

APPLICATION SOLUTIONS

NETAPP FOR MECHANICAL DESIGN ENVIRONMENTS

KEY FEATURES

Unmatched Collaboration for Mechanical Engineering and Design Teams

Engineering and design teams can share files across all platforms through native NAS (NFS and CIFS), SAN, and iSCSI support, allowing maximum collaboration.

Breakthrough Performance and Scalability

Enable nondisruptive capacity expansion and quick performance upgrades from entry-level to high-end configurations.

Highest Availability

Continuous data availability meets the needs of mechanical design environments.

Unrivaled Productivity

Manage increasing storage needs and support growing engineering, design, and production teams with ease, enabling them to focus on their core competency—creating the next big innovation.

Maximize Asset Utilization

NetApp FlexVol® technology pools storage resources automatically and enables engineering, design, and production teams to allocate storage on demand.

More Flexibility

The Data ONTAP® operating system combines the “just-in-time” storage advantages of thin provisioning with policy-based control for optimal application-level flexibility.

Leading Mechanical Design Teams Rely on NetApp Storage to Reduce Cost, Accelerate Innovation and Time to Manufacturing

MECHANICAL DESIGN STORAGE CHALLENGES

Whether yours is a large manufacturing operation or a blossoming enterprise, you are aware of the data management challenges your company faces daily. You recognize the need to support globally diverse engineering and design teams to enable them to work together more effectively. The need for fast and reliable access to your 3D models, simulation results, and historical designs is critical for helping accelerating innovation and time to market.

How will you balance your need for reliable, high-performance, high-capacity storage with ever more demanding cost constraints?

Understanding and addressing your storage and data management challenges enable your mechanical design and production teams to speed up delivery of your products and at the same time drive down your costs. In today's highly competitive global market, leading manufacturing companies rely on Network Appliance™ storage solutions to help them accelerate time to manufacturing and to reduce their overall production costs.

ACCELERATING MECHANICAL DESIGN INNOVATION AND TIME TO MANUFACTURING

Data management issues can delay manufacturing projects by days, weeks, months, or even years, greatly hindering

your company's ability to capitalize on your investments in an aggressive time frame. With NetApp as your storage solution partner, you have a data management plan in place that is as good as your business plan. Our storage solution ensures consistent peak performance, enables collaborative development environments, and delivers high availability for your mechanical design projects. Without these critical components, you lose your competitive advantage and slow down your team's ability to innovate.

Breakthrough performance and modular scalability. As performance and capacity needs grow for mechanical design environments, the storage infrastructure can be expanded independently of the server load. Using FlexClone™ volumes, regression test environments can be quickly created by cloning the production environment, allowing more QA cycles during the testing phase and therefore bringing a high-quality product to market in a much shorter time. Engineering and design teams can have a single storage device catering to multiple mechanical design application servers. NetApp offers mechanical design environments the ability to seamlessly scale from terabytes to multiple petabytes of capacity while scaling the performance linearly. This flexibility enables your storage infrastructure to grow with your engineering and design teams without disruption.

“The NetApp storage solution’s ability to reduce the complexity of working in a heterogeneous environment, along with its reliability, and high performance were the key factors in our selection process. Our engineers and designers were impressed with the flexibility and manageability of the NetApp storage system, which significantly helped with our decision to choose NetApp.”

JOHN CROWLEY Director of Technical Infrastructure, UGS

Unmatched collaboration for mechanical design engineering and design teams.

Today, the majority of mechanical design teams work in highly distributed engineering and design environments. Often they work in different time zones and in nonstandard design workspaces, typically with varied operating systems and protocols. NetApp systems are the only storage systems in the industry that can natively support Windows®, UNIX®, and Linux® environments from the same box. NetApp storage can also support NAS, SAN, and iSCSI protocols harmoniously. Mechanical design teams in India using UNIX in a NAS environment can work seamlessly and collaboratively with engineering and design teams in Europe, even if they are running Linux in a SAN environment. This type of unprecedented collaboration enables shorter design and decision cycles and accelerates your time to manufacturing.

Highest availability. Storage downtime is one of the most worrisome aspects of data management and is the usual cause for delayed mechanical design projects. Outages, planned or unplanned, can greatly hinder any project. NetApp solutions offer the ultimate in data security, reliability, and availability. The unique NetApp Snapshot™ capability dramatically reduces the backup window, freeing the manufacturing application server (UGS or Dassault environment) from being locked for hours. Snapshot technology also contributes to the quick recovery of deleted files and offers the flexibility to increase backup frequencies.

In addition, NetApp integrated RAID implementation provides maximum protection against disk failure, minimizing disruption of services to your engineering and design teams and user community.

REDUCING COSTS

The NetApp approach to data management for mechanical design environments is multifaceted. It provides mechanical design teams the ultimate in data performance, scalability, interoperability, availability, and protection—all resulting in a lower total cost of ownership (TCO). By streamlining your resources, the NetApp solution increases the productivity of your mechanical design and production teams, reduces your operating costs through improved asset utilization, shortens your mechanical design cycles, and gives your storage environment the flexibility you need—all contributing to lower overall and production costs.

Unrivaled productivity. NetApp makes it easy to manage increasing storage needs and to support growing engineering and design teams, so that your team members can focus on their core competencies—designing and innovating. Our storage solutions help reduce the duration and complexity of everyday storage tasks, including capacity planning and dynamic provisioning. In addition, managing availability becomes easier with NetApp technologies such as NearStore®, SnapVault®, SnapMirror®, and SnapLock®. NetApp

backup and recovery technology also allows seamless mirroring of engineering data for disaster recovery purposes and for managing mechanical design application version changes and updates

Maximized asset utilization. NetApp offers highly available, scalable, reliable, and cost-effective storage solutions, complemented by feature-rich manufacturing data management software from vendors such as UGS and Dassault Systemes. This improves the mechanical design team’s productivity, performance, and asset utilization. The NetApp Data ONTAP operating system includes NetApp FlexVol technology, which pools storage resources automatically and enables the creation of multiple flexible volumes on a large pool of disks. With NetApp, your engineering and design teams can allocate storage on demand.

