

# ZOZOTOWN

## PROJECT GOALS:

Deploy a new portal that integrates network simplicity and enhanced reliability that can achieve over 10Gbps performance.

Build a network that is able to scale beyond today's needs while ensuring stability.

Support the demands of an ever-expanding user base that helps the organization optimize new business opportunities.

## BUSINESS CHALLENGE

### Scalability

ZOZOTOWN is one of Japan's largest on-line domestic fashion e-commerce businesses. Active members spend an average of 50,000 yen annually, and form the core of the business. To optimize its business it was necessary to prevent peak time traffic delays and avoid transaction failures.

Another key issue is in configuring the network to accommodate user base expansion was the ability to make quick system configuration changes and prevent service interruptions. Facilitating 10Gbps access and transaction speeds required that the downtime needed for configuration changes were kept extremely short.

### Flexibility

During a sale held in January 2010, access reached three times the normal numbers of active users creating delays and transaction service interruptions that resulted in lost opportunities. For physical stores, if a customer is told that the item they are looking for is out of stock 3 times in a row, or if the store personnel is unable to meet customer expectations, it can be assumed that that customer will not return to the store.



START TODAY CO.,LTD.

## ABOUT ZOZOTOWN

ZOZOTOWN is part of the e-commerce business unit of Start Today, a Japan-based company engaged in E-commerce as well as other related services. ZOZOTOWN is an Internet resort space where retailers can establish virtual storefronts, and sell their merchandise. The company provides support in store planning, business development, store management and fulfillment. ZOZOTOWN is also a retailer with select shops under the names of EPROZE and QUINEE.

This kind of customer dissatisfaction is even more noticeable on the Internet, where a single instance of access or transaction delay can result in lost sales. For Internet shopping malls, with annual business volume based on 50,000 yen per active member, access delays or transaction failures can cause harm to the business.

### Adaptability

Although ZOZOTOWN, as a portal, is an original point of access and transaction, it is also a security environment with firewalls, content gateways, load balancers, switches, and intrusion prevention systems located between the outside network and the Web servers. ZOZOTOWN's former configuration consisted of a Web Application Firewall and other single function appliances and systems. As business grew, this configuration became more complex and their operational costs rose.

In order to continue optimizing business potential it was necessary to consider user number and access volume estimates, and make changes accordingly. Transaction processing speed was a maximum of 2Gbps, but ZOZOTOWN was barely able to get 1/5th of the performance it had assumed, making it impossible to support peak traffic while providing a secure portal.

### Predictability

Although the Internet supports dynamic growth, mono-function appliances such as firewalls and load balancers, configured between outside networks and servers, made network configurations complex and created new concerns about increased operational loads and increased costs.

"...when the proposal from Crossbeam and Uniadex said that they had simulated a configuration similar to that of ZOZOTOWN...and the values they had achieved were just as they had proposed to us, I felt that Crossbeam had gotten our attention," said Mineki Okura, Systems Division Director, Start Today.

### SOLUTION

The environment that ZOZOTOWN required in order to circumvent delayed access and transaction interruptions was a 10Gbps order processing speed that could enable prompt configuration changes without any downtime during changeovers.

Proposals for resolving these issues were submitted by numerous system providers but they were centered on Web Application Firewalls or systems fortified with multiple layers of appliances. These proposed solutions would have trouble realizing a processing speed of 10Gbps. Furthermore, configurations employing systems or appliances such as WAF and firewalls invited greater system complexity.

To solve these problems Uniadex proposed adopting Crossbeam's carrier-class X-Series platform. The Crossbeam environment, which consists of security and network capabilities, such as routing and load balancing, was able to deliver an actual speed of 10Gbps, with the ability to increase speed. This performance level was maintained during their big sale in June of 2010.

One of Crossbeam's unique features, in addition to its processing speed, is its flexibility in adapting to configuration changes. Configuration changes usually call for physical changes in the network requiring a minimum of 1 day of downtime. In the case of legacy systems, the active stand-by system must be running in parallel with the main system in order to make these physical adjustments, and for extensions or configuration changes, multiplexing must take place while both environments are in operation.

For online shopping malls, and the perspective of ensuring that business continues smoothly, the speed at which this change and expansion can be conducted is one of the biggest points in Crossbeam's favor. Crossbeam enables these changes by merely replacing or making additions to the application port within the Crossbeam chassis.

### CUSTOMER APPRAISAL

Looking back, Mineki Okura, Systems Division Director, says, "I felt that realizing a speed of 10Gbps between outside networks and Web servers would be virtually impossible. Processing speed has a strong effect on cost performance so I was very wary. And it's hard to measure this speed, too. So what kept running through my mind was that the legacy systems we were used to were easier to understand and a better choice. However, when the proposal from Crossbeam and Uniadex said that they had simulated a configuration similar to that of ZOZOTOWN, and the values they had achieved met our needs, I felt that Crossbeam had gotten our attention."

Mr. Okura's summarises his thinking about the system environment, "It is not the ZOZOTOWN site itself but the fashion services we offer that we want our customers to enjoy. Therefore making a simple portal for the shopping mall is important, and it is also important that the configuration and maintenance of that portal be simple." To this Naoya Ogiwara in the Systems Division says, "Adding all kinds of appliances and making the network more and more complex is taking the risk of reducing customer service levels. Our customers and we, who manage the ZOZOTOWN portal, wanted the site to be up 24/7 with no downtime even for maintenance. Simplicity, no stoppages, and a big, speedy portal, are what attracts people to ZOZOTOWN. Crossbeam and Uniadex has helped us make this possible."

## ABOUT CROSSBEAM

We improve the sophisticated networks of enterprises, government agencies, and service providers by architecting platforms that are more adaptable, high-performing, reliable, and secure.