



Solving Healthcare IT Challenges with DataCore Software-Defined Storage

Empowering Real-Time, Always-On Data

Today's hospitals are benefitting from an explosion of information technologies that is ushering in a new era of healthcare. With these advanced technologies, significantly more data is being generated, from a much wider variety of sources, and at a more frequent pace. All of this data must be stored, shared, and protected.

With data the lifeblood of healthcare, IT departments are challenged to adopt new storage and management strategies to handle the deluge of data. The skyrocketing costs to achieve continuous data availability, cope with exponential data growth, and provide timely data access rank among the most pressing challenges facing healthcare IT organizations today.

That is why a growing number of healthcare institutions are deploying DataCore's software-defined storage platform. Only DataCore enables today's hospitals and health systems to address mission-critical healthcare IT challenges while maximizing the availability, performance, and utilization of IT resources – allowing them to enhance patient outcomes while keeping costs low.

DataCore Software-Defined Storage: The Ideal Platform to Address Today's Healthcare IT Needs

DataCore software is the cornerstone of the next-generation, software-defined data center. A complete, centrally managed solution that costs a fraction of expensive hardware alternatives, DataCore software abstracts and automates the data services and management of underlying storage capacity to free customers from vendor lock-in and deliver unrivaled performance and data protection. It can be applied to a critical part of the IT environment initially, then scaled out to cover the entire storage infrastructure in affordable and manageable steps. The software is independent of the storage system and resolves the incompatibilities of different generations of storage equipment, diverse models, and multiple manufacturers.

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High availability was the first and foremost reason for going with DataCore – and for continuing with it. Now, everything that is mission-critical to the running of the hospital is supported by the DataCore software-defined storage platform. Users not only receive faster access to data, but they benefit from more server capacity as well.

– Roger Fe de Leon, head of the storage group at Maimonides Medical Center

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On-Demand Scalability

DataCore's software-defined storage platform enables seamless, on-demand scale up of storage infrastructure to handle the growing volume of healthcare data due to applications such as EHR and PACS and data retention regulations (HIPAA).

Simple Management

DataCore simplifies management of all storage resources, freeing IT to deliver valuable new services to address emerging healthcare trends more quickly and easily.

Cost-Effective

DataCore lowers costs by virtualizing storage resources, which removes the constraints of such elements as data locations, data types, applications, or hardware types, and combines them all in one big pool of data.

Always-On Reliability

DataCore ensures continuous availability of data by enabling immediate, automated recovery of critical healthcare data, with no risk of downtime.



CHALLENGE	HOW DATACORE SOLVES IT	KEY FEATURES
<p>Consolidate and manage healthcare IT data from disparate systems.</p>	<p>DataCore abstracts and automates the data services and management of underlying storage capacity.</p>	<p>Centralized Management Single-pane management across storage devices from all vendors and models, enabling Infrastructure-wide control and monitoring of pooled storage resources from one console.</p> <p>Storage Pooling Consolidates like or unlike disks – enabling cost-efficient tiering of resources by price/performance and capacity.</p> <p>Thin Provisioning Increases storage utilization and enables cost savings by allocating just enough space just-in-time.</p> <p>Data Migration Transparently moves and migrates data; allows non-stop business operations during data center relocations, VM moves, system refreshes.</p> <p>Deduplication/Compression Reduces space needed to store multiple copies of the same data.</p>
<p>Safeguard healthcare data and applications from cyberattacks, system outages, data loss, natural disaster, and human error.</p>	<p>DataCore ensures your infrastructure is always available, no matter what the issue, by mirroring your data transparently, automatically, in real time.</p>	<p>Sync Mirroring Delivers zero-downtime, zero-touch high availability by continuously mirroring active/inactive copies between physically separate locations accessible to local/metro clusters as shared disks.</p> <p>Asynchronous Remote Replication Delivers fast, simple, remote-site disaster recovery and migration; keeps distant copies up-to-date without impacting local performance.</p>

CHALLENGE	HOW DATACORE SOLVES IT	KEY FEATURES
<p>Ensure ultra-fast application response times and real-time data availability for life-critical healthcare applications.</p>	<p>DataCore enables you to form a transparent virtualization layer across diverse storage systems to maximize the availability, performance, and efficiency of healthcare application workloads (EHR, PACS).</p>	<p>Continuous Data Protection and Recovery Businesses can roll back to a previous point-in-time prior to a disaster, virus attack, or other disruptive event without doing an explicit backup.</p> <p>Snapshots/Backups Captures point-in-time images quickly across storage devices; Efficiently clone system images, speed up recovery, and enable off-line analysis.</p> <p>Parallel I/O Maximizes utilization of multi-core processors to dramatically cut latency and removes I/O as the bottleneck in application performance.</p> <p>High Speed Caching Accelerates disk I/O and business-critical application performance by empowering existing storage assets.</p> <p>Auto-Tiering Makes intelligent and automatic usage optimizations based on cost and performance across different types of storage.</p> <p>Random Write Accelerator Significantly increases performance for workloads characterized by many random writes, such as frequently updated databases, ERP & OLTP systems.</p> <p>Quality-of-Service Controls Ensures high-priority workloads meet SLAs with predictable I/O performance by regulating resources consumed by lower priority requests.</p>

