



A simplified route to hyperconvergence

Jorudan drives innovation while reducing IT costs and eliminating downtime by moving to a Dell EMC hyperconverged infrastructure



Technology

Japan

Business needs

Jorudan needed to replace its main IT platform, whose hardware was coming to the end of its warranties, and looked for a solution to cost-effectively migrate to a hyperconverged infrastructure to lower costs, simplify management and drive product innovation.

Solutions at a glance

- [Dell EMC Solutions for Microsoft Azure Stack HCI](#)
 - [Dell EMC R740xd S2D Ready Nodes](#)
 - [Dell EMC Networking S4048-ON switches](#)
- [Dell Technologies Consulting Services](#)
- [Dell EMC ProDeploy for Enterprise](#)
- [Dell EMC ProSupport Plus for Enterprise and Software](#)

Business results

- Drives innovation with HCI
- Saved up to JPY20 million (US\$182,000) in hardware
- Completed HCI deployment in 2 months
- Increased efficiency through easier IT management
- Eliminated downtime during maintenance tasks
- Simplified support with a single point of contact

“We found that the Dell EMC ProDeploy team took care of the deployment phase for our HCI efficiently. The team completed the work in just two months.”

Shinichi Sato
Manager, Planning and Sales Department, Jorudan

Headquartered in Tokyo, Jorudan builds information systems for companies providing transport services. The company has developed several business-to-business-to-consumer services, such as Norikae Annai Biz, a train connection search service. Norikae Annai Biz is one of Jorudan's many Advanced Passenger Information systems. The service is bought by Jorudan's business customers to help their employees calculate travel costs.

Jorudan used an infrastructure based on blade servers to deliver its services, including Jorudan Cloud Service, which offers multiple web-based solutions to clients. The infrastructure's 16 blade servers and three storage servers ran in a Windows Server 2012 and Windows Server 2012 R2 environment, with the servers virtualized using Microsoft Hyper-V. In total, the infrastructure supported 200 virtualized machines.

An application transformation journey begins

With six months before warranties ran out on the hardware, Jorudan looked to replace the technology and wanted to implement a hyperconverged infrastructure (HCI). Shinichi Sato, manager in the planning and sales department at Jorudan, says, "With HCI, we knew we would have a system that was easier to operate. We wanted to move away from blade servers."

Sato says that running firmware updates on the blade servers had caused service interruptions. He explains, "Our services are largely based around transportation information. We have clearly defined windows for interrupting our own services—typically between the last train at night and the first train in the morning."

Worked with a trusted provider

Jorudan engaged with Dell Technologies Consulting Services to identify the right HCI solution. Sato and Dell Technologies experts decided on a Dell EMC Solutions for Microsoft Azure Stack HCI. Sato says, "Over 80 percent of our systems are Windows Server-based. Hence, we were able to manage a smooth transition from the former three-tier system to the new HCI system optimized for Hyper-V environments."

Completed HCI deployment in 2 months

Jorudan worked with Dell EMC ProDeploy for Enterprise on the implementation of the HCI. Sato comments, "We left the heavy lifting to the Dell EMC ProDeploy team in terms of operating system deployment, the Hyper-V build, connecting with the Active Directory environment and creating the Azure Stack HCI storage environment. We found that the Dell EMC ProDeploy team took care of the deployment phase for our HCI efficiently. The team completed the work in just two months."

"The Dell EMC system has failover capability, so there has been a significant improvement in both ease of maintenance and system reliability."

Shinichi Sato, Manager,
Planning and Sales Department,
Jorudan



Reduced data migration journey time

The company saved time migrating data from its servers to the HCI infrastructure by choosing the Dell EMC Solutions for Microsoft Azure Stack HCI. Says Sato, “We looked at a number of HCI solutions, but Dell EMC Solutions for Microsoft Azure Stack HCI was the only one that allowed for our transition over to Hyper-V that didn’t require any data conversion. Just forwarding files would take over three hours and our only window for this sort of task is a few hours in the middle of the night. With the size of the data files, we are talking about two to three days to get this done. With Azure Stack HCI, we could make direct use of the disk image taken from Windows Server 2012—a copy of the VHDX [virtual hard drive] file can be imported into the virtual environment.”

Up to JPY20 million (US\$182,000) saved in hardware

Jorudan also achieved significant cost savings by transforming its IT. Because it no longer has to purchase dedicated storage arrays, the company estimates that it saved between 10 million and 20 million yen. As a result of the project, Jorudan consolidated hardware substantially, going from the 16 blade servers and three storage servers to just six Dell EMC R740xd S2D Ready Nodes running Azure Stack HCI, plus Dell EMC Networking S4048-ON switches.

Increased infrastructure management efficiency

The IT team at Jorudan has found the HCI more efficient to manage. IT personnel no longer need to maintain distinct server and storage networks because both servers and storage are under one point of control. Sato says, “If we had a problem with the storage, for instance, we had to check storage servers, switches, server network interface cards and more to isolate the issue. The Dell EMC system has failover capability, so there has been a significant improvement in both ease of maintenance and system reliability.”

“The quality of support from Dell EMC ProSupport for Enterprise is excellent compared with other vendors. It is great to have one point of contact.”

Shinichi Sato, Manager,
Planning and Sales Department,
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Zero downtime during updates

The redundancy built into the HCI has meant less cost and zero downtime during system maintenance. Sato comments, “With Windows Server 2012, we did not have the failover functionality set up like we do with Windows Server 2016. Because we are running a six server-node system, we can have two nodes offline at any one time. Hence, our system downtime is basically zero. We can add capacity without any system downtime, which is a solid benefit for us.”

Support services simplified with Dell EMC

Jorudan—whose IT is now 70 percent based on Dell EMC—is highly satisfied with the performance of the Dell EMC ProSupport Plus for Enterprise team with the addition of Dell EMC ProSupport Plus for Software for the HCI. “The quality of support from Dell EMC ProSupport for Enterprise is excellent compared with other vendors,” says Sato. “It is great to have one point of contact.”

Drives product development

Jorudan is driving innovation with the Dell EMC Solutions for Microsoft Azure Stack HCI and is looking to deliver new services to customers via the platform. Sato explains: “Mobility as a service is receiving a lot of attention now, and we are talking about services that we can offer in this area. Furthermore, Internet of Things (IoT) devices such as GPS units for vehicles are making real-time location data cheaper and easier to use. Add to this new sensors and interfaces, and the services we can offer become really interesting.”



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