Steel manufacturer improves enterprise resource planning processes

TAGAL improves mission critical ERP performance by two times using Dell's innovative platform optimization driven by RISC migration approach

Business need

To support their 24x7 mission critical business applications on a highly reliable, available and serviceable business IT platform, and ensure efficient product delivery to customers in a highly competitive environment, TAGAL needed to refresh their IT infrastructure.

Solution

TAGAL worked with Dell™ Services to implement a comprehensive RISC migration from HP Unix to MS Windows platform using a Dell end-to-end solution comprising Dell 12G PowerEdge™ servers, Dell EqualLogic storage, Dell Networking switches and a Dell DR backup and recovery appliance along with outsourced infrastructure management.

Benefits

- Outsourcing IT infrastructure results in 75 percent time savings for IT team
- Comprehensive solution reduces total cost of ownership by 20 percent
- Application performance improves by two times with robust storage
- Disk based backup solution makes data recovery two times faster

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"When we were comparing proposed solutions, Dell's offering stood out clearly because it was an end-to-end solution. Having a single point of contact to take care of all the elements of our data center has resulted in a reduced total cost of ownership of 20 percent and more importantly, peace of mind for our IT team."

Zhang Wei, Chief Technology Officer, TAGAL

In 2001 steel giants ThyssenKrupp and Angang Group decided to establish their presence in the growing Chinese steel market and formed a joint venture called TAGAL which houses a state-of-the art hot-dip galvanizing line with the aim of supplying products of the highest quality.

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>
> *Zhang Wei, Chief Technology Officer, TAGAL*

Based in Dalian, China, TAGAL employs 300 people and draws revenues close to U.S$ 1.5 billion per year, predominantly from the automobile industry.

Technology plays a strategic role in the operations of the company and TAGAL relies on an enterprise resource planning (ERP) system, through which company-wide processes including manufacturing are automated. However, the ERP system in place at TAGAL was not optimally performing due to the underlying IT infrastructure. As a result, inefficiencies across departments impacted the company's ability to deliver products in line with service level agreements (SLAs).

Recognizing the need to upgrade their IT infrastructure to support the mission critical ERP system and operations, TAGAL identified two main criteria which the refresh would have to fulfill. First, the infrastructure had to optimize the supply chain management resulting in all customers receiving their deliveries within 30 days. Second, with plans to setup a new plant in Southern China to meet growing demand for their products, the infrastructure would have to be robust and scale to meet the needs of two different manufacturing locations

Robust end-to-end solution replaces ailing IT infrastructure

TAGAL's data center infrastructure was based on Hewlett Packard (HP) Unix Itanium servers and HP EVA storage array which were reaching end-of-life and demanded a large percentage of the IT team's time in maintenance. Moreover, the level of technical support they received was subpar, and TAGAL wanted to work with, not just a hardware vendor, but a total solution provider. With over 10 years of a beneficial relationship with Dell that provided infrastructure for other projects and end-user computing, TAGAL explored the option of appointing Dell to migrate and upgrade their infrastructure to be Windows based instead of Unix, and to maintain it as well.

Zhang Wei, Chief Technology Officer, TAGAL, explains, "We operate in an extremely competitive environment, so it is crucial that we spend our IT resources' time on innovative service delivery to our customers. So, the concept of outsourcing our IT infrastructure entirely appealed to us and with Dell, we found experts who

Technology at work

Services

Dell™ Global Infrastructure Consulting Services
– Workload Assessment
– Design and Plan
– Implementation
– Infrastructure Managed Services

Hardware

Dell PowerEdge™ R910, R720 and R320 servers

Dell EqualLogic PS6110XS

Dell Networking S4810 switches

Dell DR4000

Software

MS Windows 2008 Server Enterprise Edition

could design and migrate to a more robust infrastructure to enhance our mission critical ERP performance and also manage it on a regular basis."

The new infrastructure at TAGAL was designed as an end-to-end solution by Dell Infrastructure Consulting Services to include Dell PowerEdge R910, R720 and R320 servers, Dell EqualLogic PS6110XS and Dell Networking S4810 switches. To support the company's business continuity initiatives, a disaster recovery solution comprising of Dell DR4000 was also put in place.

IT team focuses on business innovation for better IT value added services
With the Dell solution in place and being closely monitored by a team of experts, the IT team has seen a 75 percent reduction in the time spent worrying about their infrastructure. "While previously 75 percent of our day would go into monitoring and maintaining our infrastructure, since outsourcing it, we only spend about 10 percent of the day thinking about it, and that is usually time spent on receiving daily updates from our Dell team," comments Zhang.

TAGAL appreciates the end-to-end solution provided by Dell which covers all dimensions of their data center from servers, storage and switches to software and services. Standardizing their infrastructure on a single vendor has also had an impact on TAGAL's total cost of ownership, reducing it by 20 percent. "When we were comparing proposed solutions, Dell's offering stood out clearly because it was an end-to-end solution. Having a single point of contact to take care of all the elements of our data center has resulted in a reduced total cost of ownership of 20 percent and more importantly, peace of mind for our IT team," says Zhang.

ERP system performs two times better improving customer response times
The biggest challenge faced by TAGAL with their previous infrastructure was the slow performance of the ERP system. ERP transaction codes and reports, which were crucial to manufacturing related departments, took a long time to process as the system was unable to meet the demands of growing number of transactions. Consequently, the more time employees took to process required reports, the longer their customers spent waiting for reliable information as well as timely delivery of products. As a result, TAGAL experienced a lack of standards and governance and struggled to deliver to their customers in a timely fashion.

By deploying a robust storage solution, TAGAL has seen their ERP system perform two times faster. With the superior I/O performance of Dell EqualLogic SAN, employees have been able to process transaction codes and reports in a fraction of the time it took previously and have dramatically improved the lead time on their enterprise resource planning management. The Dell Networking S4810 switch, selected by Tagal because of the low latency response it offers compared to other products in the market, provides their 10 Gbps IP SAN, interconnectivity with the Dell EqualLogic PS6110 XS.

"With the Dell EqualLogic storage solution's ability to manage data for multiple workloads, our mission critical ERP system is now two times faster than it used to be. We have managed to achieve efficiencies in the resource planning process, ultimately improving our relationship with our customers. We are setting a benchmark in the industry for production efficiency and are able to produce products more quickly for some of the world's largest automakers," states Zhang.

Data recovery two times faster with disk-based backup solution
Backing up data was yet another time consuming task faced by the IT team at TAGAL. As backing up to tape was proving to be a tedious and unreliable form of data recovery, the company welcomed the relief provided by Dell DR4000, which allowed TAGAL to keep more data online longer and reduce their dependency on tape backup. Moreover, recovering data is twice as fast now with disk based backup compared to tape, meaning that unnecessary downtimes during recovery periods can be avoided.

As the business continues to grow, TAGAL plans to set-up another plant in Southern China and with the DR4000's deduplication and replication functionalities; a complete backup solution for multi-site environments is now available to them. "We find it immensely valuable that the solution we have received from Dell has addressed our current issues and is also ready to scale with us into the future. We don't think of Dell as a supplier, but we consider them a business partner and appreciate their input in improving our business efficiencies," concludes Zhang.

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