



Deployment case study: Cisco HyperFlex system

Strengthening the virtual desktop infrastructure environment
for all employees

“We have deployed the Cisco HyperFlex system and experienced firsthand the benefits, such as performance and operation manageability, that could not be achieved through combinations of individual products.

I really did not believe I would be able to use it in just 30 minutes.”

Shinichi Hakoda

IT Promotion Department Manager, AS ONE Corporation

Executive Summary

- **Customer name:**
AS ONE Corporation
- **Industry:**
Wholesale trade
- **Location:**
Osaka, Japan
- **Number of Employees:**
485

Business Challenge:

- Create a virtual desktop infrastructure (VDI) for all employees using high performance, easy-to-manage products
- Reduce worker hours, costs of construction, and the operational and management burden

Network Solution:

- Cisco® HyperFlex™ system

Business Results:

- With the management console, you can grasp the status of every component at once, simplifying operation and management.
- The company plans to further strengthen the VDI environment and support all employee terminals within the business year.

Business challenge

As One Corporation is a general trading company handling scientific instruments in the three fields of science, industry, and medicine. It provides a comprehensive range of products: more than 70,000 commodities in paper catalogs and more than 1.4 million in web catalogs. The company has created an original business model in which, while manufacturing for wholesale, it also has retail capability as a PB manufacturer. Throughout 10,000 domestic locations As One is developing a customer-centric business in which the necessary items are delivered to the necessary places at the necessary times.

As One is proactively involved in building information systems linked to service improvements. In addition to promoting server virtualization for the past 7 to 8 years, the company has used converged infrastructure products to strengthen its integrated database. Converged infrastructure has helped the company expand the number of our products handled by the web catalog to more than 1 million, and improve both operability and manageability. As One is also creating an efficient work environment through virtual desktop infrastructure (VDI). Sales representatives can perform their required work without returning to the office each time.

The company initially built its VDI environment on other companies' servers. Meant for roughly 100 terminals, it was a general system configuration combining servers and storage. There were several issues, such as worker

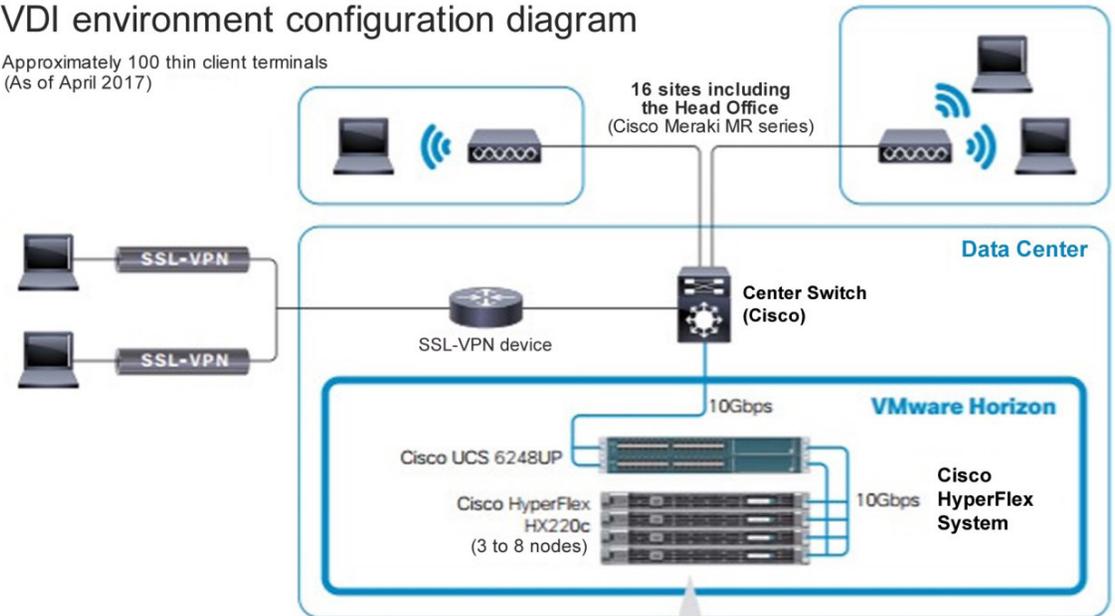
hours and cost of construction, and response during daily use. Later, As One developed a VDI on a scale that covered all 400 or more employees. Strengthening this VDI required selecting new products.

"It's said that we all need to reform the way we work, and at our company, not only are more employees taking maternity, but more people are likely to take time off to provide nursing care in the future," said Shinichi Hakoda, IT Promotion Department Manager. "It is important for us as a company to provide an environment in which employees can work safely in cases such as this as well. However, the number of terminals for VDI increased greatly from the originally envisioned scale, and we believed it would be difficult to resolve the issues faced during construction and operation using our existing approach. By strengthening the web catalog integrated database, we were able to adopt a converged infrastructure and reap the benefits. We thought we might be able to do the same thing with VDI."

