppSense gives us strong platform control and does the heavy lifting with its Active Directory and group policy features."**

Lee Eilers, Remote Access Services Team Lead, CDC

## Conclusion

User virtualization facilitates the move towards a more secure, well-managed, and dynamic core infrastructure model with:

- Significantly less user-related complexity
- Precise control over every user even as the desktop environment becomes more dynamic
- Bullet-proof reliability and predictable user experience
- Freedom of choice as new devices and technologies become available

This reduces overall IT cost and risk, eliminates complexity, improves IT resource utilization and responsiveness and makes IT a strategic asset for the business - one that drives innovation and aligns to changing business needs.