Working to optimize groupwide IT systems
Adoption of Cisco Hyperconverged Infrastructure

Nippon Paint Holdings Co., Ltd., the leading paint manufacturer in Asia that constantly strives to position itself as a major player in the global marketplace as well, decided to implement a Cisco® HyperFlex™ system to optimize its groupwide IT system capabilities. There have been zero issues since going live one year ago, and the company, which is now working toward groupwide system integration, has seen benefits from cost, speed, and operational perspectives.

Customer name
Nippon Paint Holdings Co., Ltd.

Industry
Manufacturing

Location
2-1-2 Oyodokita, Kita-ku, Osaka-fu

Number of employees
Standalone: 230
Consolidated: 20,257 (as of December 31, 2017)

Business challenges
- The review of individual optimized settings for IT infrastructural elements, such as alternative environments, backup, and redundancy
- The operation of legacy servers and storage processes and increased administrative load

Network solution
- Use Cisco HyperFlex™ to optimize the IT infrastructure’s resource pool capabilities
- Employ fabric interconnects to make it easier to use external storage resources

Business results
- Enhanced business agility following the optimization of the group’s domestic IT systems
Case study
Cisco HyperFlex System Deployment

Business challenges
Nippon Paint Holdings has, following its restructuring in 2014 to become a holding company, endeavored to centralize and optimize its internal IT systems. Kenichi Kanbara, Manager, Infra & Apps / IT System Planning Group, Information Systems Department on Nippon Paint Holdings Co., Ltd., spoke about the challenges the company faced at that time, as well as its design philosophy, as follows.

“We migrated our mainframe to an open environment over the course of several years, starting in 2002. At the time, our internal IT systems were configured and optimized on a standalone basis, and we also faced budget-related issues with respect to backups and redundancy. In light of this, we decided to overhaul and redesign our IT setup from a holistic perspective when migrating our mainframe. The thought process behind this was that there would be tangible benefits from a security, cost, and operation perspective, and we also believed it would be better if we could back up data and control jobs and so on at a group level. In this regard, we had been using virtualization platforms since around 2005, but felt there were issues with conventional IA servers and storage. Over time, it became increasingly difficult to manage things as the number of machines continued to increase, and there was a mishmash of different models and specs. We also encountered connectivity issues between the servers and storage facilities, and we were unhappy with the fact the underlying infrastructure was not as modern and up-to-date as the application layers.”

It was at that time that Kanbara happened to come across information regarding Cisco Unified Computing System™ (Cisco UCS). His initial reaction was, “Why Cisco servers?” but upon speaking with Cisco, he felt the Cisco offering was a good match for the company’s design philosophy. He was especially impressed with Cisco UCS fabric interconnect. “The server is free of any manufacturer branding, and the design is easy to understand. One major difference is the fact it comes with fabric interconnects. With other manufacturers, it is generally expected that you

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Kenichi Kanbara
Manager, Infra & Apps / IT System Planning Group, Information Systems Department
Nippon Paint Holding Co., Ltd.
install and implement a sizable amount of equipment, making it difficult to make adjustments or additions on an as-needed basis. This is not the case, however, with Cisco UCS, which led us to think it would be a fit for the infrastructure we were looking to build up and develop,” said Kanbara. “Some time thereafter, when we were trying to determine the appropriate timing to update our servers, Cisco HyperFlex was announced, and we immediately decided to implement said form of hyperconverged infrastructure because it provided all-in-one server and storage functionality. It is ideal for Nippon Paint’s ever-evolving IT infrastructure because...
of its ability to make partial additions and modifications as required.”

