Churchill China enables 24/7 operations – thanks to Life IT

Overview

The Challenge
With new office facilities in Shanghai, Churchill China wished to move to 24-hour operations for its core business systems. With tape-based daily and weekly backup, this was not possible – a major constraint on business growth. The company wished to find a robust backup and recovery solution that would provide a very high degree of disaster recovery capability, while enabling systems to remain online 24/7

The Solution
IBM Premier Business Partner Life IT recommended replacing the existing tape backup and third-party data recovery process with a full disaster recovery solution based on Maxava HA software and a second IBM System i server. The Maxava HA software performs a continuous copy of production data to the secondary server, without requiring application downtime.

The Benefits
Churchill China has a full and continuous data backup copied from the production server – avoiding downtime and meeting the company's need for 24/7 operational availability. If the primary server suffers a disastrous outage, the secondary server has the ability to act as a failover for key users – reducing risk for this expanding international business.

Churchill China plc is one of the world's major manufacturers and distributors of high-quality ceramic tableware and related products. The Company operates two manufacturing units in Stoke on Trent, Staffordshire, supported by distribution centres and a sourcing operation in Shanghai, China.

The company, which employs some 600 people world-wide, generated revenues of more than £45 million in 2006 and reported a profit of £3.1 million.

Churchill offers an ex-stock service on many of its core products, and prides itself on its ability to meet customer requirements for rapid delivery. A global sourcing capability, both in the UK and China, can deliver a wide range of tabletop products including ceramic tableware, glassware and giftware.

Potential problems loom
The global sourcing and rapid delivery model is backed both by management and employee commitment, and by constant investment in information technology. The company uses two IBM System i servers – one running production, warehousing, logistics and human capital management applications, while the other handles Lotus Domino email and CRM applications – to provide an integrated suite of line of business systems.

To preserve operational data, Churchill China had been running both daily incremental and weekly full backups to tape, which were then stored off site. A third-party vendor provided a recovery service, which included delivering a replacement server if necessary. As total data volumes grew, the time taken to conduct a complete restore from tape crept up towards 36 hours. Once time for delivery and commissioning of the replacement server had been included, it was clear that recovering from disaster such as fire or flood in the data room would simply take too long.

At the same time, the tape backup itself was taking longer to complete, during which time production systems were unavailable. The available overnight backup window in the UK was being squeezed by the need for the Shanghai facilities to access the systems, and at some point it would become impossible to run the backup without impacting global operations.

Premier solution
Life IT, an IBM Premier Business Partner, recommended that Churchill China implemented Maxava HA software to provide continuous replication of line-of- business production data to a new IBM System i520 server.

This recommendation would eliminate need to take the production server offline during the tape backup process, enabling continuous 24/7 availability of key business systems to Churchill China's worldwide supplier base.

David Garnett, IT Manager at Churchill China, comments, "The new Maxava HA solution not only removes the conflict between the backup process and the demand for 24/7 operations – it also means that the backup is always current. The tape backup only ran overnight, so there was a risk that we would have to roll back to day-old data if disaster struck.

"By contrast, Maxava HA replicates current data continuously. If catastrophe strikes the primary server, the smaller secondary server

can simply take over, supporting a limited number of key users while the main system is repaired."

Maxava HA and the i520
Churchill China and Life IT selected an IBM System i520 server for the Maxava HA solution, leveraging the powerful journaling features of the i5/OS operating system. Maxava HA handles data and object replication for more than 800 libraries with no noticeable overhead on the production server. Policy-based control allows users to set up the required level of replication, and backup becomes a matter of simply monitoring the Maxava HA reports. The i520 server is located a short distance from the production server, connected on the company's 1Gb Ethernet network.

Lotus Domino applications and databases are also copied to the i520 server, using the built-in replication features of the Lotus Domino software. Churchill China continues to take full tape backups, too, from the backup server, which includes the Lotus Domino data.

"The former tape backup, offsite storage and replacement server provisioning and implementation was costing the business upwards of £10,000 annually," says David Garnett. "The new i520 and Maxava HA solution has moved the business from a 24-hour backup routine to near-instant recovery, and one that eliminates business interruption."

Productive partnership
Life IT researched, recommended, sized and implemented the Maxava HA and i520 solution for Churchill China, and assisted with preparing the business case.

David Garnett comments, "Life IT were excellent, providing very knowledgeable personnel who understood the business need as well as being able to deliver an excellent technical solution. Churchill China has enjoyed a productive partnership with Life IT for more than 15 years. Maxava HA has proved to be a highly efficient solution that allows Churchill

China to meet its twin objectives of continuous operation and disaster protection.

"Ultimately, while the solution is very cost-effective, this project was really more about managing risk while enabling growth. The combination of the IBM System i platform and Maxava HA has provided Churchill China with an excellent foundation for international business expansion."

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IT Manager
Churchill China

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