• Brightsource

Brightsource is a £50m marketing services and technology company, with over 120 staff across three offices in the United Kingdom. Brightsource is part of Cello, a global insight and strategic marketing group, which is listed on London's Stock Exchange. The business focuses on the not-for-profit, financial services, travel and retail sectors, and has a strong core competency in data-driven marketing communications.

Ed Rollinson is the Head of IT for Brightsource's corporate marketing division. He is responsible for IT infrastructure supporting the company's data processing solutions and automation services, that enable clients to create compelling marketing collateral and drive successful campaigns.

"Our goal is to give our clients a competitive advantage by improving the effectiveness and agility of their marketing, across both print and digital channels," stated Rollinson.

• Running Out of Capacity

Brightsource had been relying on a virtualised IT environment with HP hosts and EMC VNXe storage appliances at its Cheltenham and disaster recovery datacentres, which served additional offices in London and Edinburgh.

"Our systems were working adequately, but we were reaching the limit both in the number of CPU cycles the hosts were offering and the throughput of our EMC SAN," explained Rollinson. "We run very large data processing jobs for our customers and must have the ability to process runs of over six million records quickly. Our existing SAN just wasn't able to keep up with that load."

"Cristie's consultative approach suited Brightsource and helped develop a strong partnership, both technically and commercially." Ryan Smith, Sales Director, Cristie Data.

• Struggling with Replication and Storage Management

"The EMC VNXe platform was difficult to manage," Rollinson reported. "Provisioning storage was a time-consuming and laborious process. Plus, every time a change was made to any of our replication configurations, we had to shut down our entire VM environment and restart the storage processes. That exercise would take upwards of 90 minutes to complete, so it had to be done outside of production hours. But since we serve clients across the globe, downtime simply doesn't exist."

The replication processes were also inefficient, according to Rollinson. "Even if we only made a small modification to just one field in the database, we would have to replicate the entire database — nearly 4.2 terabytes of data. It would flatten our bandwidth."

And finally, the high amount of load on the company's virtual

BRIGHTSOURCE

Challenges

- Existing storage environment difficult to manage
- Impossible to designate separate RPOs for different applications
- Entire 4.2 TB database had to be backed up as a whole, even for small changes
- All storage configuration changes required 90-minute system restarts

Solution

- Two Nimble CS220G arrays in a replicated configuration
- Nimble Storage InfoSight

Benefits

- Gained the ability to establish different RPOs for different datasets
- Eliminated the need to restart storage processes for configuration changes
- Reduced bandwidth consumption for replication from over 20Mb to 0.6Mb

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platform was causing latency in several essential applications. "We have a number of database applications that are very sensitive to latency across the network," Rollinson reported. "The EMC arrays were just not able to cope with throughput in the network traffic. Our VMs were starting to drop off the network, the database applications were failing, and the user experience for the business as a whole was becoming quite poor."

• Looking for a New Storage Option

Brightsource started looking at options for upgrading its EMC storage environment. They started by considering an expansion of the existing environment, but that would have required a fork-lift upgrade. The second option was to switch to a completely new storage solution. "We wanted our environment to be future-proofed," Rollinson stated. "We attended several VMware customer events and talked to a number of different storage vendors. After much research, we decided to focus our evaluation on Nimble."

"To be honest, after seeing the Nimble arrays in action, the product really sold itself." Ed Rollinson, Head of IT, Brightsource.

• Running the POC on Nimble

Brightsource started the Nimble POC early in 2013. "Nimble was very gracious to us during the evaluation period," Rollinson acknowledged. "I think we may have out-stayed our welcome on how long we kept the box! But we learned a huge amount about our internal processes, about our data processing needs, and also about the Nimble functionality. To be honest, after seeing the Nimble arrays in action, the product really sold itself." Rollinson admitted that he and his team tried really hard to bring the Nimble array down. "We wanted to push it to the point where the array flat-lined. The good news is, we couldn't get anywhere near close to that with the Nimble array. Our goal for the POC was to be able to process six million records in 10 hours. We managed to do that very easily without even pushing the Nimble array. The only limitations in our system now are licenses for the applications. If we ever need to scale, we only need to add additional hosts. The Nimble array can handle anything we throw at it."

"The Nimble systems had plenty of performance in reserve, and is independently scalable for capacity, so the design is effectively future proof" Wayne Hazell, Senior Consultant, Cristie Data.

• Setting Different RPOs for Each Data Set

Nimble replication was a huge step forward for Brightsource, according to Rollinson. "Previously, we were only able to look at one single data set with just one replication schedule. Now we can separate our data sets out and create different replication schedules depending on the urgency and importance of the job and recovery objectives for each category."

Brightsource now replicates all of its application data every hour, its VMs every 12 hours, work in progress (WIP) every three hours, and the company's 500 GB of archive data every 48 hours. "Being

able to separate our data sets into logical categories results in much more efficiency," Rollinson said. "It's significantly faster than replicating the entire 4.2 terabyte EMC system at one time. We also have the ability to easily adjust our replication schedules on the fly if our data sets or RPOs change."

• Reducing Replication Bandwidth Consumption

While the EMC processes were saturating Brightsource's 20Mb link, Nimble's WAN optimized replication only consumes a small subset of the available bandwidth, reducing stress on other corporate services. "Nimble InfoSight showed us we were using only 0.6Mb of bandwidth to process our data," Rollinson stated. "That's just brilliant. The Nimble replication processes are extremely efficient and have absolutely no impact on any of our services."

• Simplifying Management and Reporting

"Nimble InfoSight is a strategic asset for us in terms of performance and replication monitoring, as well as for future planning," Rollinson said. "With InfoSight, we can easily predict what we will need and how our systems will respond to various scenarios. I can pull up a performance report during meetings with our execs and say, 'for this replication job, this is the bandwidth we are now using, and this is what we will need in the future.' Having that information at our fingertips is an absolute dream for us."

• Impressed with Nimble Support

"You only realize how bad your support was when you start to experience really good support," Rollinson shared. "The level of service I get from Nimble is an absolute joy! When we were in the POC, we were encouraged to really push the Nimble systems. They told us to pull a hard drive out and see what happened. And I kid you not, by the time I walked from the server room back to my office, our phones were ringing! I had to admit, the first time Nimble Support called I was a bit sceptical. I asked, 'Are you ringing just because we are a trial client and you are trying to promote your service?' The support representative replied, 'No, we have no way of knowing if you are a POC customer, you appear as regular customer in our support system.' I have never come across that level of standard support from any other technological service in my 15+ years in IT management. Nimble Support is a deep breath of fresh air for us."

"Over 70% of support cases are solved through Nimble AutoSupport without any customer intervention." Steve Blakemore, Technical Director, Cristie Data.

• About Cristie Data

Cristie Data have been IT infrastructure and data management specialists for over 40 years. We take a consultative and platform agnostic approach to any customer project and advise on solutions that are best aligned to your businesses. **www.cristie.co.uk**