EMC VDI Solution For Epic EMR With XtremIO

SPEED, AGILITY AND CONVERGED INFRASTRUCTURE FOR EPIC DESKTOPS

BEST USER EXPERIENCE AT THE LOWEST COST

Within End-User Computing, Virtual Desktop Infrastructure (VDI) for Epic EMR environments holds the promise not only of consolidating desktops into the data center for improved manageability, efficiency, and security, but also shaping and evolving next-generation services such as bring-your-own-device, Windows on Mobile, and workforce mobility. However, implementing large-scale VDI environments presents many challenges. Administrators must rapidly roll out both persistent and non-persistent desktops for all users— task workers, knowledge workers, and power users— without compromising the overall outstanding Epic user experience.

In addition, a VDI solution must be simple to deploy, manage, and scale with substantial cost savings over physical desktops. Storage is a critical component of an effective VDI solution, and XtremIO completely transforms storage from a traditional bottleneck into a powerful enabler for VDI.

XtremIO storage redefines the core desktop/application image data storage for VDI deployments and integrates tightly with EMC storage systems managing long-term and archive storage needs. EMC is ushering in a new era of unparalleled user experience, unprecedented simplicity, and reduced costs. XtremIO is ideal supporting Epic databases in your datacenter as well as the largest Epic VDI deployments at your desktop/bedside. As an Epic customer, you can now utilize XtremIO's flash-specific architecture that linearly scales performance and capacity in tandem, resulting in tremendous workload consolidation and cost reduction across your entire Epic IT infrastructure.

UNPARALLELED EPIC USER EXPERIENCE

XtremIO delivers massive, consistent I/O performance to ensure that every desktop provides an ideal user experience. EpicCare responds instantly and consistently, faster than on physical desktops. The user experience is unaffected by boot storms, antivirus scans, suspend/resume operations, application peak demands, user activity, or used capacity on the XtremIO array. XtremIO delivers any desired level of performance from hundreds of IOPS to peak rates of thousands of IOPS per desktop.

SCALE FROM PILOT TO PRODUCTION QUICKLY

XtremIO empowers you to move easily from pilot to large-scale production. In contrast to all other VDI storage solutions, XtremIO enables you to and quickly deploy linked clones, full clones, and persistent and non-persistent desktops, or combinations of these to meet business requirements with no concessions for storage performance.

REDEFINE

EMC²

SIMPLE TO MANAGE

Manage your Epic VDI environment with existing desktop management tools and paradigms without special changes. With the EMC Virtual Storage Integrator (VSI), XtremIO provides the ability to easily deploy Citrix XenDesktop or VMware Horizon View virtual desktops within seconds. Pools of hundreds of desktops can be set up and ready for user logins within an hour. XtremIO integrates VMware VAAI (vStorage APIs for Array Integration) for inline data reduction and in-memory metadata for rapid rollout of full clone desktops from within VMware vSphere. Through tight integration with VMware, XtremIO enables offloading and acceleration of common tasks to its all-flash arrays, and easily supports all types of users and mixed workloads.

XtremIO delivers performance that scales as the number of your desktops grows. Leveraging unique in-memory provisioning, XtremIO's scale-out design easily supports additional performance and capacity requirements required by an Epic environment, automatically delivering more performance to existing desktops. This keeps the entire environment balanced as it grows and ensures that every Epic user always gets the best desktop experience.

GET ALL-FLASH PERFORMANCE AT BETTER THAN PHYSICAL DESKTOP PRICE

XtremIO's always-on, real-time inline data reduction technology dramatically shrinks and compresses the amount of storage capacity required to support Epic VDI environments. Thousands of virtual desktops can be deployed with only a few terabytes of flash. For the first time, full clone desktops can be deployed easily and cost-effectively, allowing existing desktop management tools and applications to be re-used in virtual desktop environments. Non-persistent desktops can also be used alone or in combination with persistent desktops. Administrators no longer need to de-feature desktops or be limited to non-persistent desktops. Every desktop in your Epic environment can be fully functional, customizable, and affordable.

With XtremIO, an Epic VDI environment supporting thousands of persistent and non-persistent desktops is easily supported on a compact and powerful 4U flash array, with full high availability, unparalleled user experience, and the lowest cost per desktop.

