Manufacturing company updates management systems

Teijin Limited updated its key system to a high-performance server that is optimal for SAP HANA

“The deciding factors for us were the close relationship between Cisco and SAP, Cisco UCS’s shares and price, and the user-friendly, comprehensive support.”

Toshitaka Murakami
Enterprise Business Headquarters TG Support Division Manager, Infocom Corporation

Executive Summary

- **Customer Name:** Teijin Limited
- **Industry:** Manufacturing, Service
- **Location:** Osaka, Japan
- **Number of Employees:** 15,756

- **Customer Name:** Infocom Corporation
- **Industry:** Service
- **Location:** Tokyo, Japan
- **Number of Employees:** 1,109
Case study
Cisco Public

Business Challenge:

• The company needed measures to prevent the deterioration of the key management system used by the group. It also needed to update applications.

Network Solution:

• The application introduced SAP HANA and used the Cisco® UCS® platform.
• This reduced the time needed to process business tasks by improving performance.

Business Results:

• Technical support and maintenance support through close connections between Cisco and SAP
• Management of all system integration projects through Cisco Advanced Services
• Complete migration of the key system and examination of disaster recovery

Business challenge

Teijin Limited opened in 1918 as Japan's first rayon manufacturer. The company currently participates in three business domains: high-functional raw materials, healthcare, and IT. Teijin is advancing its strengths in each industry and aims to create new value that other companies cannot imitate. Furthermore, the company plans to engage in drastic business structure reforms and develop a business entity that provides solutions throughout the group.

Teijin established a key system using domestic and overseas businesses that consists of the Teijin headquarters and the group. The large-scale system includes 400 to 500 servers. Infocom Corporation, a company in this group, has provided continuous support, including the construction of infrastructure (such as servers and networks), operation maintenance, and the development and construction of various business applications. Infocom is also supporting everyday tasks.

The system used for management tasks requires countermeasures against deterioration as well as upgrade support for applications. In a discussion focused on the future, Teijin and Infocom compared the continued usage of conventional applications and their replacement with new product applications, and decided to replace everything. At that point, the team chose to introduce SAP HANA. At the same time, they

Cisco UCS + SAP HANA, which supports the Teijin Group’s key systems

Cisco UCS C460 M4 Rack Server

It offers exceptionally high performance and reliability to power the most server performance-intensive and memory-intensive, mission-critical enterprise applications and virtual workloads.

Main Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Case size</td>
<td>4 RU</td>
</tr>
<tr>
<td>CPU</td>
<td>Intel® Xeon® processor E7-4800/8800 v2, v3, or v4 product family x 2 or 4</td>
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<tr>
<td>Memory</td>
<td>Up to 6 TB (96 DIMM slots)</td>
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<tr>
<td>Drive Bays</td>
<td>Compatible with 2.5 inch (SFF) x 12 (Compatible with hot plugs, supports each drive for SAS/SATA/SSD. 2 bays can install PCIe SSD)</td>
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<tr>
<td>Scalability</td>
<td>10 PCI Express (PCIe) Gen3 slots (Supports Cisco UCS virtual interface cards and third-party adapter/GPU cards)</td>
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<tr>
<td>Networks</td>
<td>Gigabyte Ethernet LAN-on-motherboard (LOM) x 2, 10 Gigabyte Ethernet port x 2</td>
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Network solution

“For improvements related to deterioration, it seemed like we could control the investment costs better by continuing to use successor models,” said Infocom support group leader Toshitaka Murakami. “However, after considering the medium term and making comparisons and examinations, we came to the conclusion that using SAP HANA would be better.”

Murakami added that, in recent years, almost all servers consisting of a system were virtualized, leaving fewer opportunities to introduce physical servers.

“Introducing SAP HANA was a great challenge for us. Up until now, we had heard of many cases of difficulties during its introduction,” Murakami explained. So they arranged a discussion between a staff member from a company that had introduced SAP HANA, and a project manager from Teijin.

“In order to make the project a success, we decided that asking a vendor with results using SAP HANA was safer and more secure, even if it cost a little more,” Murakami explained.

Kazushi Shiraishi, also from Infocom’s support group, noted that maintenance was a factor.

Features of SAP HANA on Cisco UCS

Both companies provide optimal solutions based on SAP ERP, BWA, and HANA’s standard technology. In particular, SAP HANA, which has been optimized under Cisco UCS, gives customers a true competitive advantage. The Cisco HANA certified server is equipped with the following features. It can process the transfer of huge amounts of data between the SAP ERP and SAP HANA databases through a high speed, low latency I/O interface in real time. Furthermore, the SAP HANA database’s maximum performance can be extracted by combining it with the Cisco Nexus Series data center switch.

- **Features of Cisco HANA certified server**
  - **Large scale in-memory and large capacity storage disk**
    - Supports up to 6 TB of memory with 64 DIMM slots
    - Large memory capacity can be installed at a low cost
    - 6 TB storage disk can be installed
  - **High speed and low latency interface**
    - Supports high-speed I/O at 40 to 80 Gbps
    - Integrates I/O through FCoE
    - Utilizes low latency (2μ sec) I/O performance
  - **High Performance**
    - Equipped with the latest Intel Xeon E7 family processor
    - Equipped with 8 sockets and a maximum of 120 cores
“We decided to entrust Cisco with everything related to system integration. They were able to provide complete support, from networking to high-level applications. There were many cases where communication between vendors became difficult because there were different construction vendors in charge of servers and networks, so I looked forward to Cisco’s total support,” Shiraishi added.

Business results

The Cisco UCS lineup includes the blade server B series and Cisco UCS C460 M4 Rack Servers. They provide total high efficiency and usability from the initial construction to everyday operation through Cisco UCS Manager. It can manage the entire system through a graphic interface and a service profile function that simplifies configuration and expansion.

Cisco UCS can process huge data transfers between the SAP ERP and SAP HANA databases through its large capacity in-memory and storage and high speed, low latency I/O interface in real time. After Teijin migrated to SAP HANA, its performance improved and the time needed for batch processing during the night, which is when accounts are settled, was reduced by several hours.

Teijin introduced two Cisco UCS C460 M4 Rack Servers: one for real execution and one for development and quality assurance.

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“We are using this based on a proposal that said development and quality assurance could sufficiently secure performance, even in virtual environments,” said Shiraishi. “It is as per the proposal, which said that real execution should be made independent. Everyone was nervous when switching from a conventional system for the real execution environment, but it was completed in time without any problems.”

Cisco cooperated closely with SAP to provide optimal solutions based on both companies’ standard technologies. In the Cisco Tokyo office, there’s a SAP competence center that provides total support for the introduction, construction, and operation of SAP HANA. It provides comprehensive proposals for everything from servers to networks.

“Cisco and SAP’s connection is strong, so we could be at ease regarding the technology as well,” said Murakami. “Cisco UCS’s global share is top class, and its price was also low. All of these backed our decision. We are also in charge of maintenance, so we were concerned about that as well. However, it has a support center like network products, and we knew that they would provide support in a quick manner, so we determined that it was fine.”

According to Shiraishi, the introduction and migration project finished in about a year, but the team knew that maintenance operations would continue for more than 10 years afterwards, and asked Cisco for support.

“The company successfully completed its goal of transferring the key system to SAP HANA. From the start of its operations to the present, it has used the new system without any problems for the business tasks of various companies in the group.

For More Information

For details about Cisco UCS, please visit www.cisco.com/go/ucs.