CHALLENGE	HOW DATACORE SOLVES IT	KEY FEATURES
<p>Scale storage as needed – easily, instantaneously, inexpensively, and non-disruptively.</p>	<p>DataCore software enables you to improve performance without requiring you to rip and replace your system. By providing a virtual storage pool with existing and new storage systems that dynamically assigns workloads to optimal storage tiers based on performance requirements, DataCore lets you scale up or scale out your applications while efficiently using all your resources.</p>	<p>Parallel I/O Maximizes utilization of multi-core processors to dramatically cut latency and removes I/O as the bottleneck in application performance.</p> <p>High-Speed Caching Accelerates disk I/O and business-critical application performance by empowering existing storage assets.</p> <p>Auto-Tiering Makes intelligent and automatic usage optimizations based on cost and performance across different types of storage.</p> <p>Storage Pooling Consolidates like or unlike disks – enabling cost efficient tiering of resources by price/performance and capacity.</p> <p>Thin Provisioning Increases storage utilization and enables cost savings by allocating just enough space just-in-time.</p> <p>Data Migration Transparently moves and migrates data; allows non-stop business operations during system refreshes.</p>

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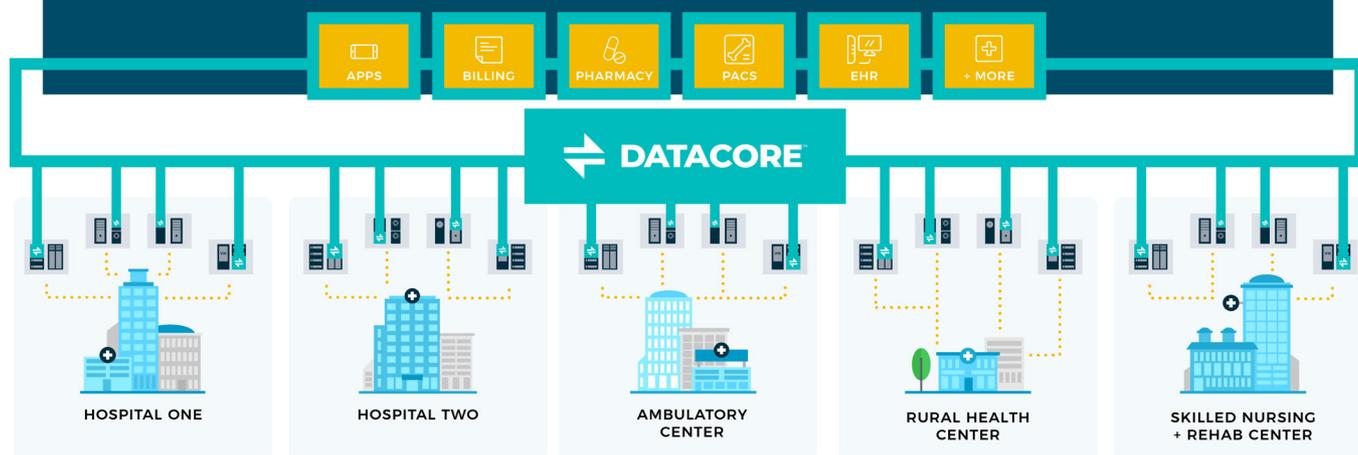
The fact is that we are not tied to a particular vendor. We can always just get the best storage for what we are trying to accomplish without having to learn a new management system to for every model.

– Dustin Fennel, chief information officer at Mission Community Hospital

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Centrally manage your storage assets, and ensure faster workloads, higher availability, and lower overall total cost of ownership with DataCore.

As hospital systems expand and leverage new locations and software to deliver and coordinate care, consolidating and managing all of the associated data can be extremely challenging. DataCore virtualizes storage resources, removing the constraints of such elements as data locations, data types, applications, or hardware types, and combines them all in one big pool of data.



About DataCore Software

DataCore is the authority on real-time data. The company pioneered [software-defined storage](#) and has now expanded its technology leadership to [hyperconverged](#) infrastructures. DataCore empowers IT organizations to achieve always-available, high-performance and highly efficient data. Its patented technology eliminates storage bottlenecks with adaptive parallel I/O optimization, enables zero-downtime synchronous mirroring, and provides a true hardware-agnostic architecture – resulting in flexibility, resource efficiencies, and cost savings.

DataCore Software is the cornerstone of the next-generation, software-defined data center. DataCore's value has been proven in more than 10,000 customer deployments across traditional, hyper-converged, cloud, and hybrid environments. Visit www.datacore.com or call (877) 780-5111 for more information.

For additional information, please visit datacore.com or email info@datacore.com



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