



LEADING U.K. PAWNBROKER SEES GOLD IN HP STOREONCE BACKUP SYSTEMS

Deduplication at Albemarle & Bond Holdings PLC reclaims 76 terabytes of disk space, and critical systems can be restored in hours instead of days

Case Study



"The deduplication capability of the HP StoreOnce Backup Systems has enabled us to reduce backup data by 84 percent, reclaiming 76 terabytes of storage for more valuable uses."

John Lucas, Head of Information Technology,
Albemarle & Bond Holdings PLC

Objective

Support rapid growth by increasing reliability and resilience of data; enable site recovery

Approach

Virtualize and standardize the IT environment as steps towards infrastructure convergence; evaluate disk-to-disk backup solutions to enable site-to-site replication

IT improvements

- Enhanced network productivity enabled by replication with HP StoreOnce bandwidth throttling
- Critical systems recovery now possible in hours instead of days
- Backup capacity scalable without disruption or adding another system
- Virtual machines moved between sites in hours instead of days, increasing agility
- Data protection centrally administered in two to four hours per week, freeing staff for more valuable tasks

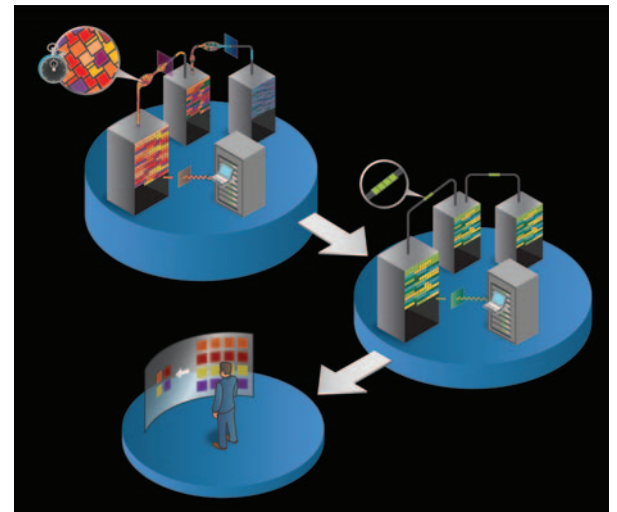
Business benefits

- 100% reduction in downtime to date, increasing service availability
- 84% reduction in backup data from deduplication, reclaiming 76 terabytes of storage for more valuable uses

HP customer case study:

HP StoreOnce Backup Systems and Veeam bring replication, resilience, and major cost avoidance to multi-store chain

Industry: financial



Able to help in tough times

What type of business does especially well in a recession? Look no further than Albemarle & Bond Holdings PLC.

It's one of the UK's leading pawnbroking, short-term financial services, and jewelry businesses. In almost 30 years it has grown from a single store to more than 180 stores and 700 employees, operating under the Albemarle & Bond and Herbert Brown brands.

The global recession has aided the acceleration of the company's expansion. "The banks are no longer lending to those in the higher risk brackets," says John Lucas, head of information technology at Albemarle & Bond Holdings PLC. "As a result, we've seen a massive amount of growth within pawnbroking, our secured lending offering."

Company profile

About Albemarle & Bond Holdings PLC

Albemarle & Bond Holdings PLC, with 180 stores and 700 employees, is one of the UK's leading pawnbroking, short-term financial services, and jewelry businesses, operating under the Albemarle & Bond and Herbert Brown store brands.

It's not just individuals who are customers, Lucas adds. "We're starting to see small businesses bringing in gold, obviously from home, and using it in order to gain access to cash readily." It's a win-win situation, Lucas points out. The customer gets cash faster than applying through banks, the economy is stimulated, and their gold or jewelry items secure the loan, reducing the risk.

Albemarle & Bond depends on its information technology heavily, Lucas adds. The company hosts its own custom retail, financial services, and point-of-sale systems; and the infrastructure also supports a number of mobile users moving between the sites. Also playing an important role are analytic solutions from Cognos, Microsoft®, and QlikView, enhancing strategic decision-making.

"We've transformed from a low tech organization to an organization which aims to use technology as an enabler to the business," Lucas sums up. "These past 18 months have been about putting a 21st century infrastructure backbone in place that enables the future growth plans currently standing at about two to three new stores a month."

"In our prior environment, we had a month of downtime in a year. With the HP StoreOnce Backup System solution, we've had no downtime in the past 12 months."

