Hewlett Packard Enterprise

UK service provider transforms data protection with HPE Apollo 4510 and Scality

Innovative archive-as-a-service speeds disaster recovery and reduces costs

Objective
Simplify data protection for small and medium businesses to reduce costs and accelerate disaster recovery

Approach
Move to a hybrid infrastructure for cloud-based backup and archive-as-a-service leveraging the HPE Service Provider-Ready Software-Defined Storage with Scality solution, including HPE Apollo 4510 Systems and NTP Software VFM

IT Matters
- Removed 70% of data from backup rotation for more cost-effective data retention

- Accelerated data recovery from 11 hours to 3 hours

- Enabled infinite scalability of archive-as-a-service offering

Business Matters
- Protects 70% of customer data at 1/3 the cost of cloud backup

- Improves data durability from 5 to 13 "nines" for always-on digital businesses

- Provides small/medium and mid-market companies with enterprise-class business continuity assurance

Always-on assurance for the digital economy

We've all heard it said that "you can't be good at everything." Daisy Group would beg to differ.

This UK-based service provider has built a legacy of excellence in end-to-end business communications and managed services solutions. IT, cloud, voice, mobile, data—you name it. Daisy not only delivers the services, the company also ensures service availability and data protection for customers. It's a breadth of services and support very few enterprises can deliver with the absolute assurance that Daisy guarantees.

The fact is, Daisy simply can't fail. Most of its business continuity and disaster recovery customers are small and medium-sized firms that lack the resources to support their own disaster recovery infrastructures. So if they suffer a power loss, system outage, or natural disaster, these customers depend completely on Daisy to get them back up and running.

Mike Osborne, managing director of business continuity at Daisy Group, explains, "In today's digital economy, businesses of all sizes have a growing dependence on always-on technology. They can tolerate very little downtime, yet few have the IT expertise or the budget to support a failover solution. Most need to recover within four hours and can't afford to do that using traditional infrastructure."

> "The Apollo 4510 System is the ideal fit for our business model. It offers the performance and reliability that are absolutely critical in a hosted archive solution."
>
> — Mike Osborne, Managing Director of Business Continuity, Daisy Group

That's where Daisy comes in. Daisy has been perfecting disaster recovery for more than 25 years and supports about 1,500 customers with cloud-based backup and recovery services. The company performs 35,000 backups per week, protecting over 1 petabyte of customer data. As a Hewlett Packard Enterprise Gold Partner, Daisy relies primarily on HPE ProLiant DL380 servers to identify data slated for backup, compress and encrypt the data, and transmit it to off-premises storage in the Daisy cloud for secure, offsite protection. This cloud backup solution eliminates the need for local tape backups, and it provides customers with a portal to manage the backups and perform a rapid recovery if needed.

Archive-as-a-service simplifies data protection

When analyzing customer backup data, Daisy's business continuity experts discovered that 70% of that data was old and rarely used. Yet it remained on the customer's primary storage and included in the daily backup rotation. This was both costly and inefficient.

The fact is even small and medium-sized businesses amass huge amounts of data. Between financial and business records, files, applications, and email, a typical small business today stores and backs up approximately 10 terabytes of data. However, as these volumes continue to grow, backups—and recoveries—take longer. Yet the business's expectation for immediate availability does not change.

Daisy determined there had to be a better, simpler way to protect massive amounts of big data.

"If 70% of the data being backed up is almost never touched, then why back it up," Osborne reasons. "Because we're able to identify all the data that's just sitting, mostly unused, then why not archive it off of the primary storage and take it out of the backup solution altogether? This would not only help the customer reduce their primary storage costs but also make recovery from backup much faster."

Daisy decided to introduce a new offering— archive-as-a-service (AaaS)—as a natural complement to its cloud backup solution. The idea was to archive the 70% of customer data rarely used, yet ensure it could still be accessed instantly if necessary.

"HPE technology has traditionally provided the basis for our backup and recovery platforms," notes Osborne. "It's always been highly reliable, high performance, and cost

effective. So when we looked at solutions for our new archive offering, we naturally engaged HPE."

Enterprise-class availability for small and medium businesses

Daisy built its AaaS solution for big data, using HPE Apollo 4510 Systems with Scality RING and NTP Software VFM — key components of the HPE Service Provider-Ready Software-Defined Storage with Scality solution. Scality is running on UBUNTU 14.0 and NTP Software VFM is running on Microsoft Windows Server 2012 R2.

