Installation of A10 ADC Achieves Virtualization of Server Load Balancer Environment and Consolidation of Equipment

Company
- GameOn Co., Ltd.

Industry
- Gaming

Critical Issues
- Japanese online gaming company seeking a Server Load Balancer (SLB) with advanced virtualization features that consolidates multiple SLBs and enables multi-tenant environment while realizing a high level of independence

Selection Criteria
- High level of independence among virtualized SLBs
- Application Delivery Partition (ADP) feature that enables integration of load balancers of different configurations such as L3, L4 and NAT

Solution
- A10 ADC for SLB solution

Results
- Consolidated five pairs of load balancers into one pair
- Increased reliability of the overall system
- Reduced SLB install time to 15 minutes using a template for ADPs
- Reduced equipment cost and management overhead
- Provided highly extensible platform for future growth

> **"** *By virtualizing and integrating our disparate collection of load balancers, we were able to reduce equipment cost and management load. We are now able to add services quickly with a simple setup and expand resources easily by adding hardware, so we have no concerns regarding future expansion.* **"**
>
> **Minaki Niiyama,**
> Project Manager, Infrastructure Team, Infrastructure Group,
> Technical Department at GameOn Co., Ltd
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> **Kenichiro Kato,**
> Infrastructure Team, Infrastructure Group,
> Technical Department at GameOn Co., Ltd.

GameOn Co., Ltd. was founded in 2001 and headquartered in Tokyo, Japan. GameOn participates in the management and development of online games in Japan. It also offers software licenses to the Internet cafes for using online games, as well as operates online web portal sites for online games. In addition, it has business licenses merchandising rights utilizing the licensing of online games.

GameOn develops and operates a suite of online games for PCs and mobile devices. The game industry has faster service cycles than other industries and demands speed in infrastructure development. To meet this need, GameOn uses A10 Networks® Application Delivery Controllers (ADC), which provides multi-tenancy by virtualizing multiple load balancers. A10 ADC enabled GameOn to virtualize its load balancer infrastructure, and also shorten the time required to deploy new capacity.

Issue: Cloud Technology Accelerated the Service Delivery Cycle of the Game Industry

"Since we try out new games one after another to search for a hit, the game industry essentially delivers services in a rapid cycle. Those of mobile and Web-based games are particularly fast. As the use of the private and the public Cloud has penetrated the game industry in the last several years, the time we have to shape an idea and release it has contracted even more," Minaki Niiyama told us.

Under these circumstances, requests to the Infrastructure Team have grown more demanding. Kenichiro Kato said that it is not rare for the necessary infrastructure to be selected toward the end of a development stage when adjustments are made to performance, at which point the team is asked to prepare a load balancer—immediately.

"In the past, we would rush to purchase and install a load balancer, but it would take several months to obtain a budget and procure the equipment, and even if we did have the extra
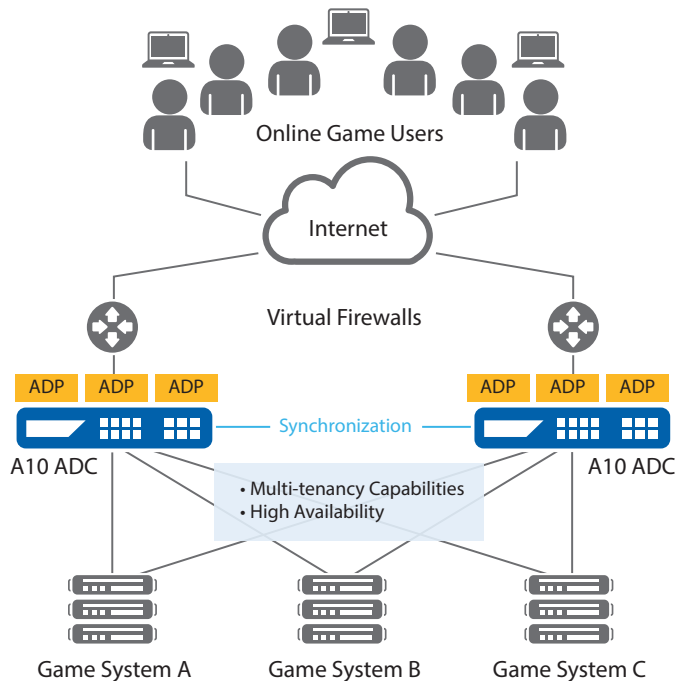
Figure 1: GameOn's solution for virtualized load balancing

Online Game Users

Internet

Virtual Firewalls

ADP ADP ADP ADP ADP ADP

Synchronization

A10 ADC   A10 ADC

• Multi-tenancy Capabilities
• High Availability

Game System A   Game System B   Game System C

equipment on hand, we needed about a week to configure it. We wanted to improve on this situation, which is why we took the latest replacement opportunity provided by a support contract termination to install a load balancer with a virtualization feature."