John Lucas, Head of Information Technology, Albemarle & Bond Holdings PLC

Making growth more secure

A key next step in building that backbone was to enhance the reliability and resilience of data, Lucas adds. The company has consolidated into five data centers and is well under way towards a converged infrastructure. "We wanted to build a new level of disaster recovery into our business by replicating data between our data centers as we back it up, moving it across our wide-area network," he explains. "If we lose a location for whatever reason, we can revert to a backup and pull it up on another site without having to deal with tapes."

"Management hadn't yet seen the benefit of investing in systems that would support a level of stable and reliable growth," Lucas explains. "Data is growing quite fast because we're implementing new systems requiring a number of new virtual machines, which add up quickly."

Customer solution at a glance

Hardware

- HP ProLiant DL380 servers
- HP ProLiant BL460c server blades
- HP ProLiant BL490c server blades
- HP ProLiant BL680c server blades
- HP BladeSystem c7000 enclosure
- HP 4400 Enterprise Virtual Array
- HP 6400 Enterprise Virtual Array
- HP 2324 G2 Modular Smart Array
- HP 2324i G2 Modular Smart Array
- HP StoreOnce Backup Systems
- HP D2D 4112 Backup Systems
- HP D2D 2504i Backup Systems

Software

- HP CommandView EVA software
- Veeam Backup & Replication
- VMware vSphere 4.1
- IBM Cognos 8.4.1
- Microsoft Threat Management Gateway 2010
- Microsoft SQL Server 2005
- Oracle 10d
- Microsoft Exchange Server 2007
- QlikView

Operating systems

- Microsoft Windows® Server 2008 R2
- Microsoft Windows Server 2003

Network protocol

- Gigabit Ethernet

HP Gold Preferred Partner

- Beovax Computer Services, Ltd.

Services from HP

- HP Care Pack services

Getting help from Beovax

To solve the challenge, Lucas turned to Beovax Computer Services, Ltd., an HP Gold Preferred Partner that now manages Albemarle & Bond's server infrastructure and delivers level two and level three support. "We use Beovax because it's more cost-efficient than trying to keep that level of IT expertise on staff," Lucas explains. "We get a personal approach from their organization, and they deliver on their service-level agreements and promises. They also give us cost-effective recommendations, appropriate for the size of our organization."

It's important that Beovax is an HP Gold Preferred Partner, Lucas adds. "We wouldn't go to any organization that didn't have relevant qualifications and didn't maintain them," he says. "I know that to get the Gold status, Beovax has to jump through a number of hoops each year. And that gives us a level of satisfaction about the breadth and depth of their technical knowledge."

Recommendation: HP StoreOnce Backup Systems and Veeam

Improving data protection has been part of an overall IT makeover in the year and a half since Lucas joined the company, he explains. Albemarle & Bond transformed its infrastructure from an assortment of servers (“whatever had been the best value at the time,” Lucas recalls) to standardization based on HP Converged Infrastructure technologies. These include virtualization on HP ProLiant DL380 servers using VMware vSphere 4. In addition, the company is deploying an HP BladeSystem c7000 enclosure with ProLiant BL460c, BL490c, and BL680c server blades in its Oxford and Wakefield data centers to increase compute density.

Three of the company’s five data centers now have HP 2000 Modular Smart Arrays. The two primary data centers, Oxford and Wakefield, have HP 6400 and 4400 Enterprise Virtual Arrays, respectively. By virtualizing on HP servers and storage, the IT team can manage shared pools of interoperable resources through a common management platform.

As the Beovax team designed a data protection solution, “we removed the idea of tape as much as possible,” explains Neil Thomson, senior account manager for Beovax. “We couldn’t get all the information at Albemarle & Bond onto a tape library without a lot of additional investment. I also knew that Albemarle & Bond was going to invest in a high-speed, high-bandwidth Multiprotocol Label Switching (MPLS) network. And it seemed ridiculous to put a tape solution in each data center rather than trying to replicate the data between them.”

The Beovax team had been examining deduplication boxes for some time. “The pricing structure of the HP StoreOnce Backup Systems was very attractive, and its built-in replication capabilities made it a sensible decision,” Thomson says.

Beovax also recommended Veeam Backup & Replication as backup software. “It’s far better than the integrated VMware utility for backup,” Thomson says. “Veeam has better scheduling capabilities and more advanced features such as the ability to bring a VMware image up in isolation. We use Veeam just about everywhere we support VMware environments.”