Currently, the company has deployed the solution in three locations in the UK, each with a cluster of two Apollo 4510 systems. To ensure continuous availability and scalable capacity, Scality RING automatically replicates and balances storage capacity across the Apollo 4510 systems, which are purpose-built for object storage. NTP Software VFM enables the customer to identify archive data residing on primary storage and move it onto the Apollo/Scality platform. NTP Software VFM also leaves behind a file stub so users can still access the information on the archive as easily as if it were residing on their primary storage.

"The Apollo 4510 System is the ideal fit for our business model," says Osborne. "It offers the performance and reliability that are absolutely critical in a hosted archive solution. Plus the Apollo systems gave us the flexibility to economically launch our AaaS offering at the performance and capacity levels we needed, and then add processors, capacity, and memory in a linear fashion as we grow."

He adds that Scality RING provides the perfect complement to the Apollo platform. "We are the backstop for our customers. When all else fails, Daisy must be available. Our reputation is everything. HPE Apollo provides the reliability and resilience we need in a hardware platform and Scality RING builds in a high degree of resilience at the software level."

With the Apollo 4510 System and Scality RING, Daisy improved data durability from 5 to 13 "nines" —a level typically associated with very expensive, high-end solutions. Instead, Daisy has done it using a very economical server-based architecture.

"It's a brilliant solution," asserts Osborne. "We're using global technology, deployed in regional data centers, to provide enterprise-class storage with high availability that's affordable to small and medium local businesses."

Lower cost, faster recovery

By augmenting cloud-based backup with the new AaaS offering, Daisy is helping its customers free up valuable primary storage, reduce backup costs, and dramatically improve recovery time. The key is moving 70% of the data, which is rarely used, to the archive.

The economics of AaaS mean that customers spend just one-third the amount to retain data in the archive compared to what it costs for backup. For example, if it costs $1 per gigabyte per month to backup 100% of their data currently, 70% of that cost can be reduced to just $0.30 per gigabyte per month—a tremendous savings.

Customer at a glance

Application

• Archive-as-a-service and cloud-based backup services for small-to-medium-sized and mid-market businesses across all industry sectors

Solution

• HPE Service Provider-Ready Software-Defined Storage with Scality

Hardware

• HPE Apollo 4510

Software

• Microsoft Windows Server 2012 R2

• UBUNTU 14.0

• Scality RING

• NTP Software VFM

Because only 20% of the total data volume is backed up thanks to archiving, Daisy also accelerates recovery for its customers. Using state-of-the-art technology, Daisy can stream about one terabyte per hour from the backup environment. In a traditional recovery scenario for a customer with 10 terabytes of backup data, this would consume approximately 10 hours, plus another hour to rebuild and configure the servers to bring the customer back online. By reducing that 10 terabytes of backup data to just 2 terabytes through the archive solution, Daisy can reduce recovery time to just three hours instead of 11 hours.

Enhanced agility with infinite scalability

Daisy also gained extensive agility to expand services and handle a growing number of customers. With the multi-tenant Scality RING now deployed, the company can bring multiple new services to market quickly and at reduced cost thanks to flexible, multiprotocol "connectors" that allow the company to deploy file/object and Openstack applications by simply adding HPE Apollo 4510 Systems to the HPE Service Provider-Ready Software-Defined Storage with Scality solution.

Moreover, as Daisy expands its AaaS offering across the UK, the HPE and Scality platforms can easily scale to support more customers and more data.

"The beauty of this solution is we can just put other Apollo 4510 systems in different regions of the UK as needed and Scality will automatically recognize the additional capacity," Osborne points out. "It's infinitely scalable."

He further advises that businesses today, regardless of size, cannot afford to operate without a reliable disaster recovery strategy. Statistics across all sectors suggest that an extended outage will likely result in that company eventually going out of business. If the initial loss of revenue were not bad enough, the loss of customer confidence ultimately strikes a lethal blow.

Osborne concludes, "We are in the midst of the latest industrial revolution of our time—the digital revolution. Nearly every firm is transforming into a digital business, with greater reliance on online commerce and social media presence. With the help of HPE and Scality technologies, Daisy is enabling this transformation with a hybrid infrastructure that not only protects their data but also their reputations."

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