



HIGH-PERFORMANCE SUPPLY CHAIN

CHALLENGE

Facing an expanding data center, YCH Group looked toward new technologies to streamline its IT environment, help reduce its eco-footprint, and provide a scalable and flexible solution.

SOLUTION

To streamline its IT infrastructure, YCH migrated much of its environment onto a standardized platform of Dell PowerEdge M1000e modular blade enclosures containing PowerEdge M600 server blades, which connect to a Dell/EMC CX3-20 storage area network (SAN) to deliver a consolidated, unified storage foundation.

BENEFITS

- Compact Dell PowerEdge blade servers can deploy in half the time required for tower or rack-mounted servers, and helped reduce the hardware footprint by 70 percent, power consumption by up to 45 percent, and total cost of ownership by 40 percent compared with the previous solution.
- Integrated Dell/EMC CX3-20 storage helps consolidate several independently running storage systems into a SAN.
- Dell Global Infrastructure Consulting Services helps deploy the server environment 60 percent faster than the previous process.

Related Categories:

Blade servers, case study, Dell PowerEdge blade servers, Dell/EMC storage, power management, YCH Group

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Dell™ PowerEdge™ M1000e modular blade enclosures connected to a Dell/EMC CX3-20 storage area network helped supply chain provider YCH Group reduce data center floor space by 70 percent and power consumption by up to 45 percent compared with the previous solution.

YCH Group, an integrated logistic services and end-to-end supply chain management provider, supports up to 3,000 partners in more than 20 supplier hubs across the Asia Pacific region. Since the mid-1990s, the company has provided warehousing, freight forwarding, and transportation to manufacturers, suppliers, and retailers. YCH thrives on a flexible technology environment that can respond quickly to customer needs and accelerate supply chain operations by connecting its technology platform to customer systems.

Previously, YCH deployed servers with extra processing capacity to keep pace with growth and handle unexpected increases in activity, which led to servers being underutilized. Additionally, because the company deployed servers from multiple vendors, the server environment was difficult to monitor and manage. Faced with a rapidly expanding business, YCH reviewed how it could simplify its IT environment to meet customer demands and provide new services quickly. James Loo Wai Kheong, CIO at YCH, says, "Compared to the previous deployment, Dell blade servers were chosen because the solution streamlines our IT environment and reduces floor space by 70 percent. Plus, it supports our green initiative of reducing carbon emissions through a smaller energy footprint."

BLADE SERVERS HELP CONSOLIDATE IT ENVIRONMENT

With a close working relationship of over 10 years, YCH chose Dell to help consolidate its IT environment. "We have come to trust and rely on Dell because our companies have a long history of working together," Loo says. "Dell understands our needs. As an actual customer of our end-to-end supply chain solutions, it knows how fast we need to scale our infrastructure to meet customer requirements."

YCH migrated much of its heterogeneous environment of over 400 servers onto Dell PowerEdge M1000e modular blade enclosures and PowerEdge M600 server blades. Explains Loo, "With a product road map, Dell gives us the assurance that our deployed blade servers will be compatible with future products."

Dell Global Infrastructure Consulting Services assisted YCH in rolling out hardware at its data center, helping accelerate deployment of the consolidated server

environment by 60 percent compared with the previous process and providing training and comprehensive technical support. In addition, YCH integrated several independently running storage systems into a consolidated Dell/EMC CX3-20 storage area network (SAN). "The close partnership between Dell and EMC provided a seamless experience and eliminated the hassle of us coordinating delivery between the two vendors," says Loo.

SCALABILITY AND FLEXIBILITY HELP ACCELERATE PROVISIONING

YCH can now use Dell PowerEdge blade servers to help provision capacity for its needs. "We can now respond to different customer requirements, from supporting the smallest customer needing very little computing power to major hubs requiring all the MIPS [million instructions per second] we can muster," says Loo.

Previously, YCH spread its customer data across seven separate databases, which the integrated switching technology in PowerEdge blade servers helped consolidate into one database. "We have a lot of data to grind, so the flexible support for Gigabit Ethernet, Fibre Channel, or InfiniBand protocol enables the Dell blade servers to support all our needs from a single location," says Loo.

With nine evenly distributed, high-efficiency fans, PowerEdge M1000e blade servers can generate less heat than traditional rack-mounted servers and help reduce energy consumption for cooling the system. "The Dell blade server system effectively decreases our energy consumption by up to 45 percent compared to the previous solution with its dynamic cooling technology that directs air to areas where the most heat is generated," says Loo.

HIGH AVAILABILITY HELPS SUPPORT OPERATIONS

YCH can also count on Dell PowerEdge blade servers to help provide maximum

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—James Loo Wai Kheong
CIO at YCH Group
July 2008


availability in support of critical logistics operations. "We know we can rely on Dell hardware to run customer-facing applications that support the continuous flow of information and goods," says Loo. Applications for moving raw materials, distributing consumer goods, and returning defective goods will be delivered to approximately 3,000 YCH customers and suppliers. In addition, up to 3,000 employees can use internal applications such as Microsoft® Office 2007 and internal finance and human resource applications running on PowerEdge blade servers.

To help maximize uptime, PowerEdge blade servers offer dual Chassis Management Controllers (CMCs). The densely packed configuration of PowerEdge blade servers also helped YCH reduce the physical footprint of its data center by 70 percent compared with the previous deployment: up to 64 server blades can fit into a 40U rack space, which is 60 percent more space efficient than traditional 1U rack servers.

The centralized system and reduced footprint resulted in 50 percent faster provisioning of new processing and storage capacity compared with the previous solution. Altiris® Deployment Solution™ software accelerates new service provisioning with its visual drag-and-drop capability and rule-based RAID provisioning. "In the supply chain logistics business,

we don't have large data volumes in the beginning of our business transactions, but requirements have a tendency to grow uncontrollably as relationships with customers progress. With the Dell PowerEdge blade server system, we know we can efficiently transfer storage resources and processing power to the customers and supply hubs that need it most," says Loo.

Consolidating its IT environment onto PowerEdge blade servers—which allow server blades to be added to the enclosure with little effort—and decreasing energy consumption helped reduce YCH's total cost of ownership by 40 percent compared with the previous solution. "We do not have to deploy extra resources with Dell blade servers," says Loo. "Other vendors might provide a buffer, but Dell helps us maximize our current hardware without adopting extra capacity." 

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