FUJITSU ASIA SELECTS A10 THUNDER ADC TO PROVIDE HIGH-PERFORMANCE LOAD-BALANCING SERVICE

> " *A large number of virtual ADCs can be provided through a single A10 Thunder ADC chassis, and there are cases where cost performance per virtual ADC instance is more than ten times better than other products in the same price range."*

Takahito Shibata | Manager, System Department 3, Platform Integration Business Group,

FUJITSU SOCIAL SCIENCE LABORATORY LIMITED

CASE STUDY

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COMPANY

Fujitsu Asia Pte Ltd

INDUSTRY

Technology

NETWORK SOLUTION

A10 Thunder ADC

CRITICAL ISSUES

- High-performance load-balancing service to scale out the networks of Fujitsu's customers that were expanding across Asia.

- Consolidation of networking infrastructure to reduce appliance sprawl and streamline management.

- Lower the total cost of ownership without sacrificing features or ease of management.

RESULTS

- Fujitsu Asia can now standardize Thunder ADC for its cloud-based load-balancing service.

- Thunder ADC multi-tenancy features allow Fujitsu Asia to host hundreds of virtual load-balancing instances on a single appliance, lowering space and hardware costs.

- An industry-standard command line interface (CLI) enables network engineers to easily ramp up and operate Thunder ADC without requiring extensive training.

- Functionality, ease of management and cost goals have been met.

FUJITSU

Fujitsu Asia was established in Singapore in 1997 to provide leadership in business development, technology innovation and customer support as regional headquarters for the Fujitsu group of companies in ASEAN. It was subsequently established as the Asia region headquarters in 2014.

Fujitsu Asia provides a wide range of technology products, solutions and services, for example, information processing, packaged software and system solutions, telecommunication services, as well as cloud-based networking services through "FANICS" (Fujitsu Asia eNhanced Information and Communication Services).

CHALLENGE

The Fujitsu Group has established data centers all around the world to support locally based customers and Japanese companies expanding beyond their home market. Fujitsu Asia, established in Singapore as Fujitsu's headquarters for the fast-growing ASEAN region in 1997, provides a wide array of business services, upon which many companies rely for their IT infrastructure and cloud networking needs. Takahito Shibata, Manager, System Department 3, Platform Integration Business Group, FUJITSU SOCIAL SCIENCE LABORATORY LIMITED ("Fujitsu SSL") was responsible for a Japanese company in the distribution industry that was planning to migrate to the cloud using overseas data centers.

"As we thought about moving systems to the cloud, we started to consider the use of overseas data centers. In the process of discussing what the best network environment for our customers would be, the need for ADCs required for server load distribution came up. However, at that time Fujitsu Asia was not providing load-balancing services from its data centers," recounts Keisuke Katsuda, Network Services Business Unit, Integration Services Business, Fujitsu Limited, who was involved in sales promotion for FANICS at Fujitsu Asia at the time. Fujitsu had various ADCs to meet customer requests and was looking to standardize its load-balancing services for better management.

"There had actually long been a demand for load-balancing services, and when we considered future data center services in the context of developing an environment in which we could deliver one-stop service to customers, we realized that we had to take this opportunity to provide standardized load-balancing services," Katsuda says.

This is what prompted Fujitsu Asia to work with Fujitsu SSL to consider an ADC solution.

SELECTION CRITERIA

Shibata's customer had previously installed an ADC on its network, and had offered flexible load distribution functions. Moreover, as the customer was highly sensitive to cost, the balancing of functionality and cost was important. In response, Shibata thought that a multi-tenant environment that would virtually isolate load-balancing functions on a per-customer basis would be essential. Looking back, he was searching for a product offering with compelling price performance metrics based on the number of ADC instances that could be provisioned, combined with an advanced feature set. A10 Networks Thunder® 1030S ADC emerged as the ideal candidate.