HP StoreOnce Backup Systems are certified for Veeam 5, Thomson adds, “and Veeam has written a white paper on how to use Veeam with the HP StoreOnce Backup Systems, so it’s a safe solution to deploy.”

Protecting sites with replication

Albemarle & Bond uses Veeam to back up data to a network attached storage (NAS) share on the HP StoreOnce Backup System at each of the five data centers, Thomson explains. “There’s an HP D2D 4112 Backup System at each of the two primary data centers, which have the big SAN infrastructure with the HP EVA storage arrays,” he says. “The three other data centers use MSAs as the primary storage and use the lower-capacity D2D 2504i units for data protection. These three data centers replicate their data to one of the primary data centers and the two primary data centers replicate their data to each other overnight. This provides disaster recovery for all of the data centers.”

“We have 180 outlets and many employees, but only a small IT team. The HP StoreOnce Backup Systems help us get projects done from a central location, without having to travel.”

**John Lucas, Head of Information Technology,
Albemarle & Bond Holdings PLC**

The individual pawn shops use Microsoft DFS Replication to copy data to the data centers, where it gets backed up on the HP StoreOnce Backup Systems.

This overall solution currently protects many terabytes of structured and unstructured data, growing significantly each year. “We’re protecting many database transactions, and also file shares that include spreadsheets and other analytical work,” Lucas explains. “We’re also seeing a big increase in the amount of email, attachments, and scanned images.”

At Albemarle & Bond’s London data center there are no IT personnel, and changing tapes wasn’t an option. That made disk-based backup mandatory.

The benefits that Albemarle & Bond is achieving using HP StoreOnce Backup Systems, Veeam software, and HP servers and storage are many.

Reducing downtime by 99 percent

The new solution has eliminated downtime to date at Albemarle & Bond (A&B). “In our prior, non-standardized environment, we had a month of downtime in a year—we lost use of our unsecured lending system for that amount of time, damaging store operations,” Lucas recalls. “With the HP storage and StoreOnce Backup Systems solution, we’ve had no downtime in the past 12 months.”

Reclaiming 76 terabytes of storage

Deduplication is playing a key role. "The deduplication capability of the HP StoreOnce Backup Systems has enabled us to reduce backup data by 84 percent," Lucas reports. "We back up 91 terabytes of data with a deduplicated copy that is only 15 terabytes, reclaiming 76 terabytes of storage for more valuable uses."

Boosting productivity by throttling bandwidth

Deduplication helps make low-bandwidth replication possible by reducing the amount of data that must travel over the network. Another StoreOnce feature—bandwidth throttling—also plays a role. Explains Thomson: "The ability of StoreOnce to throttle bandwidth is critical. A&B can control the volume of its replication traffic on the network any time of the night or day. That ensures needed bandwidth for services such as email and telephony. It makes replication practical."

Recovering critical systems in hours instead of days

Because data is replicated between the two primary data centers each night, Albemarle & Bond can improve its recovery time objective (RTO). Notes Thomson: "Our current RTO is being able to recover critical systems within about three hours, and non-critical systems the next business day." In the prior environment, there was little certainty that a given system could be recovered.

Scaling without disruption

The company has increased scalability along with reliability. "As A&B grows, it can add capacity to its HP StoreOnce Backup Systems without disruption, and without adding another system," Thomson points out. "That saves us from re-configuring the replication, and from additional licensing costs."

Changing quickly to meet opportunities

Notes Lucas: "We had a good example recently of how the StoreOnce technology is valuable. We needed to move virtual machines around the organization because we restructured. And we used StoreOnce to do in under an hour what would have taken days in our old environment—we would have had to dump the server images down onto USB drives and drive them to the new locations."

With the new solution, Albemarle & Bond's IT team has more time for new projects. "We have 180 outlets and many employees, but only a small IT team," Lucas observes. "The HP StoreOnce Backup Systems help us get projects done from a central location, without having to travel. Backup administration takes just two to four hours a week, and we expect that to go down drastically once we finish some additional system changes."

In the past two years, the stock price of Albemarle & Bond Holdings PLC has almost doubled. It's a good indication that even during tough times, the company's value can now grow as fast as its data and number of stores.



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4AA3-7286ENW, Created December 2011

