

ECLAT Textile



“Double-Take provided us with the most cost-effective way to replicate the order processing database and email systems of our Taipei data centre to our data centre in Miaoli. If there is an outage, our systems can fail over to the secondary data centre within 10 minutes, so our business staff can maintain uninterrupted communication with customers worldwide.”

- He Cheng-ying, Chief Information Officer of ECLAT Textile



Project Background

ECLAT Textile is a multinational corporation focused on innovative R&D and vertical integration. It specialises in the manufacture of flexible knit fabric and functional garment products. The Taiwan-based group is a major ODM for many international apparel brands. While their sales and R&D operations are locally based, ECLAT Textile's target market consists mainly of customers located in the US and Europe. Currently, ECLAT Textile has the ability to develop up to 3,000 new fabric types each year, as well as 150 new garment samples on a daily basis. ECLAT Textile's own Eclon Yarn and Fabric brand has already acquired the bluesign® certification, which ensures high-quality products for customers.

ECLAT Textile has production bases throughout Taiwan, mainland China, Vietnam, Cambodia and Lesotho. In order to ensure continuous operation of production lines, each production base has an independently operated IT system, with full-time IT staff dedicated to system maintenance. The data centre of ECLAT Textile's Taipei headquarters has been in use for many years. During its construction, the power supply for the office air conditioner was not separated from the rest of the equipment. The data centre's routine maintenance was also handled by regular property management staff. This led to numerous incidents, with unexpected shutdown of air conditioning systems that resulted in overheating and outage of the data centre equipment. By implementing a remote disaster recovery solution and replicating data from Taipei's order processing database and email systems to the data centre in Miaoli, ECLAT Textile aims to avoid interruptions to their sales process caused by equipment outages.



Business Challenges

As the world's largest supplier of elastic circular-knitted fabrics and functional garments, ECLAT Textile has to keep their email, order processing and production systems online at all times during working hours. This is to make sure the staff are able to respond to customer needs without delay, ensure smooth operation of the production lines and deliver products as scheduled. If there is an unexpected outage in the data centre in Taipei, employees will likely have to work overtime. In some cases it can even impact the operation of production lines and the overall delivery schedule.

In order to avoid disruption caused by outages of the order database and email system, ECLAT Textile decided to implement a remote disaster recovery solution to maintain the business operation by switching to the second data centre in Miaoli when natural disaster or human error occurs.

There are still many issues that need to be addressed by ECLAT Textile in order to achieve these goals.

Company name:

ECLAT Textile

Headquarters:

Taipei

Industry:

Textiles

Business environment:

- Year of Establishment: 1977
- Total number of employees: 9,100
- Specialises in the manufacture of flexible knit fabrics and functional garments

Implementation team:

ECLAT Textile and Zero One Tech

- A traditional backup solution requires that both the source and target data centres have the identical IT systems, including servers, storage devices, switches and other equipment. And disaster recovery software should be installed in these systems. Therefore, the cost can be very high for this approach.
- Most remote backup systems are very complicated, so the switchover or failover takes long time. If there is a personnel change, it is necessary to provide extensive training to the new staff. This poses burden on daily maintenance and operation of the IT department.
- The IT department required an easy-to-use disaster recovery software that could replicate the data residing on a VMware Sphere virtualized platform, from the Taipei data centre to the Miaoli data centre, without the need to purchase a second, identical IT system.



Solutions

ECLAT Textile chose Double-Take Availability over other solutions for its easy-to-use interface and quick failover across any combination of physical and virtual platforms. It also enables one-to-one or many-to-one server replication, and failover options at the full server or application level. In addition, it supports the latest version of the VMware vSphere virtual environment. Additionally, Double-Take provides multiple ways to protect data by flexible, granular recovery for files, directories and entire servers. Moreover, the architecture can meet the demands for protection and recovery across heterogeneous environments, including support for one-to-one or many-to-one, Active-Standby or Active-Active environments, as well as support for replication across LAN and WAN.

Double-Take can capture byte-level changes and asynchronously replicate them in real time. So, only the bytes that have changed are transmitted. Transmission compression and bandwidth scheduling features ensure bandwidth efficiency for remote office data protection. During the implementation of Double-Take, ECLAT Textile upgraded the internet bandwidth of the two data centres to a bidirectional 100M optical fibre link. This allowed them to remotely replicate their order database and email systems with just a little extra cost on network bandwidth.

He Cheng-ying, Chief Information Officer of ECLAT Textile, said: "The first phase of the disaster recovery implementation is successful, with the detailed project planning by Zero One Tech and Odyssey Technology, the addition of just one high-performance server, and Double-Take Availability's real time replication technology. It can keep our order database and email systems, which are business critical, operating in the most stable environment."

Double-Take Availability provides flexible options to choose between automated or manual configuration on failover function. Due to network quality issues that could lead to false detection of a system failure, ECLAT Textile decided to adopt the manual mode over the automated mode. Failover to the second data centre in Miaoli can be achieved within 10 minutes once a failure occurs. ECLAT's IT department is gradually expanding their remote disaster recovery plan to include other business-critical databases and applications in order to further improve the company's information protection.

Zero One Technologies, the authorized distributor of Double-Take in Taiwan, has a team of technical consultants certified by Vision Solutions. The team not only provides complete technical support and professional services, but they can also help businesses to adopt a highly reliable remote disaster recovery system within a reasonable budget.



Results

- In the event of IT system failure, manual failover to the Miaoli data centre can be achieved within 10 minutes.
- A highly reliable high availability environment that can avoid the risk of system outage was established without the need to modify existing IT architecture or acquire a lot of new equipment.
- The solution supports the VMware vSphere virtualisation platform. It provides greater flexibility for recovery on the target virtual host.
- It protects both physical servers and VMware vSphere virtual machines, and any combination of physical and virtual machines, providing simplified administration of the IT systems.
- It can achieve the same performance with a much lower cost because the purchase of identical servers as the secondary host, required by other solutions, is not necessary.
- Real-time replication keeps the data up to date and ensures data integrity on the secondary host.



Technologies

- Double-Take Availability
- VMware vSphere
- Windows Server