

# ASSOCIATED NEWSPAPERS

## ASSOCIATED NEWSPAPERS HITS VIRTUALISED HEADLINES WITH DATA DOMAIN & VIZIONCORE

# vizioncore™

### THE SITUATION

Faced with significant challenges around space, power and cooling in its primary data centre, Associated Newspapers implemented VMware Infrastructure to consolidate its physical server estate. With its virtual infrastructure in place and growing rapidly, Associated Newspapers required a completely new approach to disaster recovery.

### THE SOLUTION

Having investigated potential solutions on the market, Associated Newspapers decided to implement a combined disaster recovery solution around vRanger Pro™, Vizioncore's market leading backup and restore solution, and Data Domain's DD580 high-speed inline deduplication system.

### THE RESULTS

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Steve Bruck  
Infrastructure Architect  
Associated Newspapers Limited

"Virtualization is a fantastic technology which delivers so much more flexibility in terms of how you provision and manage applications. However, it is easy for virtual infrastructures to grow rapidly, so you need to underpin your implementation with a solid disaster recovery strategy that is tailored to the specific characteristics of virtual machines. With Vizioncore and Data Domain we have a very easy to use and rapid system to ensure we can quickly get vital applications back up and running for a business which requires close to 24/7 availability."

Steve Bruck, Infrastructure Architect  
at Associated Newspapers Limited

### THE SITUATION

Associated Newspapers Limited (ANL) is the management company for five major newspapers - Daily Mail, The Mail on Sunday, Evening Standard, London Metro, Irish Mail on Sunday and the advertising publication Loot.

Established in 1905, it is a subsidiary of the Daily Mail and General Trust plc (DMGT). ANL is based in Kensington and also has responsibility for Harmsworth Quays, the London Docklands plant at which it produces all London, the South of England and South Wales editions of the titles.

Over the last ten years ANL's IT requirements have grown dramatically. This began to present space, power and cooling challenges in its primary data centre. In 2006 the organization began to investigate how it could use server virtualization to reduce its hardware footprint. Following a proof of concept project was based on a handful of Dell and HP servers running VMware Infrastructure 3 (VI3), ANL decided to deploy the technology out into its wider production environment.

In a short space of time the IT team had created a large number of virtual machines running applications including circulation systems, advertising programmes and PDF management software. With around 140 virtual machines on seven VI3 host machines, and a high volume of large-image files to handle, ANL decided that it would have to take an entirely new approach to backup and recovery.

"Virtualization had been a slow burner as we got to grips with it, but once we saw the inherent benefits and really embraced it we soon had a very large infrastructure which required backing up," said Steve Bruck, Infrastructure Architect at Associated Newspapers Limited. "Our existing strategy, based on Legato Networker and

Storagetek tape libraries, already had its limitations before we implemented virtualization, but as we began to standardize on virtual infrastructure the old physical backup tools were no longer practical or effective. We had a huge amount of tape backups to manage and maintain and our requirements were only going to grow as we deployed more virtual machines. We decided we would have to look at ways of more intelligently backing up and storing these large volumes of data."

## SOLUTION

Towards the end of 2007, ANL began to look at the various solutions on the market and saw a demonstration of Vizioncore's management suite for VMware environments, vEssentials, which includes its flagship backup and restore product vRanger Pro. "We liked the fact that this product could obviously handle serious amounts of data and could automate the backup routines completely. We don't have the time to be too hands on with these kind of processes," said Bruck.

Having settled on vRanger Pro as the core element in its backup strategy, ANL then began to consider the storage element to complement the software. "We were keen to move away from tape storage as it simply wasn't reliable or rapid enough on the restore side and our storage requirements were becoming significant. We are quite conservative with our virtual machines and tend to limit them to around 10GB, but when you have as many of these machines as we do it soon becomes quite a storage headache if you are using tapes," said Bruck.

One technology ANL thought could help to curb the growth of its storage requirements was data deduplication. The IT team was particularly impressed with Data Domain's high-speed, inline deduplication systems. "In tests we saw that we could achieve pretty staggering deduplication ratios by using the Data Domain appliance alongside Vizioncore's software – on average around 50x, but peaking sometimes at over 90x. The appliance handles any amount of data you throw at it and provides exceptionally rapid recovery," said Bruck.

## THE RESULTS

The combination of Vizioncore vRanger Pro with Data Domain's DD580 system has transformed ANL's backup and disaster recovery strategy. "We can just check a tick-box in vRanger Pro to turn off its own deduplication process and it

sends raw data to the Data Domain system. That means we get the very highest dedupe rates possible. In an average month vRanger Pro will create about 12.5TB of virtual machines backup images which the DD580 will shrink down to about 250GB."

The organization is able to replicate the deduplicated data to a secondary site with a second Data Domain system, thereby providing much quicker availability of data for disaster recovery purposes. In fact, it was found that on many days less than 1% of the data written would need to be transferred over the network, which also had a significant impact in terms of reducing the bandwidth requirements for DR. "In terms of our ability to restore virtual machines, we are now in a far better position to act," said Bruck. "The beauty of the Vizioncore / Data Domain combination is that despite the fact you are looking at a folder of highly compressed data, what you see is full images, so recovery is very much a point and click process. The fact that we are no longer trawling through tape libraries, combined with our ability to restore at disk-to-disk speed rather than tape-to-disk, means our recovery times are a great deal faster. We might be looking at half an hour to restore a server rather than the half a day which our old solution might have taken."

There also significant cost benefits associated with the implementation. vRanger Pro is licensed per physical socket on the host server; ANL's Legato Networker required a license per virtual machine. Furthermore, as part of its overall backup strategy review ANL has been able to decommission its physical backup servers.

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The next phase will be to implement the other two elements of vEssentials; vCharter Pro™ and vReplicator™ that will provide enterprise monitoring and replication of ANL's virtual infrastructure. This is scheduled to happen in Q2 2008.

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