NetApp Solution for Enabling IT as a Service for Healthcare Organizations

KEY FEATURES

NETAPP SOLUTION FOR ENABLING IT AS A SERVICE

Today’s healthcare environments are faced with providing a higher quality of service but with stagnant revenue growth, higher resource costs, and more regulation around patient data management. IT departments have to assimilate these increased service requirements into limited or even shrinking IT budgets. With double-digit data growth, how can IT departments meet the increased demand from government mandates and clinical needs with fewer dollars? How can CIOs improve their clinical solutions while managing an increased demand for resources, equipment, building needs, electricity, and network growth with smaller budgets? Many hospitals are considering IT as a service (ITaaS) as a way to meet some of these needs.

THE NETAPP DIFFERENCE

Healthcare customers throughout the United States use NetApp for our “go beyond” approach to ITaaS, data center efficiency, provisioning of new business applications, storage for virtual and physical servers, backup, and more. The NetApp® ITaaS solution provides nondisruptive availability of critical business data and repeatable IT infrastructure library (ITIL) processes. That lets you deliver new applications and capabilities in a modular fashion with confidence while decreasing overhead cost and increasing efficiencies to patient care.

Lower your cost structure this quarter
Realize savings immediately with an integrated reference architecture with OS and application standards. Improve data center efficiency with a proven project delivery methodology to restructure the role of storage and data management.

Slash your time to deploy critical applications
Inflexible storage tiers are a bottleneck for providing critical data and applications in a timely manner. Free storage administrators from labor-intensive management tasks and empower them to become policy administrators. Activate your storage and new applications faster than ever. Deliver rapid and reliable ITaaS across all application tiers with an infrastructure that scales out with ease.
“We currently allocate just 0.5 FTE to the management of more than 145TB of NetApp storage. Before we implemented the VMware® on NetApp infrastructure, our IT staff spent 70% of their time on backup/recovery processes, routine server and storage administration, and firefighting. Now it averages just 10%, so with a staff of seven we’ve effectively gained back four FTEs who can proactively work on fine-tuning performance and projects of higher value. We’ve seen a boost in team morale as the stresses of the old environment have been replaced by a calm confidence in the abilities of the solution.”

Steve Wilkes
Systems Manager, Corporate IT, Health Informatics Service,
Nottinghamshire Healthcare, NHS Trust

Deploy with confidence
Traditional approaches require the acquisition of storage to meet anticipated needs that often never materialize. This “overprovisioning insurance” is costly. Now you can complete frequent full-scale infrastructure testing with limited-scale cost. The combination of our service-oriented infrastructure, service management framework, and delivery methodology allows you to test more and more often to deliver a higher-quality IT environment.

Remove storage from your risk radar
Minimize business risk while rapidly building and deploying a dynamic data center with NetApp Professional Services and Authorized Professional Service Partners (APSPs). Our service management framework and strongly typed architecture have been deployed worldwide in customer data centers that support hundreds of different applications.

THE CHALLENGE
As you strive to keep pace with ever-expanding data growth from picture archiving and communication systems (PACS), electronic medical records (EMRs), computerized physician order entries (CPOEs), lab activity, and so on, your enterprise suffers higher costs and lower productivity because of an inflexible IT architecture. Your underlying technology prohibits your IT organization from effectively managing costs and responding quickly to the new healthcare demands.

BIG-PICTURE DESIGN WITH INCREMENTAL DEPLOYMENT
Healthcare organizations that turn to server virtualization to solve these problems can guarantee their success by including the NetApp ITaaS solution. NetApp delivers a complete, scalable, and cost-effective storage solution that meets data management and security requirements for healthcare systems and network enterprises. These storage solutions provide a solid foundation for private and public healthcare cloud services.

The NetApp ITaaS solution is designed to ITIL standards. ITIL defines a service catalog as a list of services that the IT organization provides to its users. Your services and associated service-level agreements (SLAs) are supported through policy-based provisioning and protection in the NetApp ITaaS solution.

You can select the order of deployment for business applications and capabilities within this tested and proven framework. Each incremental step contributes to achieving large cost reductions, responding far faster to new business requirements, and reducing risks related to protecting data assets.

EFFICIENCY AT THE CORE
Optimization and efficiency are the main pillars of an agile, high-performance infrastructure. Our software technology and storage architecture meet a broad range of storage and data management needs.

You can select your multiprotocol support (NFS, CIFS, iSCSI, or FCP) over Fibre Channel and Ethernet storage networks to help preserve your investments in storage infrastructure while optimizing performance, availability (99.999%² and beyond), and capacity against cost constraints. Our customers have successfully deployed hundreds of petabytes over Ethernet networks optimized and designed for storage traffic and tiered to functional SLA requirements. Through careful design, the high performance and low latency of a Fibre Channel SAN network are
achieved over Ethernet, but with substantially lower costs, greater simplicity, and scalability.

