Data Center Optimizes with Converged Infrastructure

First Riding starts new cloud services and builds foundations in a shorter period using integrated infrastructure.

Business Challenge

First Riding Technology (FRT) operates a data center facility in Okinawa and has consistently provided high-quality facilities and services to a large number of companies and public institutions for more than 15 years. As a power data center company financed by Okinawa Power, FRT provides safe, reliable infrastructure at a reasonable cost 24 hours per day, 365 days per year by using its industry expertise.

Figure 1  Data Paradise

The FRT data center provides a “data paradise.”

In the same way that we all long for the comforts of paradise ourselves, we also want a comfortable and stable environment for our data. The character “RAKU” (comfort) is shown in the logo and incorporates a motif of the sun’s energy alongside trees brimming with life. The square frame expresses the durability and intelligence of our IDC (internet Data Center), and the island and palm tree express the comfort of paradise.

FRT delivers services to more than 100 companies and public institutions using proprietary data center facilities and has always provided housing and hosting facilities that meet the needs of its customers’ operations and monitoring services. Approximately 90 percent of service users are customers in the Tokyo metropolitan area and outlying regions, and many state their objectives as being disaster recovery and backup. Because Okinawa Prefecture is geographically less prone to earthquakes, FRT service quality and costs are very highly rated.

With the proliferation of cloud environments, there are many calls for FRT to provide cloud services using high-quality equipment and operations structures. Based on examples of transitioning to cloud use during infrastructure updates and improvements, FRT has started to select server platforms by evaluating service
“Our new solutions reduce construction time and raise productivity without impacting service quality or customer satisfaction.”

Takeshi Sunabe
Deputy general manager
Internet Data Center Dept.
First Riding Technology Inc.

foundations that can respond flexibly to user companies’ needs. Takeshi Sunabe, Internet Data Center Division, SI Center director says, “We started collecting new platform information from the start of 2014 with the aim of developing our cloud services business. At the time, converged infrastructure such as VSPEX and FlexPod had already emerged and the focus was on matching user scale. Services were already publicly available in 2015, and since hyperconverged infrastructure products had already been released, the comparison also took these into account.”

Network Solution

At the end of this investigation, FRT introduced the FlexPod configuration, adopting the Cisco UCS® Mini. Additionally, Cisco Nexus® 9000 Series Switches were adopted at the same time. The solution is as shown in Figure 2.

Figure 2  The Cisco UCS solution that supports FRT cloud services

Sunabe spoke about the reason for adopting Cisco UCS: “The main focuses of the investigation were affinity with storage and ease in changing the number of servers based on user situations. We were shown a demo of the Cisco® equipment when we visited their Tokyo office. We realized how easy it was to add and remove devices and carry out tuning, and considered it a very interesting solution. We appreciated being able to experience the ease of use of Cisco UCS Manager and Cisco UCS Director, and realized that it surpassed expectations.”

In particular, Cisco UCS Director enabled the deployment of a customizable management screen that customers could handle in a speedy way when providing cloud services.
Business Results

Deployment of the FlexPod configuration reduced construction periods by 2 months. The Cisco UCS Mini is an all-in-one model that can contain up to eight blade servers in the 6 rack unit (RU) chassis, along with power supply modules and Cisco UCS fabric interconnects. With high performance and scalability, one chassis can house everything. After FRT deployed the Cisco UCS Mini with the core FlexPod configuration, the 5 months typically required in the past could be shortened to 3 months, and thus suppressing costs.

Tadashi Shingaki, SI-G (System Integration Group) leader of the Solution Business Development Headquarters, Internet Data Center Division, says, “In order to start service provision on time, we had to construct this in a short period. The major reduction in construction periods was very helpful. Approximately 1 year after starting operations, it is extremely stable, and we have not had any problems. One advantage is that small companies like us can prepare hardware resources optimally in order to quickly and flexibly respond to customer needs. Cisco UCS Manager can confirm and check a lot of information, and although there was a little confusion at first, we are now able to find what we need instantly.”

Cisco UCS Director provides user management screens. It also provides integrated software management of infrastructure, combining physical and virtual resources. More than 1000 tasks are provided as a standard, defining necessary tasks for operation and management. This collection of tasks enabled automation of infrastructure operation without requiring scripts to be written. Sunabe says that he wants to provide management screens for users using Cisco UCS Director.

“When providing cloud services, creating original management screens for customer use requires corresponding construction periods and costs. Since Cisco UCS Director already has the main parts of these screens, it minimizes the burden on everyone and allows the speedy deployment and use of new services.”

Concentrating on Functionality

The Cisco Nexus 9000 Series Switches provide many features, such as maximum network bandwidth of 100 Gbps, high availability, and high extensibility, as well as compatibility with Virtual Extensible Local Area Network (VXLAN) and Cisco ACI (Application Centric Infrastructure).

FRT is focused on the features and performance of Cisco Nexus 9000 Series Switches, which emerged at the same time it investigated this platform. The staff at FRT decided that its introduction would be useful in achieving a better service platform. With the Cisco UCS Director, staff has total management and operability.
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### For More Information

For more information about the products used in this case study, visit the following:

Cisco UCS:

Cisco UCS Director:

Cisco Nexus 9000 Series Switches: