

# Musgrave Budgens Londis

## Critical data storage. How to move it and improve it – at the same time

For the highly successful convenience retailer Musgrave Budgens Londis (MBL), business depends on the rapid and constant availability and performance of the organisation's systems and data – around the clock, seven days a week, 365 days a year. Any loss of these critical systems and data could potentially cost the company massively, through an inability to process orders and the loss of tens of thousands of pounds of revenue every hour. For the business to continue to function confidently and successfully it needed storage solution par excellence and turned to ArdentA for the answer.

Londis is part of the £3bn turnover Irish-owned multi-national grocery wholesaler Musgrave. Musgrave's vision is to be the largest supporter of branded independent retailers in the UK.

MBL's business is vast and runs on critical data available constantly to all of its 2200-plus members, all independent store owners. Members benefit not only from volume deals, but also from access to marketing, store development, technology and retail expertise to help them drive footfall and turnover.

### The Project

MBL needed to facilitate the relocation of its business-critical systems. The company was all too aware of the challenges it faced. Should it fail, or should it fall short of anything but a fully professional approach to planning, design and implementation, there were major implications that would not only impact the bottom line but also severely disrupt the business and affect its reputation among customers.

On top of that, an over-riding concern – and a major criterion of the project – posed a big challenge. Quite simply, in moving the data centre by over 100 miles, there should be *zero downtime* to the business.

### The Solution

Fully aware of the risks it faced, MBL was quick to embark on a project to relocate all of the business critical systems from the data centre within three months. ArdentA was engaged as the technical partner to perform the migration.

MBL believed that ArdentA, as a leading storage solutions provider, was able to take on the task faced by the convenience retailer. MBL also saw the added value of ArdentA as a complete solutions provider, with skill sets in EMC<sup>2</sup> Symmetrix and CLARiiON, as well as a strong pedigree in the IBM and HP environments.

An EMC<sup>2</sup> Velocity Partner, ArdentA seized the opportunity for MBL to do much more than migrate its storage systems to a new data centre. A solution could also be provided to improve the capacity of the Symmetrix array.

### The Requirement

To help run its warehouse and distribution business, MBL uses Hewlett-Packard HP9000 servers – four servers support three warehouses and a head office from a central data centre based in Southampton.

At the core of its Storage Access Network (SAN), MBL utilised EMC<sup>2</sup> technology in the form of the highly resilient Symmetrix 8430 – a system for both live and test data. Catering for disaster recovery and flexibility of development environments, MBL made extensive use of EMC<sup>2</sup> Timefinder technology.

Issues were evident. This storage array was running at 75% capacity and there was the question of whether it should be replaced with a newer Symmetrix DMX range array.

But budget restrictions made this a completely unacceptable option, and more than that, the 8430 array was performing well, so there was no technical reason to replace it. To complicate matters, MBL received notice of the imminent closure of the data centre, by their outsourced data centre provider. All their equipment would need to be moved, quickly.



The ArdentA proposal included the implementation of a new EMC<sup>2</sup> CLARiiON CX500 array to be used initially to facilitate the migration of the data to the new data centre, and to then use the CX500 after the migration to host the development systems.

Because of the physical distance between the data centres, a SAN extension over fibre was not possible, and due to the short term nature of the project a SAN extension over IP was too costly. The ArdentA proposal used Informix High-availability Database Replication (HDR) over IP to facilitate the cutover of the data from the original data centre to the new one. MBL decided to simply use Incremental file system recovery to achieve the cutover of file system data.

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## Techniques

Ardenta had already implemented HP Virtual Partition technology (vpars) which allowed MBL to virtualise their development HP9000 server into three separate HP-UX environments. For the migration, Ardenta implemented a fourth vpar which was given the same resources as the live server.

The total capacity of the data to be moved was around 2.5 Terabytes. Using EMC<sup>2</sup> SanCopy technology, the initial cut of data was taken from the Symmetrix to the CLARiiON. Once the initial data transition was complete, Informix replication was used to synchronise the databases.

Following the successful testing, the CX500 and the target server were relocated to the new data centre. Informix HDR automatically re-established replication between the servers.

Final cutover was achieved by using the three hour maintenance window to recover file system data using incremental file system restores. The Informix replication was reversed to provide a backout strategy.

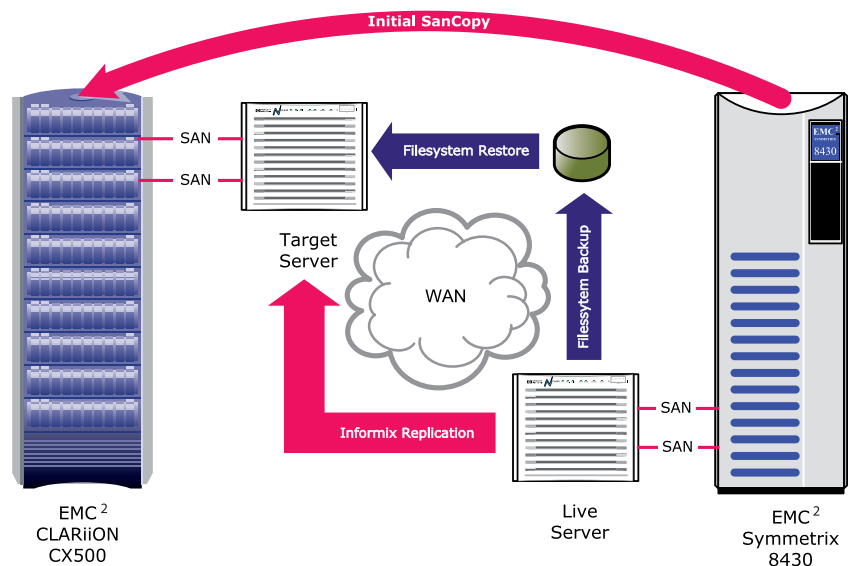
Once the equipment had been relocated to the new data centre, Ardenta reconfigured the SAN using SanCopy functionality so that the live data was stored on the Symmetrix while the CX500 supported the test and development systems. This reduced the used capacity of the Symmetrix to 50% giving the array another three years projected lifetime.

This solution not only allowed for the migration of the systems to the new data centre but also significantly reduced the potential cost of a Symmetrix upgrade by implementing a tiered storage solution.

*“We have to be certain that our business-critical systems have the best data storage solutions available in the industry, backed by in-depth technical expertise available when we need it.*

*In Ardenta, we found the answer to our stringent data storage requirements and a strong partner who we trust in providing industry-leading storage capabilities for back-up to disk and rapid data recovery. ”*

Nicola Duckett, IS Director,  
Musgrave Budgens Londis



## The Results

MBL have gained many business benefits as a result of the Ardenta solution, among them:

- Relocation of business critical systems with no downtime to business
- Implementation of Tiered Storage to reduce the Total Cost of Ownership
- Increased capacity of storage arrays to give longer lifetime
- Separation of live and test systems for performance improvement.