Verification: The Advanced Virtualization Feature Capable of Integrating Server Load Balancers of Different Configurations was the Decisive Factor

In replacing their load balancers, GameOn compared products from four companies, including the vendor of their existing product. From among the four, they chose A10 Networks Application Delivery Controllers as having the best virtualization feature. Niiyama explained the reasons as follows.

"Each product had different levels of independence in its virtual load balancer when used in a virtualized multi-tenant environment. The A10 ADCs' Application Delivery Partition (ADP) features, which virtualizes a load balancer into partitions, had the highest level of independence among all that we compared, and the fact that the A10 ADC is able to virtualize and integrate load balancers of different configurations such as Layer 3, Layer 4 and Network Address Translation (NAT) was the key factor in our selection."

Because GameOn did not have much time until the end of support from the incumbent solution, they undertook the installation in two phases. First, in early 2013, they structured a virtual environment built on the A10 ADC that was equivalent to the existing environment; then, in July 2013, they restructured it into a live environment. In the second phase, when the virtual environment entered production, A10 supplied technical information, provided evaluation equipment and offering various other forms of support.

"A10's support services are fast, with technically advanced questions answered in a short period of time. The response speed in solving an issue is a crucial factor when something is used as the service infrastructure of a business. I was confident in that aspect as well that our choice of A10 ADC was the right one," said Kato, reflecting back on the installation phase.

Benefits: Deployment Time for New Load Balancers Reduced to a Mere 15 Minutes

GameOn installed A10 ADC appliances, deployed in a redundant configuration, the pair of A10 ADC appliances replaced the five pairs of load balancers that were used previously. Since some systems in the previous environment were not providing redundancy, the overall system has improved markedly in terms of reliability after replacing the older systems with the A10 ADC. Kato described the virtualized load balancer environment provided by the A10 ADC as follows: "The

A10 ADC installation drastically reduced the deployment time for new load balancers. Even the most sudden of requests to add more load balancing capacity took only around 5 minutes, with simple setup of ADP partitions. Before switching to the A10 ADC, rollout of new capacity could take several months; The A10 ADC enables us to fulfill expansion requests from our Development Department far more rapidly, typically within a day."

"About 15 minutes" is no exaggeration, according to Niiyama, but is now the actual time to set up an ADP when delivering a new game title. Configuration templates for features such as L2 and L3V aid in the rapid deployment. Niiyama elaborated further that they have no concerns about future expansion, when the need for additional load balancers should arise.

"Each load balancer is virtualized, so we can expand by simply adding hardware resources. We are not using any advanced features such as SSL/TLS Acceleration at present, but we have the ease of knowing that we can expand the necessary resources immediately should such requests be made. Because expansion is easy, we don't need to own excessive resources in the beginning and can invest when necessary, which is another great aspect of the A10 ADC."

About A10 Application Delivery Controllers

A10 ADC is a scalable, high-performance application networking platform that delivers enterprises, web properties and Internet Service Providers (ISPs) with superior reliability and an energy-efficient footprint for low total cost of ownership (TCO). With A10 ADC, customers of all sizes benefit from application availability, scalability and performance, increased infrastructure efficiency and a faster end user experience. The A10 ADC has a comprehensive Layer 4-7 feature set and flexible virtualization technologies such as A10 Networks aVCS™ Virtual Chassis System, multi-tenancy and more for public, private and hybrid cloud environments. In addition, A10 leads in IPv6 migration technologies with many large-scale deployments worldwide.

A10 ADC delivers an industry-leading return on investment (ROI) by leveraging A10's 64-bit Advanced Core Operating System (ACOS), with a scalable shared-memory parallelism architecture that surpasses the competition in scalability and flexibility.

For more information, visit: www.a10networks.com/products

About A10 Networks / A10 Networks, K.K.

A10 Networks is a leader in application networking, providing a range of high-performance application networking solutions that help organizations ensure that their data center applications and networks remain highly available, accelerated and secure. Founded in 2004, A10 Networks is based in San Jose, California, and serves customers globally with offices worldwide. For more information, visit: **www.a10networks.com.**

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: **www.a10networks.co.jp**.

To learn more about the A10 Thunder Application Service Gateways and how it can enhance your business, contact A10 Networks at: **www.a10networks.com/contact** or call to talk to an A10 sales representative.