A10 Networks Thunder ADC line of Application Delivery Controllers, which provides an Application Delivery Partition (ADP) function that virtually divides a system into multiple partitions and operates them as multiple ADCs. According to Shibata, it "far outclasses other products in the same price range in terms of the number of virtual ADC instances that can be supported in a single chassis unit." When cost was compared with competing products in light of performance and functionality per virtual ADC instance, some products were about ten times greater cost. According to Shibata, "We actually conducted performance tests with multiple products, and it was Thunder ADC that exhibited optimum performance." Katsuda of Fujitsu Limited believed that the fact that all functions were available from the outset without the need for additional licenses was also a significant point when considering its deployment as a standard data center service in the future.

"While it is hard to predict how a customer will want to use a system, we wanted to avoid purchasing additional licenses as customer applications expand. Considering the lead time to buy additional licenses, we wanted to minimize any unnecessary hassles," Katsuda says. "With Thunder ADC, we were able to cast aside such concerns."

SOLUTION

Having scored highly in terms of its flexible form factors, extensive functionality and a high level of performance, Thunder ADC was adopted as the foundation for the load-balancing service in its FANICS offering.

A10 Networks Advanced Core Operating System (ACOS®), the proprietary OS that runs on Thunder ADC, is able to maximize the performance of the underlying hardware. It also delivers high levels of performance even within a compact appliance.

In terms of functionality, as well as offering regular load-balancing features and scalable SSL Offload functionality, Shibata also appreciates that Thunder ADC offers high-speed processing capabilities made possible through dedicated security processors.

Along with a web-based GUI and industry-standard CLI, the ability to easily respond to individual requests using the A10 Networks aFleX® Deep Packet Inspection (DPI) Scripting Technology was also cited as one of the reasons for selecting A10 Thunder ADC. aFleX TCL scripting offers programmatic control over application traffic, allowing network operators to perform any number of actions, such as blocking traffic, redirecting traffic or modifying content. The fact that Thunder ADC has been successfully deployed in other environments in Japan provided additional reassurance to Shibata.

As the infrastructure for the load-balancing service of FANICS, Thunder ADC fulfills the array of features needed to support it, from its load balancing to security features and aFleX-based traffic control.
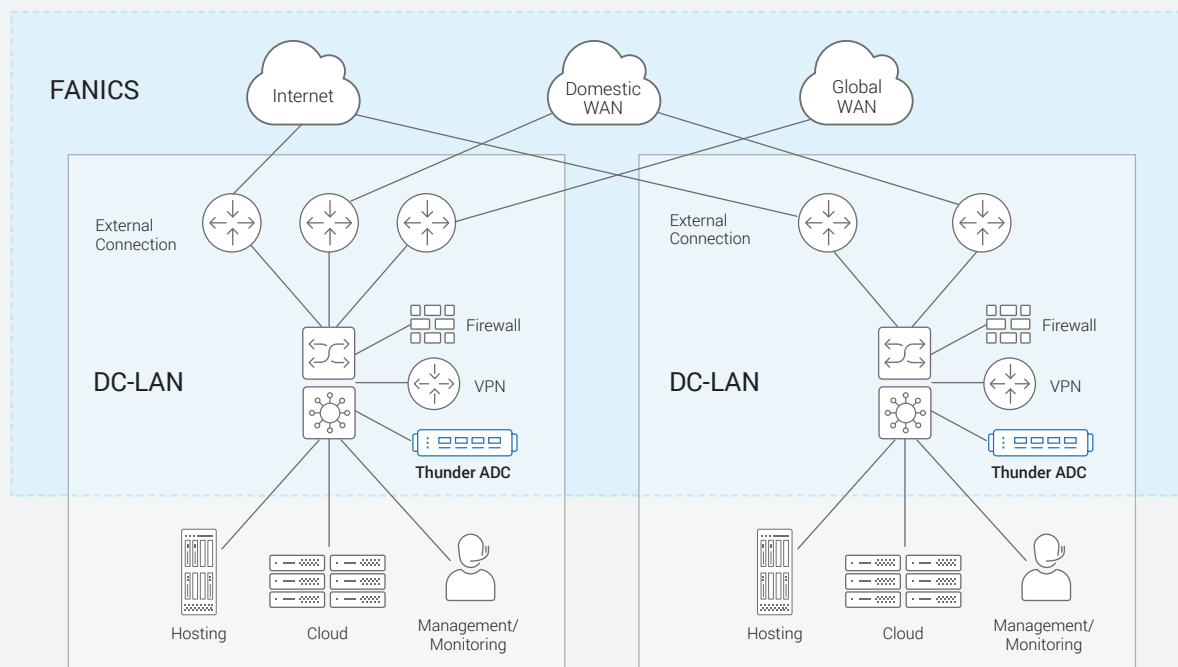