**Network solution**

Broadly, there are two types of IT infrastructures in the group. The first is for VDI desktop use, and the second is the user and enterprisewide servers. There are 120 production environment servers alone, and when taking into account our development environment servers, this number rises to more than 150. The group network, servers, and storage have been designed based on the idea of a shared resource pool. The Cisco HyperFlex system serves as the base and foundation for this endeavor. Kanbara discusses the factors that went into his decision and the benefits the company hopes to gain by employing the Cisco solution. “We hope to see upsides from a speed and cost viewpoint and want to be able to build and design alternative environments and redundancy configurations with ease. We also expect the Cisco HyperFlex system to deliver with respect to its ability to both theoretically manage infrastructural components as a single unit and make full use of network environments. We felt comfortable because Cisco has a long-running track record when it comes to network devices, and we too have used Cisco network products within the company for many years. At the same time, we wanted to be able to make use of external storage options if required. This, combined with fabric interconnect’s ease of use and overall utility, resulted in our decision to adopt the Cisco solution.”

Kanbara continued, “We have benefited from the hyperconverged infrastructure’s ability to reduce the amount of time required to address otherwise time-consuming items, and our impression after adopting it is that first and foremost, the solution does not have the feel and vibe characteristics of big brand name products and services, and it is simple and easy to use. We feel that it is a well-designed white box. We have not encountered any kind of trouble per se following its adoption more than one year ago, as we can use VMware to ignore hardware and only recognize virtual environments. Truthfully speaking, we were apprehensive regarding how the solution would perform in practice, but such concerns proved to be needless, as the solution has successfully delivered as per our expectations. When it comes to hyperconverged infrastructure, we have been able to devote more time and energy to tasks requiring our attention, as the solution in question does away with the need to worry about connectivity, authentication and support, and so on between items. Indeed, using conventional servers and storage would have easily required us to spend 1.5 times more time on the construction of the system. Furthermore, knowing Cisco will provide full support should any issues arise gives us peace of mind.”

The benefits of adopting fabric interconnects have been astounding, ranging from how easy it is to connect fabric interconnects and use them to build and gain visibility into environments, in addition to how well they have performed with respect to initial expectations concerning its connectivity with external storage. “We want to have adequate storage capabilities to temporarily house data during migrations and everyday operations. When it comes to third-party storage found on virtual platforms, the Cisco solution has performed as expected regarding fabric interconnect’s ease of connectivity and insight into environments,” said Kanbara.

**Business results**

“It is most reassuring knowing our systems are stable and predictable and contribute to heightened business agility,” commented Kanbara. The company, which has seen performance from the Cisco solution in line with its expectations, is now working toward the overall optimization of the domestic group companies’ IT systems, including desktop environments and infrastructures. In the near future, the company aims to finalize its SDN policy and deploy solutions such as the Cisco Application Centric Infrastructure (Cisco ACI™) not only in its data centers, but also in each branch because it “desires heightened flexibility from a BCP perspective when considering networks are the last to go.” Finally, when asked about his expectations for Cisco going forward, Kanbara replied that “I get the impression that Cisco is moving away from being a network device manufacturer and toward focusing on more targeted
needs. In this regard, I am interested in seeing what kinds of new services the company comes up with and look forward to partnering with it to build future ecosystems.”

For more information
Visit www.cisco.com/go/hyperflex for details regarding the Cisco HyperFlex system.

Product list
- Cisco HyperFlex system

Nippon Paint Holdings Co., Ltd.

Location: 2-1-2 Oyodokita, Kita-ku, Osaka-fu
Founded: March 14th, Meiji 14 (1881)
Capital: 78,862,000,000 Japanese Yen
Number of Employees
Standalone: 230, Consolidated: 20,257
(as of December 31, 2017)
URL: https://www.nipponpaint-holdings.com/

Ever since Komeisha, our predecessor company, successfully manufactured Japan's first Western-style paint back in 1881, Nippon Paint Holdings, Co., Ltd. has, in its position as the number one paint company in Japan, continuously contributed to the country's economic growth and expansion for more than 130 years. Expanding your reach while simultaneously broadening the scope of our product and service suite as well as growing our international presence, primarily in Asia. Presently, our two main business lines comprise of paints and fine chemicals, and we have offices in Asia, North America and Europe. In October of 2014, we restructured ourselves as a holding company and embarked on a quest to achieve growth on a global scale.

Going from the pinnacle of the Japanese paint industry to becoming the leading paint company in the world.
We are devoted to spreading the "Nippon Paint" name throughout the world.