



NetApp®
Go further, faster



Solution > Infrastructure > **Service Providers**

NetApp Solution for Archive as a Service

KEY BENEFITS

Fast time to revenue

Define new services in minutes.
Allow for a quicker ingestion of
enterprise data volumes in bulk.

Broaden market reach

Offer multiple archive SLAs through
policies to address a broad range of
customer requirements.

Satisfy enterprise security and privacy requirements

Satisfy stringent corporate or
regulatory requirements for privacy
and security of high-value and
sensitive data.

Reduce total cost of ownership

Enjoy economies of scale and
storage efficiencies with a single
multi-tenant, multisite infrastructure,
resulting in an overall reduction in
capital and operating costs.

THE CHALLENGE

Today's economic environment compels service providers to build several complementary lines of business around outsourced storage services in order to reach the broadest market with the least cost. Each of those lines of business must deliver services that create a positive user experience comparable to or better than internally managed infrastructure.

Service providers are challenged with the fact that different market segments have different requirements and that different classes of data have different storage constraints and service-level requirements. Consumers have different storage needs and expectations than enterprises, and an infrastructure designed to provide basic outsourced consumer storage services at pennies per gigabyte has different requirements than one designed to provide advanced storage and data management services for high-value corporate data.

Architecting an infrastructure on which to base an entire line of advanced storage and data management services is key to creating storage efficiencies, minimizing internal costs, and maximizing operating profit.

Long-term retention services, such as protected nearline, finite retention, active archive, and perpetual deep archive, are examples of services with an archive as a service business line. Each is related to long-term data retention but the retention period, the frequency of data access, the availability, and the latency that can be tolerated upon access are different for each service. Every attribute contributes to the user's experience, which must be the outsourced storage service. Our flexible storage infrastructure allows you to offer varying service levels and storage characteristics for the data at various price points, enabling you to meet the broadest range of requirements for enterprise as well as consumer customers.

“StorageGRID enables service providers and/or IT departments to deliver public storage clouds with the highest level of privacy, security, and data protection available on the market.”

Frost and Sullivan

Along with the need for defined retention periods and access levels, service providers face the challenge of addressing varying constraints upon how and where different classes of data are stored for customers. Sensitive data must be strongly encrypted and may also be constrained to reside within defined geographic borders. For example, evidentiary data may be required to reside on WORM media, while other data may be required by corporate policy to be digitally shredded at the end of its retention period. Enterprise customers may require a legal hold to be applied to their data at any time to eliminate the possibility of deletion during the course of litigation, regardless of the defined retention period for the data. Large organizations may have availability or latency requirements that demand both off-site and on-premise storage, as well as storage in multiple countries.

Service providers typically have had to resort to weaving together various platforms, appliances, and third-party software applications to gain this level

of control over geographically distributed storage resources and the data that resides on those resources in a multi-tenant, multi-technology environment. Each of these storage platforms needs separate configuration, management, and administration. This creates a fragile infrastructure in which measuring and billing based on providing various services are difficult. And rolling out new services to respond to changing business requirements become a high-risk, lengthy, and costly endeavor.

Service providers wishing to offer the broadest range of premium archive as a service products with the most cost-efficient operations turn to NetApp as their trusted infrastructure partner.

INNOVATIVE SOLUTION OPPORTUNITIES

Our solutions offer you market-leading capabilities in block-, file-, and object-based storage technologies along with best practices and services designed to help you succeed. NetApp's archive as a service solution employs a unified

infrastructure that can span dozens of data centers and thousands of access points, and can be expanded in capacity and footprint without service disruptions.

NetApp FAS storage systems with multiprotocol support are federated by NetApp StorageGRID® software into a single, unified repository that spans multiple data centers and provides policy-based data management capabilities that allow you to innovate in defining a broad portfolio of targeted archive services. You can define your services through a centralized management portal, whether the underlying storage resides in a single data center or multiple sites, over a spectrum of storage hardware devices, including NetApp unified disk storage and third-party tape libraries. Using a common object-based repository, you can quickly roll out new offerings involving disk and tape storage. You can also rapidly roll out multiple differentiated services to a broad range of customers at the lowest operational cost.

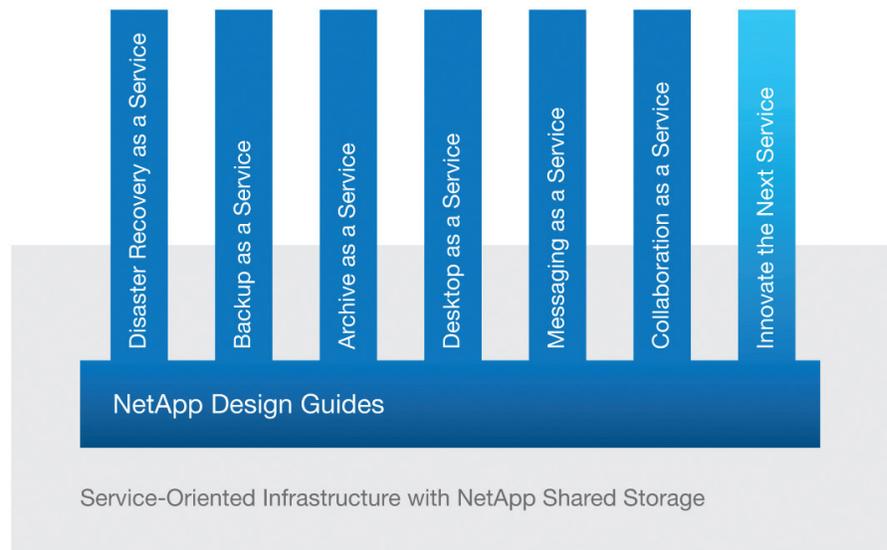


Figure 1) NetApp solutions for service providers.

