VMware AlwaysOn Point of Care Solution
Transforming the Cost, Quality and Delivery of Patient Care

Enhancing Patient Safety Through Continuous Access to Applications and Data

Healthcare transformation is under way around the world. Digitized medical records and patient data can reduce medical errors, enable fast collaboration and improve clinical outcomes. But if a clinician cannot access patient data or patient care applications because the datacenter or desktop is down, serious consequences can result.

By virtualizing clinical workspaces and hosting them in a private cloud, VMware AlwaysOn Point of Care solution enables healthcare organizations to provide the “last mile” of electronic medical record delivery. This tested and validated solution enables healthcare IT to deliver 24/7 access to patient care applications and digitized patient data—anywhere and from any device.

Improving Patient Care with AlwaysOn Desktops

The AlwaysOn Point of Care solution provides multiple levels of redundancy with no single point of failure. It supports an active-active clinical desktop environment that runs identical desktop images, ensuring that a clinical workspace is always available. If the primary site fails or is compromised through a natural disaster or other outage, clinicians and caregivers can be assured of access to the resources required to do their jobs. Constant load balancing and monitoring route users to the appropriate site in the event of an outage, enabling them to resume treating patients within seconds.

In addition, the solution improves clinician workflow and enables caregivers to spend more time with patients. Their clinical workspace can now follow them from device to device. And they don’t need to struggle to remember passwords or login credentials. Instead, logins are fast and efficient.

Policy-Driven Control and Identity-Based Access

Use of virtualization to provide cloud-based clinical workspaces untethers clinicians from specific devices. A user’s desktop or workspaces are now tied to that user’s identity, so clinicians can use the latest devices—such as iPad tablets—to access their clinical desktops and applications. Healthcare IT can also set policies or restrict access for specific users or groups of users. For example, IT can allow physicians to access patient care applications and data from outside the hospital so they can finish charting patients at home or quickly view a clinical image. Physicians now can make fast, informed initial decisions about patient treatment, even remotely. This granular level of control satisfies the needs of both clinicians and healthcare IT.

AT A GLANCE

The VMware AlwaysOn Point of Care™ solution is a validated reference design that integrates products from VMware and our partner ecosystem. By leveraging mobile, wireless and wired networks, single sign-on, and load-balancing components, the solution monitors IT infrastructure and provides nonstop access to critical patient-care applications and data across endpoints and locations.

KEY BENEFITS

• Tested and validated architectural design for nonstop access to clinical desktops and point-of-care applications
• Constant monitoring and load balancing to ensure 24/7 availability
• Unbounded mobility for a seamless “follow me” desktop experience across devices and locations
• Fast and efficient workflow for clinicians supporting “tap and go” access to shared clinical workstations
• High-fidelity user experience for remote clinical imaging
• Ability to use any device with a USB port to dictate notes
Making Connected Care a Reality Through Cloud-Based Workspaces

Cloud-based clinical workspaces help accelerate the journey to connected care by giving clinicians 24/7 access to the most current patient data and all the resources needed for treating the patient. Access to real-time data leads to better collaboration and comprehensive care plans, which in turn produce healthier outcomes and better patient care.

AlwaysOn Point of Care Solution Components

VMware View® – This industry-leading virtual desktop infrastructure (VDI) solution is the core of the AlwaysOn Point of Care solution. Virtualizing clinical workstations and hosting them in the private cloud enables healthcare IT to easily manage desktops or pools of desktops from a central location and to keep all patient data secure in the datacenter. More than 13,000 customers worldwide trust their desktop infrastructure to VMware View. Find more information at http://www.vmware.com/products/view.

VMware vSphere® and VMware vCenter™ – VMware View includes vSphere and vCenter for Desktops. This is the same virtualization platform used by all Fortune 100 companies. Now you can extend all the enterprise benefits and high-availability features of vSphere and vCenter to your desktops. Find more information at http://www.vmware.com/products/vsphere.

Security and compliance – VMware vShield™ provides best-in-class security for the virtual desktop environment. vShield EndPoint™ with hypervisor-based antivirus protection (available from leading antivirus vendors in the VMware partner ecosystem) makes it easy for IT to maintain virus-free desktops. In addition, the vShield Manager™ compliance module enables organizations to more easily meet compliance requirements through automation. Find more information at http://www.vmware.com/products/vshield.

Replication software – Replication between two sites (View pods) is critical to the solution’s high-availability functionality. Many replication software options—from file- to block-level replication—can be used for this purpose. The solution architecture uses both master-image replication and replication for user and profile data.

Application delivery controller and load balancer – Application delivery controllers (ADCs) are critical components in the AlwaysOn desktop design. In addition to standard load balancing, ADCs provide intelligent routing based on source IP addresses, geolocation or latency. This ensures that users are always routed to their preferred site and to their desktop session. If a site failure occurs, the ADC ensures that the connection is routed to the next available site.

Single sign-on – Single sign-on (SSO) software and proximity cards or badges give IT access control for applications and easy reporting for compliance. Using an SSO solution with AlwaysOn Point of Care is key to streamlining and enhancing the end-user experience. Clinicians log in only once using the tap of a card, swipe of a finger, or username and password. Credentials then pass through to all their applications, eliminating the need to enter multiple passwords and saving an average of 15 minutes per shift.

Optional Component

Management – With the environment spread across two sites, streamlined management and a single-pane dashboard become a necessity for IT to effectively manage the environment. VMware vCenter Operations Manager for View® provides the management and dashboard functionality required at each site for efficient and seamless management by the IT team. Find more information at http://www.vmware.com/products/desktop_virtualization/vcenter-operations-manager-view/overview.html.

Learn More About the AlwaysOn Point of Care Solution

For information about how the AlwaysOn Point of Care solution is built and validated, read the validation document at http://www.vmware.com/solutions/industry/healthcare/point-of-care.html

Call VMware for an AlwaysOn Point of Care assessment today. Our experts will help you determine the opportunity for your organization—and chart your course to AlwaysOn Point of Care clinical desktop access. For more information or to purchase VMware products, call 1-877-4VMWARE (outside of North America, +1-650-427-5000), visit http://www.vmware.com/products or search online for an authorized reseller.