More flexibility. NetApp enterprise storage systems function as a “unification engine” that simultaneously supports Fibre Channel (SAN), IP storage area networks (iSCSI), and network-attached storage (NAS). All NetApp storage solutions leverage standard NetApp features, such as the highly optimized and scalable Data ONTAP storage operating system, enabling mechanical design teams to minimize complexity and costs while bringing unequaled flexibility to your storage environment.

“NetApp storage is trusted with our intellectual property, the TI crown jewels—that’s the real proof of our confidence in NetApp solutions.”

DAVID THOMAS Semiconductor IT Operations, Texas Instruments

COMPREHENSIVE SERVICES

NetApp Global Services provides the comprehensive support required for continuous system operation. NetApp services include installation, implementation, and full support of your mechanical design environment. As a result, you can expect reduced time to deployment, integration of best practices, complete knowledge transfer, and high-quality support. Implementation services for systems include:

- Storage layout design
- Global namespace configuration
- HA configuration and best practices
- Volume striping configuration
- Customized “how to” help based on customer environment and workflow

In addition, NetApp SupportEdge Premium offers a hybrid approach to support, combining expert on-site resources with innovative remote capabilities. SupportEdge Premium includes hardware and software installation, system monitoring, proactive notification, immediate reactive support, remote diagnostics, and a blend of remote and on-site repair. Quarterly storage availability audits and a software subscription plan are also included.

PARTNERSHIPS WITH LEADING MECHANICAL DESIGN TOOL VENDORS

NetApp and its strategic alliances share a common vision of reducing complexity to provide a better return on investment and a lower total cost of ownership. Joint

testing, integration, and validation enable full interoperability to ensure complete, easily managed IT solutions. World-class service and support organizations work together to ensure accurate needs assessment and fast and easy deployment. Network Appliance FAS systems are certified by UGS and Dassault Systemes

to integrate seamlessly into those manufacturing application environments to provide users with significantly better performance, data integrity, and administrative benefits. NetApp backup features integrate into both UGS and Dassault environments to provide a more seamless operation than other backup solutions.

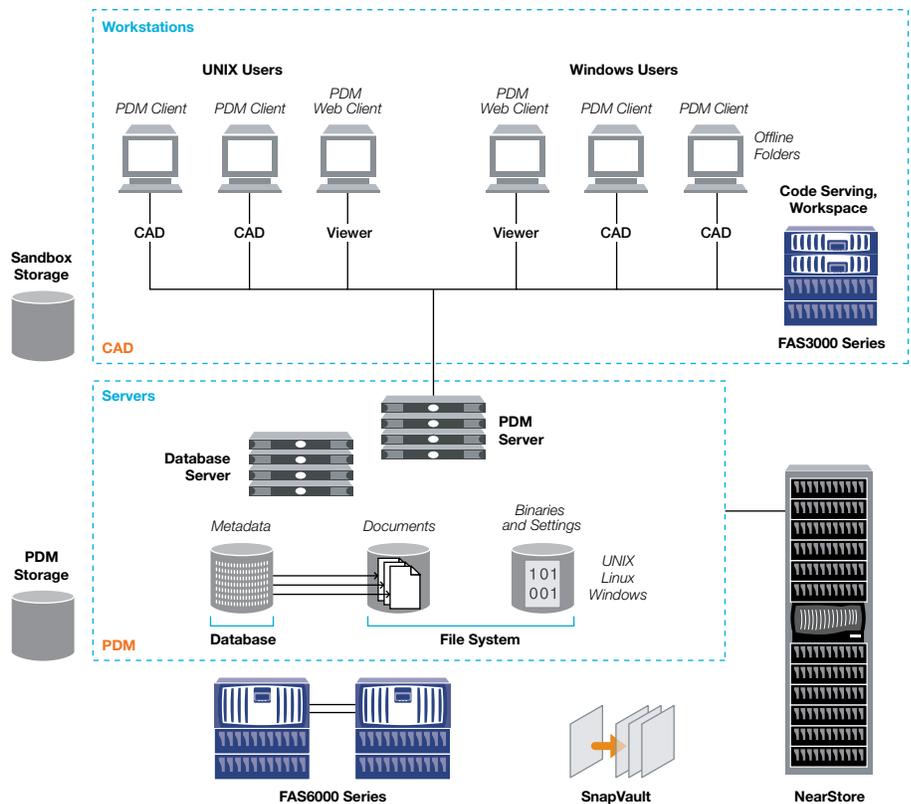


Figure 1) Sample mechanical design environment running NetApp storage solution.

“Network Appliance offers a superior cost of ownership, and has completely met our expectations—each NetApp system practically runs itself, and there have been no unexpected costs.”

VINITA GANDI Corporate IT Infrastructure Director, Metaldyne

A VENDOR YOU CAN TRUST

NetApp is a leading Fortune 1000 company with over 60,000 customer installations worldwide. With a proven world-class global service and support organization, our track record provides the foundation for your future success as you enhance and grow your IT and storage environment.

ABOUT NETWORK APPLIANCE

Network Appliance is a world leader in unified storage solutions for today's data-intensive enterprise. Since its inception in 1992, Network Appliance has delivered technology, product, and partner firsts that simplify data management. Information about Network Appliance solutions and services is available at www.netapp.com.



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