Create a Portfolio of Services

With our solution you can launch an entire portfolio of offerings in your archive as a service line of business from a single graphical portal or from your business and operations support systems. You can use either the provided graphical management console or your own operations support systems to define your new services within minutes. The new services can be based on specific industry verticals, specific applications integral to industry workflows, or by various policies or regulations governing the retention, security, immutability, and accessibility of archived data.

These services can also define the constraints on which storage platforms or technologies to employ based on locality, availability, geographic bounds, or on latency, access patterns, or required performance. This allows you to broaden your archive line of business to include local, regional, or global offerings tailored to specific market segments, using common storage resources and a single operational and management interface.

Flexible Billing Models

Archive services are not all billed on the same terms. You may want to bill basic storage services solely on capacity used per month while charging per-access and per-instance fees for perpetual retention cold archive and latency-sensitive offerings for locality of data in multiple sites. NetApp's archive as a service solution provides detailed real-time and historical information to allow billing models to combine various components into per-asset, per-transaction, or per-byte billing models.

Data Privacy and Security

Enterprise customers place great emphasis on the security of their corporate data when evaluating outsourced storage services. NetApp's archive as a service solution provides true secure multi-tenant services, allowing you to provide complete separation of each customer's data. Data is safeguarded within your data center, en route to and from data centers, and during media migrations. Data is protected from malicious attacks even if such attacks are

initiated from within a customer facility. Specifically, data encryption is applied at all stages of storage and transport. Additional protection mechanisms include encryption key separation and escrow, connection authentication, per-customer security partitions, and per-transaction audit records.

Reduced Costs

NetApp storage provides greater storage efficiency, which allows you to lower your infrastructure investment and cost of ownership. NetApp's object storage software allows you to create further storage efficiencies by federating platforms across multiple sites into a single, containerless infrastructure with a single interface. Long-term archival costs are typically dominated by the recurring migration of petabytes of data from aging storage technologies to newer technologies with each hardware refresh and technology evolution. The automated data management capabilities of our solution eliminate human intervention in these data migrations; thereby, eliminating one of the dominant costs of providing archive storage services.

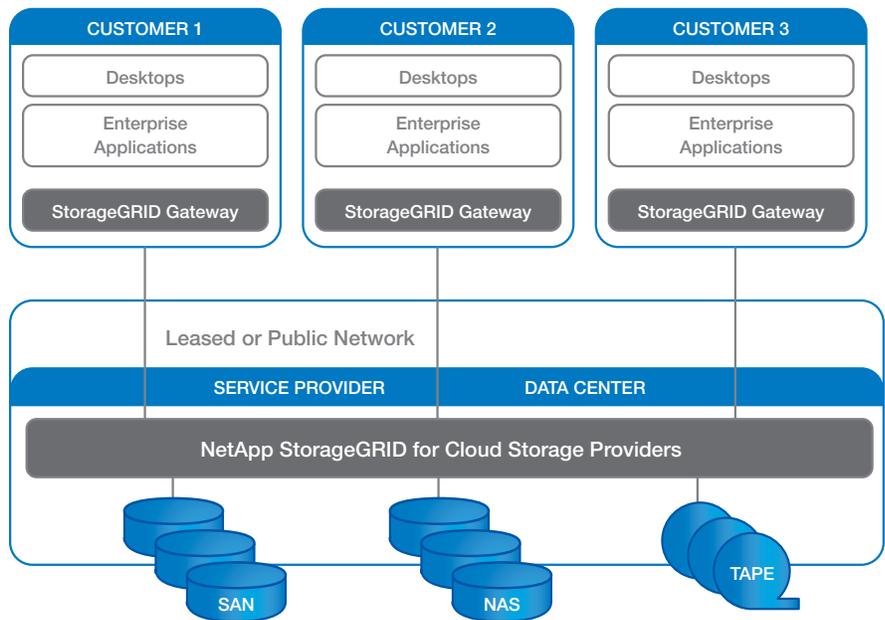


Figure 2) NetApp object storage solutions for secure multi-tenant storage with multisite federation.

100% COMMITTED TO YOUR SUCCESS

At NetApp we're about making you, our valued service provider, successful. Supporting more than one billion consumers, our proven cloud-delivery process actively promotes your success from setup to billing. NetApp doesn't sell its own cloud services; rather, we help you build your cloud services. Our collaboration with you assists in protecting your market share and sustaining your margins. Our archive

solutions are customizable to your particular business model, and we can help you set up the processes and procedures needed to maximize their operational efficiency. NetApp and its vast ecosystem of resellers and system integrator partners are available and ready to support your efforts. NetApp enables service providers to rapidly deploy archive as-a-service on a platform designed for lower TCO on a single, flexible architecture. This affords you the ability to launch new services rapidly with maximum profitability.

SALES INQUIRIES

<http://www.netapp.com/us/solutions/infrastructure/service-providers/>

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.



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