Figure 1: Thunder ADC is deployed as an application delivery controller to provide standardized load balancing services to customers across Asia

RESULTS

At present, the A10 Thunder 1030S model is running as the foundation of FANICS' load-balancing service, offered to Fujitsu Asia's customers. While server load distribution and SSL Offload basically serve as the main components of the solution, SSL Insight functionality can be used to decrypt communications and transfer them through a Web Application Firewall (WAF) or other system to perform traffic analysis.

From its inception, Thunder ADC earned high praise from those in the field for its ease of use. Manoj Buddhika Adikari, Network Services Development Lead, Regional IT Services Development, Fujitsu Asia, who is in charge of FANICS service development said, "The compact 1U size is a great help to us data center operators. As we can use the industry-standard CLI to manage the system with the same commands as other network devices, even our network engineers on the ground using Thunder ADC for the first time found it easy to manage."

On the support side, Shibata rated A10 Networks highly, as a notch above other international vendors, describing the support system that readily responds to a variety of requests for features and improvements. In particular, he asserted that excellent support was due in part to A10 having a Japanese engineer dedicated to its Japanese customers permanently located at U.S. headquarters, who is able to promptly convey requests from the field to the research and development group.

SUCCESS AND NEXT STEPS

Looking ahead, Fujitsu Asia plans to upgrade its customers from their legacy ADCs to this newly developed load-balancing service powered by A10 Thunder ADC.

"We will surely see a need to use the Global Server Load Balancing (GSLB) feature at our data centers around the world, as this is often what prompts our customers considering a global expansion to choose our data centers. As Thunder ADC supports GSLB as a standard feature, we can immediately implement it when needed. We definitely find GSLB functionality very important," says Adikari.

With the deployment at FANICS as a successful model, Katsuda says that the A10 solution is a leading option for Fujitsu, while working with its customers across Asia who are planning to expand cloud infrastructure in their data centers. "If there is need for a load-balancing service, A10 will definitely be a strong candidate," stresses Katsuda.

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A10 THUNDER ADC

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ABOUT FUJITSU ASIA PTE LTD

Fujitsu Asia was established in Singapore in 1997 to provide leadership in business development, technology innovation and customer support as regional headquarters for the Fujitsu group of companies in ASEAN, and it was subsequently established as the Asia region headquarters in 2014. Building on Fujitsu's three decades of experience in the region and with a pool of highly skilled engineering talent, Fujitsu Asia is dedicated to providing comprehensive integrated IT-based business solutions that deliver tangible business value and enable customers to meet the challenges of the new global economy. Fujitsu Asia is a wholly owned subsidiary of Tokyo-based Fujitsu Limited (TSE:6702), a leading provider of IT-based business solutions for the global marketplace. For details, please visit: **fujitsu.com/sg/**.

ABOUT A10 NETWORKS, K.K.

A10 Networks, K.K. is the Japan office of A10 Networks. It holds a mission to deliver innovative application networking solutions, while proactively incorporating feedback and requirements from customers in the local market.

For more information, visit: **a10networks.co.jp**
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ABOUT A10 NETWORKS

A10 Networks (NYSE: ATEN) provides Reliable Security Always™ through a range of high-performance solutions that enable intelligent automation with deep machine learning to ensure business critical applications are protected, reliable and always available. Founded in 2004, A10 Networks is based in San Jose, Calif., and serves customers globally with offices worldwide.

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