

# A10 vTHUNDER ADC CONTRIBUTES TO CUSTOMER ACQUISITION FOR KDDI CLOUD BUSINESS WITH RICH FUNCTIONALITIES AND HIGH PERFORMANCE



## CASE STUDY

“ Addition of the A10 vThunder ADC as an option of the advanced functions has been helpful in obtaining new customers.”

**Yasuhiro Sato,**

Manager, Planning Section 1, Cloud Services Planning Department, Solution Business Planning Division, KDDI Corporation

### COMPANY

KDDI Corporation

### INDUSTRY

Telecom

### NETWORK SOLUTION

aCloud Services Architecture  
A10 vThunder ADC



**Yasuhiro Sato**

Manager, Planning Section 1, Cloud Services Planning Department, Solution Business Planning Division, KDDI Corporation



**Keisuke Wada**

Assistant Manager, Planning Section 1, Cloud Services Planning Department, Solution Business Planning Division, KDDI Corporation

### CRITICAL ISSUES

- Needed advanced ADC to enable superior user experience and enhanced “KCPS” portfolio.
- Additional licenses required to use functionalities such as GSLB and WAF with the existing ADC products.
- Concerns about lower satisfaction level due to service outage caused by the complicated operation/management for annual license key update and regular product version upgrade.

### RESULTS

- KDDI can now provide a differentiated cloud infrastructure service to respond to the various needs of its customers.
- BCP functions across each site (East and West Japan) with newly implemented A10 GSLB functionality.
- Workloads required for advance notifications and updating tasks have been reduced by eliminating the need to update license keys.

KDDI Corporation (hereafter KDDI) provides various network solutions including mobile communication, landline communication and Internet related businesses to more than 240 Japanese and overseas regions/countries. KDDI Cloud Platform Service (KCPS) is KDDI's reliable enterprise cloud platform connected with intranet services as standard, and it uses the A10 Networks® vThunder® line of virtual appliances as an application delivery controller (ADC) to provide load-balancing and security functionalities to its customers.

## CHALLENGES

KDDI is an integrated communication carrier that has both a mobile communication business, known as the "au" brand providing services to over 40 million members, and a landline communication business providing broadband Internet services. One of the information and communications technology (ICT) solutions that KDDI provides for enterprises is the highly reliable and available cloud platform referred to as "KCPS" that instantly offers services to be utilized on-demand.

Yasuhiro Sato, Manager, Planning Section 1, Cloud Services Planning Department, Solution Business Planning Division at KDDI Corporation looks back at the various challenges KCPS had, including difficulties to balance loads from the intranet, specification constraints such as load-balancing functionality and available bandwidth, even though KCPS had offered a load-balancing function as a standard since it started.

He also mentioned that it faced operational challenges such as updating licenses and upgrading versions regularly, although it adopted a third-party virtual ADC as an extended load balancer in order to tackle those challenges. Sato stated that "in addition to having the operational complexities of the first ADC we adopted, we had to purchase expensive licenses to use the advanced functionalities such as GSLB (Global Server Load Balancing) and WAF (Web Application Firewall)."

Keisuke Wada, Assistant Manager of the same group said, "With the previous mechanism, we had to install a patch regularly and spend time on verifying if the patch program was working correctly every time a new patch was released. When the patch programs were applied, the ADC needed to be stopped, causing problems for customers." We had many operational issues such as having to update licenses every year, in addition to the patch applications by KCPS users. In this light, we decided to consider a new ADC product that would reduce operational load and improve scalability."

## SELECTION CRITERIA

A10 vThunder ADC is a software version of A10 Networks Thunder® ADC line of Application Delivery Controllers, which supports major hypervisors. A10 Thunder ADC not only provides superior 64-bit performance with the A10 Networks Advanced Core Operating System (ACOS®) but is also built based on the fully programmable A10 Harmony™ architecture, which enables flexible integration with external SDN controllers and cloud orchestrators. In addition, the industry standard CLI and the web-based GUI with multi-language support including Japanese facilitates the operation management.

A10 vThunder ADC provides various functions as standard, including security functions (e.g., WAF and DDoS protection) and those to improve application availability and speed. What KDDI expected was a GSLB function that would distribute access into appropriate sites by conducting a comprehensive check on the physical locations and their operation status. This function is utilized as a BCP measure in order not to stop the operation in case of system failure.

With the A10 Networks aCloud™ Services Architecture designed specifically for cloud service providers, A10 vThunder ADC supports the pay-as-you-go model. This enables KCPS customers to use on-demand ADC services as a monthly service like other cloud services.

## SOLUTION

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## RESULTS

SA10 vThunder ADC can be selected as one of the advanced load balancers that KCPS offers. With this, various functions such as SSL offload, GSLB, WAF and DDoS protection are adopted.

