



Healthcare Data Management for the Hybrid Cloud

Manage Patient Data Seamlessly—With Access Where You Need it Most

Technology is reshaping how healthcare works. NetApp's vision for the future of data management is to create a Data Fabric that spans your entire IT landscape. Although many healthcare organizations have been cautious to embrace cloud-hosting alternatives for workloads that contain patient data, growing business demands now require IT organizations to consider the cloud as an alternative—with many implementing a cloud-first strategy to address the need for increased agility and reduced cost.

The Data Fabric enabled by NetApp takes the worry and complexity out of managing and maintaining control of clinical data across private and public cloud resources. This allows healthcare organizations to adhere to internal data security policies, maintain compliance with HIPAA and HITECH requirements, and promote greater innovation and IT responsiveness. With a Data Fabric, you achieve:

- **Choice** to select the correct mix of private and public cloud services that will result in providing patients with the most secure and cost-effective services.
- **Data mobility** so your data flows seamlessly to wherever your clinicians need it most—across flash, disk, and private and public clouds. Manage data and control performance no matter where data resides.
 - Identify workloads that can be more efficiently run in the public cloud.
 - Quickly launch new services based on cloud computing, with the flexibility to bring back on premises once it becomes business critical, or if volume-based public cloud hosting costs escalate too quickly.
- **Speed** that allows you to innovate faster with fewer resources to improve patient outcomes. Meet changing business demands quickly and provide new opportunities to create services that improve clinical care.

NetApp helps healthcare organizations integrate on-premises enterprise-class data management and control with the flexibility, speed, and economics of the public cloud. Advances in technology and cloud computing provide key capabilities to help the healthcare industry redesign storage systems to keep pace with tremendous data growth in clinical data, and help you do more within tight budgets. With the ability to securely share, store and maintain control of your data—including big data from multi-ology images, diagnostic reports, and other critical patient-care information systems—the Data Fabric provides healthcare with the tools to continue to transform patient care. This is paramount, whether the data is retained in your private cloud, on-premise data center, or with a major cloud service provider.

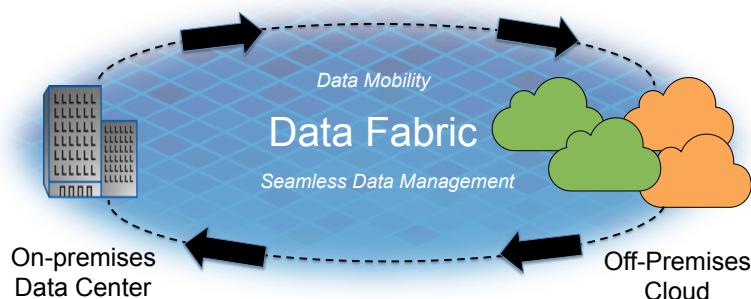
Over 50 industry-leading cloud-hosting providers are part of the NetApp Service Provider Program, offering cloud services built on NetApp. Healthcare organizations benefit from tremendous choice as they pursue a Data Fabric that helps transform to a hybrid cloud strategy. Select workloads that benefit from efficiencies of public or hyperscale cloud providers, and strategic workloads to retain within private cloud-architected data centers.

Protect Clinical Data on Your Terms – Wherever it Resides

The hybrid cloud requires new ways to reliably protect, recover and archive your clinical and business data without introducing complexity, cost and risk. The Data Fabric vision provides customers with solutions and partnerships to protect data from loss, provide business continuity, and ensure the right mix of cloud resources.

Healthcare IT can safely span data centers and clouds, while retaining ownership and control of their data, and demonstrate compliance.

Two Distinct IT Worlds are Colliding to Become the Hybrid Cloud



NetApp delivers unique capabilities to build a private cloud infrastructure. By combining our industry-leading capabilities to deliver highly virtualized enterprise storage containers based on NetApp® clustered Data ONTAP®, our deep integration with VMware® vSphere® and Cisco® UCS, and the NetApp® OnCommand® management automation and integration, healthcare organizations can deliver a self service environment with resource elasticity, and automate provisioning, workflow and orchestration capabilities.

NetApp Solutions Deliver on Data Fabric Vision	
NetApp® FAS Systems	<p>Adapt faster to changing business needs while achieving core IT requirements for uptime, scalability, and cost efficiency.</p> <ul style="list-style-type: none"> Realize consistent application performance across a broad range of SAN and NAS workloads Leverage simplified management and proven cloud-provider integration to deploy in your data center or hybrid cloud. Nondisruptive operations simplify long-term scaling and improve uptime. Reduce capacity utilization and improve long-term ROI via proven storage efficiency and twice the price/performance of the previous generation.
NetApp® All Flash FAS	<p>Combine all-flash performance with unified data management from flash to disk to cloud.</p> <ul style="list-style-type: none"> Run database applications up to 20 times faster with Data ONTAP® FlashEssentials, integrated flash-optimization technologies. Reduce server and database licensing costs by 50% through increased CPU utilization driven by flash performance. Eliminate performance silos and forklift upgrades via nondisruptive scale-out and software-defined access to flash.
NetApp® Private Storage	<p>Use multiple, industry-leading clouds (Amazon Web Services, Microsoft Azure) while maintaining complete control over PHI data on dedicated, private NetApp storage.</p>
NetApp® E-Series	<p>Meet your demanding performance and capacity requirements without sacrificing simplicity and efficiency, supporting:</p> <ul style="list-style-type: none"> High-IOPS mixed workloads and databases, High-performance file systems Bandwidth-intensive streaming applications
NetApp® AltaVault®	<p>Keep patient data safe and compliant in the cloud. Cloud-integrated storage speeds recovery and reduces risk, enabling you back up data with security to any cloud.</p>
NetApp® Cloud ONTAP™	<p>A software-only storage appliance that delivers the #1 universal storage management platform—from on-premises data center to the cloud.</p>
NetApp® OnCommand® Management	<p>Delivers the visibility to achieve common data management across resources in the Data Fabric, capitalizing on the power of the clustered Data ONTAP® storage operating system.</p> <ul style="list-style-type: none"> Reduce complexity using a unified storage management approach. Automate workflows to optimize storage efficiency and minimize IT spend. Extend data management and service delivery with open integration model
NetApp® Data Protection Solutions	<p>NetApp® data protection solutions work within the Data Fabric to make sure your data is available—when and where you need it.</p> <ul style="list-style-type: none"> Integrated data protection with the unified, scale-out of Data ONTAP® storage platform Backup and recovery for NetApp and heterogeneous storage, including cloud backup storage Disaster recovery for synchronous and asynchronous replication in the data center, remote offices, and the cloud Data archiving—either on premises or in the cloud Compliance solutions to meet stringent data protection regulations
NetApp® Encryption Solutions	<p>Remain protected, compliant, and in control. Working with partners, NetApp delivers a comprehensive portfolio of encryption solutions to secure confidential data at rest and use centralized encryption key management across physical and virtual data centers, disaster recovery sites, and cloud infrastructures.</p>
	<ul style="list-style-type: none"> NetApp Storage Encryption NetApp AltaVault NetApp E-Series SafeNet KeySecure