

Hanatour Utilizes DX Application Acceleration Platform to Rescue Online Travel Reservation Service

**Organization:**

Hanatour

Industry:

Travel

Challenge:

Alleviate poor response times and sluggish performance of new online, web-based service caused by dramatic increase in real-time user traffic

Solution:

Juniper Networks DX™ data center application acceleration platform

Benefits:

- Reduced load on backend servers, allowing Hanatour to deliver better performance for online service without requiring additional server deployment
- Produced cost savings of up to 10x by avoiding anticipated investments required to build out data center infrastructure
- Allowed company to redirect IT budget dollars into online services, delivering greater value to customers

“Our primary goal with the web application acceleration solution was to increase application capacity and speed user access to the Hanatour web site. The Juniper DX application acceleration platform not only does that, it also minimizes the delay associated with response times, making it the optimal solution for the Hanatour online service.”

Chongpil Ahn
Computation Team Manager
Hanatour

Hanatour, established in 1996, is South Korea’s leading travel agency. Based in Seoul, Hanatour has led the country in terms of passenger embarkations and total airline ticket sales for the past seven years, making it the one agency that all others emulate.

To maintain that leadership position, Hanatour continuously invests in its IT infrastructure to offer leading-edge, state-of-the-art services to its customers. The company’s network supports more than 1,100 users and 100 servers at its headquarters and 20 branch offices spread throughout the country. At least 4,500 other travel-related sites link to the agency’s web site through Hanatour-designed home pages, and several smaller agencies host their web sites on Hanatour servers. Chances are that any travel-related web traffic in South Korea passes through the Hanatour system.

The latest system upgrade, however – a web-based real-time inquiry and reservation service launched in May 2004 – may have been too successful for its own good. The resulting increase in network traffic choked existing data center resources, flooding back-end servers with requests, seriously impacting response times and leaving users frustrated and dissatisfied.

“Our site, by its nature, contains many images and has a huge volume of real-time traffic connecting to the database server to check reservation status and register reservations,” said Chongpil Ahn, manager of the Computation Team of Hanatour. “We had to find a way to effectively address the explosive growth in traffic volume caused by the opening of our Hanatour.com online real-time reservation service.”

In addition, internal firewall capabilities enable the DX platform to deliver the security enterprises need in the critical “transaction zone” where web-enabled applications reside. The DX platform delivers encrypted content faster than a server transfers non-encrypted text by supporting one-way or end-to-end SSL. The DX platform authenticates users, secures data and connections, and protects servers from denial of service (DoS) and SYN flood attacks. The DX platform also provides the security features of native protocol communication and total content manipulation.

The Benefits

By alleviating server overload, the DX 3200 application acceleration platform has allowed Hanatour to avoid additional server investments, resulting in significant cost savings. “We were expecting to see 200 sessions per server before actual operation in the production environment,” said Ahn. “However, once the DX platform was deployed, the servers were maintaining just 10 to 20 sessions each, one-tenth of the anticipated workload. That meant we could handle the same number of sessions with far fewer servers, which significantly alleviated our cost burden.”

These cost savings have provided Hanatour with considerable flexibility when planning for future growth. Anticipating an increase in the volume of traffic from overseas agencies located throughout Southeast Asia, such as Taipei and Singapore, the company has already deployed a third DX

3200 web acceleration platform to handle the load. For the next round of expansion, Hanatour is considering implementing separate DX web acceleration platforms to support specific internal and external services to ensure performance remains high.

“As the number of travelers keeps growing, we plan to expand our B2C and B2B services and run separate web sites for those services,” said Ahn. “The current plan is to deploy additional web acceleration platforms to support those new services.”

Clearly, the Hanatour IT team feels the decision to go with the DX application acceleration platform was the right one for the company. In fact, Hanatour’s experience with Juniper has been so positive, the company is looking at other Juniper solutions to help with future network expansion plans.

“We are considering deploying a web firewall to enhance web security and are also looking into SSL VPN to address growing concerns about security,” said Ahn. “We will continue to invest in the IT infrastructure to achieve optimal stabilization of our system and further improve customer service.”



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