Our leadership in Ethernet storage and our partnerships with leading networking vendors enable the seamless integration of a unified fabric with Fibre Channel over Ethernet (FCoE) and Enhanced Ethernet in the data center. Your NetApp ITaaS solution leverages preprovisioned systems for all your workloads to meet SLAs for a wide range of applications.

**THE SOLUTION**

The NetApp ITaaS solution resets the baseline of hard costs to achieve a new efficiency starting point. (Refer to Figure 1.) We provide a service catalog with a menu of options that are defined by your storage team to tailor a set of dynamic data centers with a fixed set of policies. The service catalog is built on an infrastructure that has been consolidated to protect FC SAN investments but allows one pool of assets to adapt to the changing needs of business application owners. You can reduce data storage costs by 60% or more by consulting with business application owners to right-size the levels of storage provisioning, backup, and disaster recovery to meet SLAs for:

- Business applications
- Databases
- Messaging and collaboration
- File services
- Engineering applications
- Digital media content services

**YOUR JOURNEY TO THE DYNAMIC DATA CENTER: OUR PROVEN APPROACH**

NetApp experts and Authorized Professional Service Partners will join with your IT group to help you deploy applications faster, lower TCO by up to 47%, and save up to 50% in data center costs for dramatic storage efficiency improvements.³

We base our methodology on best practices from large-scale deployments:

- **NetApp fast-start customer workshop.** Our two- to four-day workshop provides an objective evaluation of your current capabilities and business needs and identifies your desired path to achieve maximum agility and data center cost savings.
- **Assessment.** For deeper analysis and further validation, our experts work with you to get your environment ready for change. We examine strategic business objectives and tactical storage requirements and create a TCO study to incorporate into your business and capacity plan.
- **Consultation.** We deliver storage and network architecture blueprints detailing the solution design, testing, provisioning, installation, activation, operating system and application storage standards, and training and lifecycle needs, including maintenance, support, and storage allocation.
- **Deployment.** Our professional engineers and application experts build, install, test, and activate the storage solution and manage the organizational changes.
- **Management.** Storage infrastructure depends not only on good design and solution implementation, but also on scalable processes. Processes based on strong configuration management principles and repeatability are key to reaching economies of scale. We use the NetApp service management framework to run the storage infrastructure efficiently, in accordance with defined templates, processes, and procedures, to sustain the benefits of the solution. The framework also helps IT teams better understand costs and reduce fixed costs wherever possible.
Truly unified infrastructure to enable today’s dynamic data center

NetApp offers the industry’s broadest family of unified storage systems and data management software. Our solutions simplify data management while leveraging existing investments in mixed-vendor storage arrays. In study after study, NetApp is the TCO leader, which means you save more with us.

The typical NetApp ITaaS solution includes:

• MultiStore® software, to provide secure partitioning of network and storage resources so that you can consolidate multiple domains
• NetApp FAS storage controllers, which integrate easily into complex enterprises through our unified storage architecture with multiprotocol support (FCP, IP, iSCSI, NFS, CIFS, and FCoE
• Application integration through SnapManager®, to automate complex and time-consuming tasks such as backup, recovery, and cloning
• Open storage support through the use of NetApp V-Series solutions to extend the benefits of simplified data management to your existing storage arrays

• Advanced data management functionality through software such as Snapshot®, FlexClone®, FlexVol®, SnapMirror®, SnapRestore®, SnapVault®, deduplication, Protection Manager, Provisioning Manager, and MetroCluster™ (optional)
• SANscreen® to extend data center automation to storage

WHY NETAPP?

For more than a decade, a long list of large enterprises in financial services, healthcare, telecommunications, energy, high tech, and manufacturing have placed their trust in NetApp to capitalize on our extensive experience. Our people, processes, and technology deliver ideas and innovative solutions that will return dollars to your bottom line immediately.

Our credentials include:

• More than 5,000 global customers
• An extensive list of delivery partners
• Worldwide strategic global technology partners
• Thousands of Professional Services storage experts
• Thought leadership for Technology Professional Services Association (TPSA) and Storage Networking Industry Association (SNIA)

We have helped global enterprises transform their IT infrastructures, leading to significant business benefits such as:

• Avoiding cuts to the organization
• Improving resource utilization
• Consistently meeting SLAs
• Establishing a predictable cost model for the future
• Increasing productivity

We look forward to helping you create an infrastructure that will serve as the foundation of a high-performance business to support your evolving healthcare goals.

ABOUT NETAPP

NetApp creates innovative storage and data management solutions that help you accelerate business breakthroughs and achieve outstanding cost efficiency. Discover our passion for helping companies around the world go further, faster at www.netapp.com.

1, 3, 4 Benefit realized from published customer case studies and Oliver Wyman TCO report.