

2015

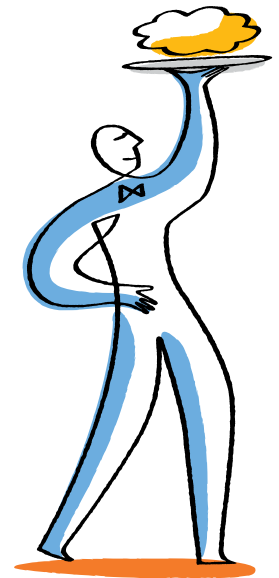


NetApp®

Solution Brief

NetApp Solution for the Private Cloud

Make your move to flexible, efficient IT service delivery



KEY FEATURES

Cost Reduction

Reduce IT costs by up to 50% with the industry's only unified architecture and leading storage efficiency technologies.

Enhanced Efficiencies

Improve operational and management efficiencies through automation of services and processes.

Increased Flexibility

Respond faster to business needs by slashing the time required to provision and protect systems and activate new applications—from weeks to days or hours.

IT Flexibility and Efficiency at the Highest Level

Cloud computing is the ultimate destination for those who seek IT flexibility and efficiency. The cloud takes the business advantages of virtualization and shared infrastructure to new heights, delivering even greater business agility and cost savings.

Private clouds, which are dedicated to an enterprise for use by its internal organizations behind the firewall, are an excellent point of entry to the cloud computing model. Through private clouds, businesses can:

- **Provide IT resources on demand.** Internal organizations and users can securely access pools of shared resources immediately without compromising data protection. For example, R&D engineers can tap into their own “personal data center” and use resources customized for their needs on demand, accountants can have extra resources during tax season, and marketing can add resources during major sales promotions.

- **Automate the provisioning process.** You can create self-service portals so internal groups can request and receive access to IT resources with minimal IT support, saving time and money while speeding time to market with innovative new services. When projects are completed, shared resources can be reallocated, eliminating overprovisioning.
- **Sharpen IT insights—and business decisions.** With private cloud computing, you can monitor and analyze who's using which resources, so you can define and meet internal SLAs, optimize your IT service catalogs, enable showback or chargeback models, and make more insightful business decisions as a result.

Private Clouds: Transforming the Promise into Results

For many IT leaders, there is no question that private clouds can deliver breakaway business advantages. The question is how best to move to the private cloud model.

“In less than a week, we can transform an acquisition’s complex IT environment into this highly efficient infrastructure with platform, data, and policy consistencies. The cloud infrastructure makes it simple to cross-pollinate—that is, integrate high-value-add processes and applications from our new businesses, and push them back out to other ExamWorks companies.”

Brian Denton

Chief Technology Officer, ExamWorks, Inc.

- How do you evolve to shared IT infrastructure without sacrificing previous investments or limiting future options?
- How do you automate processes and align them with services?
- How do you scale resources elastically without compromising security and data integrity?
- How do you determine the right solutions and technologies to implement?

NetApp can help deliver on the promise of the private cloud model. NetApp and its solutions partners have the people, processes, and advanced technologies to help you build and deploy private clouds—quickly and efficiently, with maximum benefit and minimal disruption.

An Evolution to Extreme Flexibility

You can move to the private cloud model incrementally, without ripping and replacing your current infrastructure. The path your company takes depends on your starting points and objectives.

Based on our experience with countless enterprises, we’ve identified four fundamental elements that you should implement as part of your private cloud solution:

1. **Service Catalog.** Define your services with well-defined policies that automatically map service levels to storage attributes.
2. **Service Analytics.** Optimize your services with centralized monitoring, metering, and cost awareness or chargeback to enhance visibility and cost and service-level management.
3. **Automation.** Rapidly deploy your services by integrating and automating provisioning, protection, and operational best practices.
4. **Self-Service.** Empower IT and your end users by enabling services requests to be fulfilled through a self-service portal.

NetApp Private Cloud Technologies

NetApp gives you access to the following core capabilities and sophisticated technologies as the foundation for your private cloud solution:

- **NetApp Unified Storage Architecture.** Our private cloud enabling technologies are built on the NetApp® Unified Storage Architecture and the NetApp Data ONTAP® operating environment, a flexible architecture that supports many applications, multiple protocols, diverse workloads, and changing requirements. This unified set of tools and processes can help reduce complexity and drive down

costs by allowing you to leverage your current infrastructure for current and future workloads as you build your private cloud solution.

- **Scalable and efficient shared IT infrastructure.** Take advantage of the full range of NetApp storage technologies for cloud computing, including built-in storage efficiency features such as deduplication and thin provisioning; integrated data protection; and the ability to scale up, scale down, and scale out to address dynamic resource needs.
- **Automation and analytics.** NetApp offers a suite of management products that allow you to manage capacity in a shared infrastructure more efficiently—from policy-based automation to end-to-end cloud management tools from NetApp and our partners. And our open management strategy simplifies third-party or inhouse tools integration with NetApp management products.
- **Secure multi-tenancy.** With NetApp software, you can share storage with maximum privacy and data security. In addition, NetApp with Cisco and VMware helps provide secure, end-to-end multi-tenancy across applications and data so you can reap all the benefits and business advantages of a shared IT infrastructure for private cloud computing.

