IT company builds a virtual desktop infrastructure to improve performance

Recruit Technologies built virtual desktop environments using high performance servers to boost productivity

“We like being able to perform the operations ourselves and want to verify things carefully as we proceed. This resulted in us adopting Cisco UCS.”

Naoki Ishimitsu
Manager, Corporate IT Infrastructure Group 3, Infrastructure Solution Department 1, IT Solution Division, Recruit Technologies Co., Ltd.

Executive Summary

- **Customer name:** Recruit Technologies Co., Ltd.
- **Industry:** Service
- **Location:** Tokyo, Japan
- **Number of employees:** 604
Case study
Cisco Public

Business Challenge:

• Build a remote work environment to support approximately 40,000 employees across the entire company group
• Enhance the security of terminal environments to protect data and prevent internal rogue actions and other risks
• Reduce the costs involved in maintaining and updating the PC environments of no less than 30,000 computers

Network Solution:

• Built virtual desktop infrastructure (VDI) environments to which all PC terminals can be migrated using Cisco® Unified Computing System™ (Cisco UCS®).
• Consolidated and organized the cabling between equipment, and implemented a simple system configuration using Cisco UCS 6200 Fabric Interconnects
• Expanded server configuration and reduced the burden of build-out using the service profile functions of Cisco UCS Manager
• Optimized the operation of multiple server domains through cross-management using Cisco UCS Central

Network solution

At Recruit Technologies, technicians focused on virtual desktop infrastructure (VDI) solutions to solve their issues, and had been performing validations to this end for a number of years. According to Naoki Ishimitsu (Manager, Corporate IT Infrastructure Group 3, Infrastructure Solution Department 1, IT Solution Division), the company made the decision to officially introduce VDI in 2015, the year they started to apply actual initiatives.

“Server and network performance improved, and the technological landscape changed. We determined that things had improved to a level that would allow us to use VDI,” he explained. “If the equipment is not high-performance in the first place, user convenience is impaired. That’s why we paid the most attention to server and storage equipment performance.”

“In an environment with nearly 40,000 users across the whole group, there is no room for failure. So instead of just accepting the vendor’s suggestions outright, we focused on performing validations ourselves and deepening our understanding of the process. We believe that it is vital for us to be able to handle any problems independently when they arise,” he added.

Recruit performed VDI usage validations for 10 months, starting at the beginning of 2015. In September 2015, they requested proposals from several server vendors. The company borrowed evaluation equipment from each vendor and built infrastructure environments in-house specifically for performing validations. After going through a selection process of several months, the company decided to adopt the Cisco® Unified Computing System™ (Cisco UCS®).
Ishimitsu says the decision didn’t come down to server performance alone. He gave the system’s deployment track record and Cisco support as additional reasons for the selection.

Business Results:

- Implemented high-performance, high-aggregation rate virtual desktop infrastructure (VDI) environments
“For Recruit, this would be the first time that the company adopted a product like this,” he explained. “We focused on Cisco’s increasing share in the global market and their rich deployment track record. I found that Cisco’s characteristically high compatibility with network technology, as well as the trustworthiness of the proposals and handling of Cisco representatives, allowed us to implement an environment that exceeded our requests.”

**Building a simple and effective system**
Cisco UCS aggregates server, storage, switch, and other equipment connections in Cisco UCS 6200 Series Fabric Interconnects. It also allows implementation of physically simple system configurations. Finally, with the Cisco UCS Manager management tools, technicians can use the service profile function to easily deploy settings content to other servers. This also makes it possible to recover quickly in the event a device is replaced when equipment fails or a similar malfunction occurs.

Recruit Technologies has deployed 466 Cisco UCS B-Series Blade Servers and built VDI environments that flexible work styles for tens of thousands of users.

**Business results**
Cisco UCS has reduced the work hours and burden incurred from building and operating the infrastructure that supports remote and flexible work styles.

Takeaki Tsukahara, (IT Solutions Management Department, Infrastructure Solutions Section 1, In-house Infrastructure Group 3 Member) experienced the merits of Cisco UCS firsthand.

“Cisco UCS server system concepts and architecture are slightly different from those of other companies. There was a lot of trial and error at the stage where we were coming to understand that and moving ahead with the design. We were able to implement an even better configuration after discussing it with Cisco.

We built it as a pod architecture separated into individual racks, and placed a Fabric Interconnect in each rack. The cabling for each of these was well organized and neat both in terms of appearance and configuration. The settings applied to one pod could be adapted to other pods as a service profile, and so even though we deployed a great number of servers, it felt like the building process went very smoothly,” said Tsukahara, adding that this was also a factor in keeping work hours down.

In Cisco UCS, multiple server domains are centrally managed and Cisco UCS Central is available to aggregate information of all kinds. Recruit Technologies manages these 13 pods with Cisco UCS Central.

“Pod architecture is highly individual,” said IT Solutions Management team member Satoru Hiyama. “That means that operations like system health checks are repeated identically when there are multiple pods, increasing the load from operations and maintenance. Cisco
UCS Central consolidates all of the information for each of the pods on one screen, radically simplifying operations. You can view and manage the status of multiple pods in a cross-sectional manner, which is very helpful.”

To maintain stable high performance, the system constructed also adopted the Cisco Nexus Series data center switches to connect with storage.

Yasuyuki Ono (IT solutions Management Department, Infrastructure Solutions Section 1, In-house Infrastructure Group 4 Manager) had this to say about the merits of the Cisco Nexus Series.

“The backplane is excellent. It maintains sufficiently high throughput even in places where a network bottleneck is unacceptable, which is great. In addition, as a high-bandwidth switch, it has a high port aggregation rate. The cost per port for this product is also significantly lower than the other products we’ve seen to date.”

Next Steps

As of March 2017, the PC environments of approximately 13,000 users were migrated to VDI. The PC environments of the remaining 30,000 or so terminals are scheduled for migration in 2017.

Subsequently, the company will increase the system scale (pods) to handle an increased employee headcount. It will also look at multiple-device support to allow access to VDI from smart phones and tablet devices. In addition, the company will consider other matters, such as support for the Microsoft Windows 10 environment, and will take on the development and implementation of functions based on user requests.

For More Information