"Especially, the newly implemented GSLB function enables the global server load balancing between KCPS East Japan and West Japan data centers to provide better service offerings," Sato says. "We make it a rule to verify the services on our own environment before offering to customers. We have conducted a test on A10 vThunder ADC within our environment. Our internal KCPS users have been asking for the GSLB function, so this function received positive reviews. KDDI has been actively promoting the use of customer-facing services within the company, and now uses KCPS as part of its internal system environment and au services.

Customers highly value the GSLB function thanks to interest in business continuity plans. Sato says, "Some customers decided to subscribe to a KCPS contract because of the GSLB function. Addition of the A10 vThunder ADC as an option of the advanced functions has been helpful in obtaining new customers." In addition, more customers have switched from the traditional ADC to A10 vThunder ADC, as they can use the WAF function without purchasing an additional license.

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Due to the fact that no more license key updates are required, operational workloads for service patch and license updates are reduced. "With the previous implementation, it took about two months to prepare for the updates and notify customers because the product needs to be updated every year," Wada says. "If the license did not get updated on time, the performance went down dramatically and negatively impacted the customers' businesses. However, with the A10 solution, license keys are not required to be updated anymore so licensing can be done smoothly." He also says that it is easy to propose KCPS to customers in terms of functionalities and performance, because of its operability with the intuitive GUI and customer support that enables response to customers' requests promptly.

## SUCCESS AND NEXT STEPS

KDDI would like to provide optimal services to customers while using both the existing ADC and A10 vThunder in the future. "We would like to promote A10 vThunder ADC, which is rich in functionalities with a small operation load as much as possible for new deals," Sato says.

He also mentioned that KDDI is considering an environment that enables integration with cloud orchestrators by setting up and managing A10 vThunder ADC from a console, by publicizing KCPS APIs. "We would like to provide an environment where customers can increase/decrease the number of virtual ADC instances and start a subscription for ADC including license issuance," Sato says. He also forecasts that it will be mandatory to control KCPS on a software basis. He says that if that happens, he wants to consider deploying the A10 Thunder HVA hybrid virtual appliances, in addition to A10 vThunder ADC, to accelerate the SSL process using the proprietary hardware.

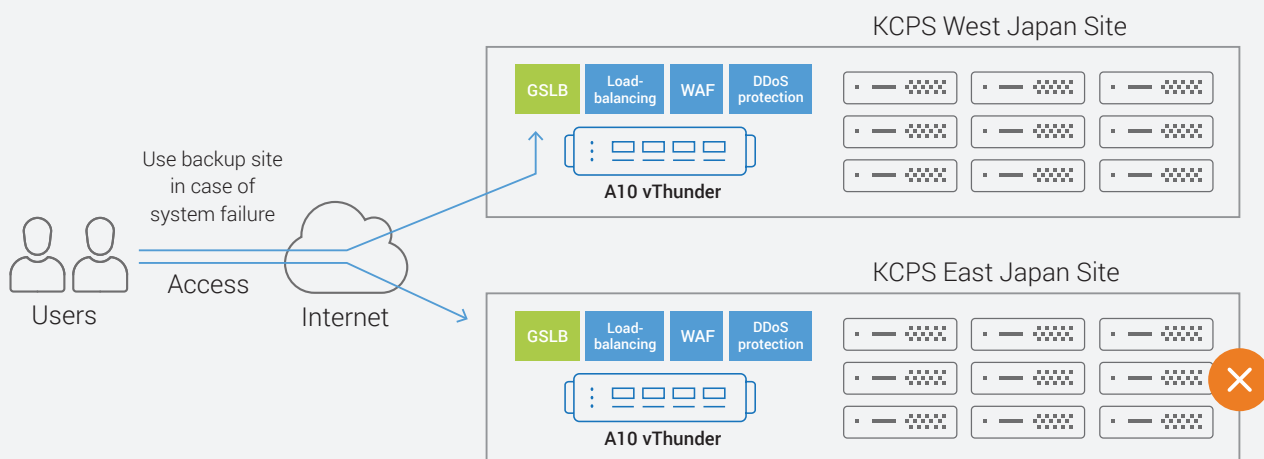


Figure 1: Alive monitoring at sites with the GSLB function to switch instantly to the backup site in the event of failure



**A10 vTHUNDER ADC**

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## ABOUT A10 NETWORKS

A10 Networks (NYSE: ATEN) is a Secure Application Services™ company, 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, Calif., and serves customers globally with offices worldwide.

For more information, visit: [a10networks.com](http://a10networks.com) or tweet [@A10Networks](https://twitter.com/A10Networks).

## 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.

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