Hakoda stated that, internally, the company was already operating several hundred physical and virtual servers, and as there was an extremely large number of managed devices, adding more network devices created a strong need to increase performance while keeping the burden of deployment, construction, and operation and management as low as possible. They quickly took notice of the Cisco® hyperconverged infrastructure solution as a product that would meet these needs, and proactively gathered information on it.

VDI environment configuration diagram

Approximately 100 thin client terminals
(As of April 2017)



Main features of the Cisco Hyperflex system

- Computing, storage and network component elements combined in one box
- Cisco has a strong global track record Unified Computing System Shared architecture with (UCS), unified operational model
- Computing and storage components can be expanded independently according to work load
- Non-stop rolling upgrades, node additions and extensions are all possible
- Automatic data distribution and re-balancing between nodes, constant optimization of system state
- By making functions such as inline deduplication and data compression the standard, storage is optimized and highly efficient resource operation is possible
- VMware ESX 6.0 U1 has already been deployed, and system installation is extremely simple
- Management tools are integrated in the VMware vCenter to support single point management



Utilized for various objectives

- Desktop virtualization**
 Low cost, consistent performance
 Predictable expansion capability
- Remote sites**
 Easy deployment and centralized management
 Smooth operation
- Server Virtualization**
 Elimination of complexity and application to extensions
 Optimization with continuous operation
- Tests/Development**
 Agile provisioning
 Support for frequent iterations
 Immediate clones and snapshots

“We had already investigated that infrastructure when proceeding with server virtualization, and made a point later to regularly check the product information of all the companies out there. We knew that Cisco was creating new products while we were gathering information, and so we made inquiries at the vendors who were supporting our system construction. Their recommendations lead us to deploy the Cisco HyperFlex.”

Network solution

Cisco is widely praised for its ability to manage many network components at once.

The Cisco HyperFlex™ system integrates computing, storage, and network components. This helps to enable deployment in a matter of minutes, and seamless management of the physical and virtual environments. Additionally, as the management tool is also integrated, there was no need to use a different tool for each component as used in the previous silo infrastructure, resulting in a simple and easy-to-understand operation.

Hakoda explained that As One performed a comparative investigation of the hyperconverged infrastructure offered by each company, and decided to use the Cisco HyperFlex system so they could purchase all elements, including the network, from one company with a strong reputation for easy operation and management.

“With the products of other companies, the switch section always had to be from other

manufacturers. With Cisco, everything was integrated, and the more we thought about it, the more that would minimize the burden,” he said.

“A major deciding factor was the standard inclusion of UCS Fabric Interconnect. Until this point, internal storage had mainly used Fibre Channel connections to maintain response, but as the server products of each company shifted to support 10 GE Ethernet, the internal network also began to switch to 10 GE.”

Hakoda said that, based on the need to select switches for future network reinforcement, there was concern over whether there would be sufficient slots to connect a large number of servers, and the inclusion of Fabric Interconnect as standard was highly attractive to the company.

Just as advertised, the construction was fast and management was easy. As One started operation the Cisco HyperFlex system in January 2017, and expanded the number of VDI terminals to around 250. Hakoda was highly impressed, stating that the construction was finished days ahead of schedule, and setup was complete well ahead of expectations.

“Normally, there is at least one month between the time the devices are delivered and when main operation starts. However, this time, the internal infrastructure team was finished in one day, and the engineers two weeks after that, cutting the total time virtually in half. I was amazed that the product itself only took about 30 minutes to set up,” said Hakoda.

Kosuke Fujita, of the As One Corporation IT Promotion Department said Cisco HyperFlex reduced their burden from a daily operation and management perspective.

“We started operation several months ago and haven’t had any major difficulties. It has been running with incredible stability. In the previous configuration we had to check the server, storage or network devices individually, but now we can see the status of all devices at once from the management console, which is very easy. The operational burden has been greatly reduced. If problems do occur in the future, being able to view all the information at once from the management console will be a great benefit for us. This has made it easy for us to survey the situation and perform diagnostics,” he said.

Business Results

As One is still reinforcing its VDI framework, and plans to make VDI usable from all employee terminals within the financial year. They are also investigating potential replacements for all devices in order to respond to the deterioration of their internal network. They will continue to use Cisco products as the main devices on both wired and wireless LANs, and plan to gradually replace other devices as well.

For More Information

See www.cisco.com/go/hyperflex for details on the Cisco HyperFlex system.

Product List

- Cisco HyperFlex system