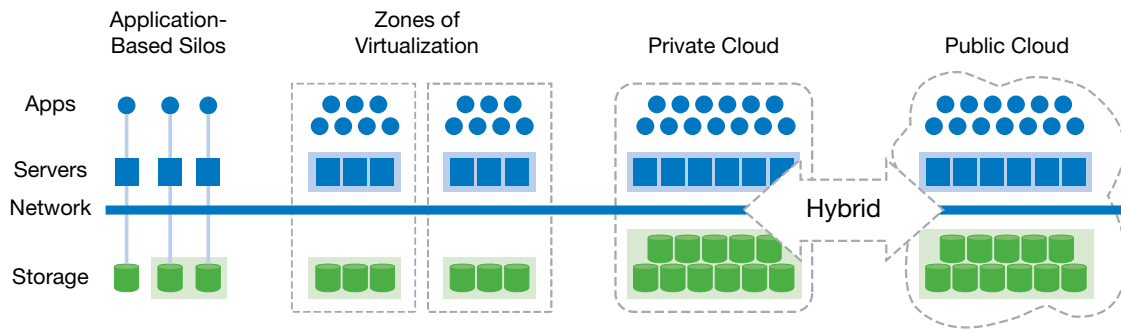


Figure 1) Evolve from virtualization to flexible, efficient IT service delivery

- **NetApp Integrated Data Protection.** Access a wide range of flexible integrated data protection capabilities directly from NetApp storage. Backup, disaster recovery, and compliance capabilities are built in and can be activated as needed without having to deploy additional complex combinations of software and hardware.
- **Cloud expertise.** Through hands-on experience in field-tested deployments, NetApp has the expertise to help you plan, build, and manage your private cloud solution. Our expertise is available to you through services that can help you jump-start your private cloud project and knowledge transfer to enable your long-term success.

Freedom of Choice Through Strong Solution Partnerships

Our extensive ecosystem of solution partners widens the expertise and choices available to you, so that you can leverage the most innovative technologies across all layers of your private cloud solution. In addition, integrated solutions, such as FlexPod™ for VMware® (prevalidated shared IT infrastructure), help reduce risk and accelerate time to deployment.

Our partners include leading IT vendors such as Cisco, Citrix, Microsoft, and VMware; global system integrators such as Accenture, CSC, and Fujitsu; and leading IT management vendors

such as BMC Software, DynamicOps, and Gale Technologies. They work with us to deliver an integrated private cloud solution that is tailored to your specific requirements.

Private Cloud in Action Financial software provider cuts costs and time to market

A multibillion-dollar software company found that it was spending more on IT than its competitors. After analysis, the company realized that much of its infrastructure was sitting idle except during peak tax season. The solution: A private cloud would allow the company to scale up and down on the fly and help reduce overall IT expenditures. NetApp was selected because of its open approach, strong partnership with VMware, and superior security capabilities. Now the company is saving money and getting better services to market in less time.

Chemical giant takes steps to move to ITaaS

An internationally recognized chemical company wanted to harness the private cloud model to accommodate the disparate needs of researchers and scientists in various R&D divisions. The company turned to NetApp to transform its siloed SANs into streamlined, shared infrastructure. The resulting plan: A private cloud based on NetApp storage that will enable the company to

consolidate, standardize, and cut R&D costs and time frames substantially.

Federal research organization gains efficiencies with private cloud

A federally funded research and development center needed to efficiently scale storage resources to meet explosive data growth. With a private cloud based on NetApp storage, the organization can now provide internal business units with infrastructure as a service on demand. The organization has a flexible, cost-efficient solution to meet its data storage capacity needs.

Augmenting Your Private Cloud

NetApp understands that your cloud strategy might include procuring cloud services from service providers to manage specific workloads, such as messaging or disaster recovery. Enterprises will make different decisions on build versus buy as they evaluate their cloud computing options. That is why NetApp has cultivated robust partnerships with leading service providers to offer a broad selection of secure cloud solutions built on NetApp. Our partners, such as Rackspace, Siemens, Terremark, and T-Systems, offer cloud solutions from data protection and infrastructure services to application services such as Exchange and SAP®.

Take the Next Step Toward IT Flexibility and Efficiency

Learn more about NetApp technologies for the private cloud and how we help enable the delivery of IT as a service for cost savings, enhanced efficiencies, and increased flexibility. Visit netapp.com/cloud or contact your local NetApp or partner sales representative.

About NetApp

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

Go further, faster®



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