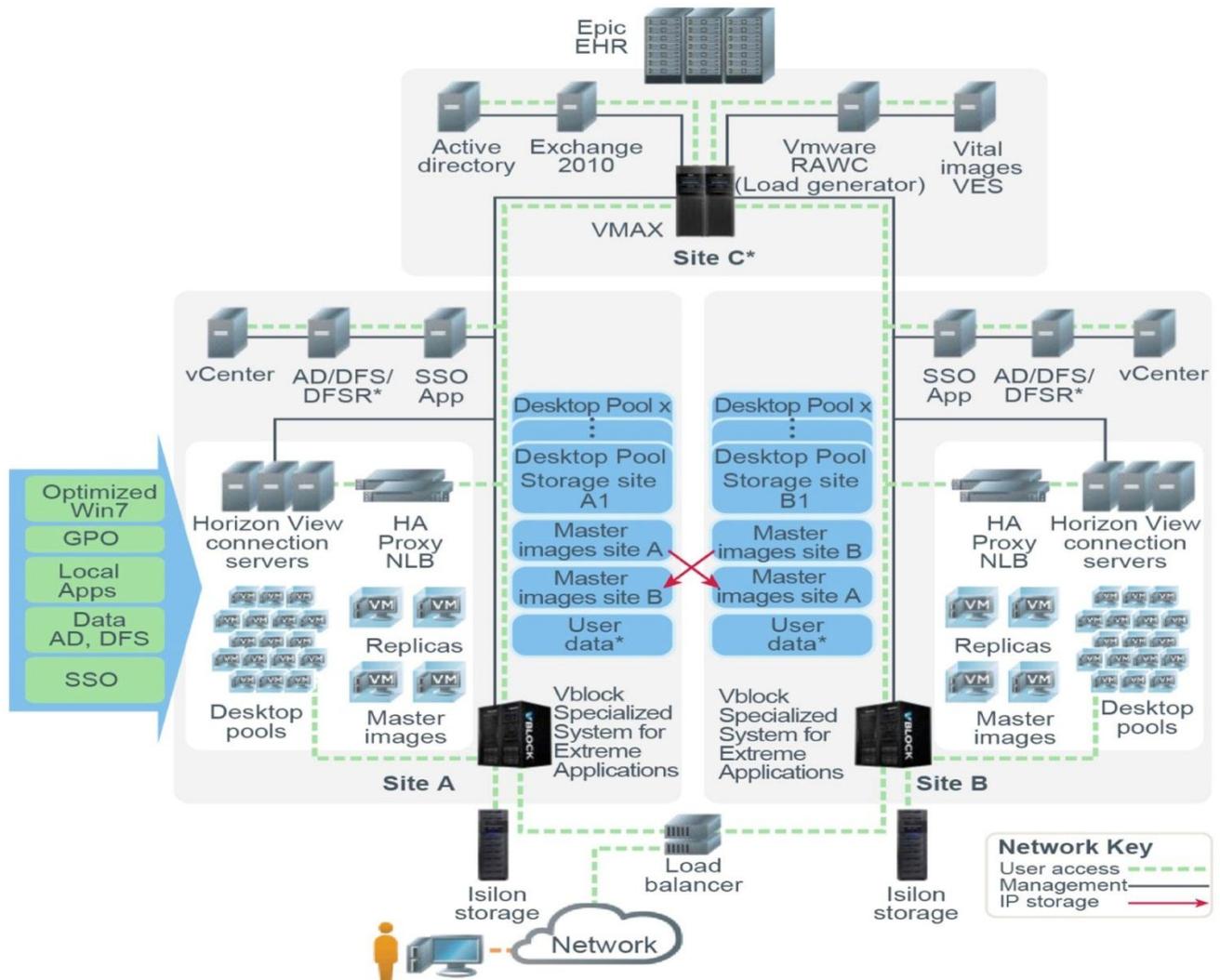| XTREMIO ADVANTAGE	VALUE IN EPIC VDI ENVIRONMENTS	BENEFITS
Consistent massive IOPS, low latency	Minimize boot storm issues, consistently fast access to patient data	Highly productive caregivers, adopt VDI at scale, improve productivity, reduce helpdesk calls
Deployment flexibility	Use any combination of persistent and non-persistent desktops	Provision based on Epic's and your hospital's requirements, not infrastructure limits
Operational simplicity	Scale from pilot to large-scale production	Achieve success with VDI projects
Scalability	Simple and rapid in-memory provisioning Grow to any number of desktops within the same storage system	Roll out or upgrade hundreds of desktops in minutes Achieve any deployment scale or desired IOPS/desktop performance level
Efficiency	Reduce storage and datacenter footprint through data deduplication, data compression and high density storage.	Achieve best rack space per desktop and power consumption per desktop
Lowest cost per desktop	Attain lower costs than physical desktops	Facilitate project justification

LEVERAGE THE FULL VALUE OF EMC

As part of the EMC portfolio, XtremIO allows for integration with your existing EMC solutions supporting your Epic EMR environment, like backup and recovery solutions, storage for user data, and management models for low operational expenses.

XtremIO systems are available on a stand-alone basis or in a converged compute, network, and storage infrastructure offering from VCE or in a VSPEX configuration from an EMC Partner, all ready to deploy VDI at proven scale.

The EMC architecture for Epic VDI environments depicted in Figure 1 below is delivered on a VCE Vblock Specialized System for Extreme Applications, specifically designed for Epic EMR desktop environments.

Figure 1. Integrated and Virtualized Desktop Environments

REDEFINING TRUSTED HEALTH IT

EMC has been very successful in delivering Epic IT infrastructure that satisfies both the demands of the Epic application and the needs of Epic users. We are redefining trusted health IT with our Epic customers at more than half of Epic customers and most of the largest Epic installs in the U.S. You can trust EMC, working with our partners, to deliver continuous innovation for your Epic EMR-- in your datacenter and on the desktop, for your other clinical applications, and across your enterprise-wide IT infrastructure.

CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller— or visit us at www.emc.com.

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