



SINA Perfects its Game with Citrix NetScaler System

SINA is a leading online media and value-added information services provider serving Chinese audiences in Mainland China and around the world. SINA provides a host of services, including Internet media, entertainment, online user value-added/wireless services, and e-government solutions for Internet users and government/enterprise users through five main business lines. SINA has more than 230 million registered users and more than 60 million users of various paid services worldwide, with daily page views topping 450 million. It is the most favored Internet brand in Mainland China and within Chinese communities around the world.

CHALLENGE: MANAGING MASSIVE SPIKES IN TRAFFIC DURING MAJOR SPORTS EVENTS

Major sporting events have always been a key focus for media around the world. Good coverage of breaking sports news can serve as a competitive opportunity to increase readership and boost overall popularity. According to statistics from SINA's operational divisions, SINA's page views increase by two to three times over normal volume during such events as the Olympic Games, World Cup and various tournaments. Traditionally, companies have had to add a large quantity of servers and L4 load-balancing equipment to support such traffic spikes, demanding a large capital outlay and operational resource investment. But after a sports event, Web site traffic returns to normal — resulting in a huge investment for technology infrastructure that will not be needed most of the time. Supporting dramatic increases in online traffic during major sports events without over-investing was a big challenge for SINA.

IMPLEMENTING CITRIX NETSCALER SYSTEM

SINA realized that new technologies would have to be introduced to alleviate soaring Web site traffic during major sports events while minimizing costs. The company reviewed and tested a number of load-balancing products available on the market. Citrix® NetScaler® out performed all other products during the testing, delivering strong performance in acceleration, server load reduction and security. Sina needed a powerful Layer 4-7 switch to deal with tens of thousands of viewer requests per second, especially for news or pictures, and in terms of network connection optimization, no other product compared to Citrix NetScaler. Thus, SINA decided to deploy Citrix NetScaler at its four

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LI SONGBO

Vice President of Engineering, SINA

Key Benefits

- Ability to handle peak traffic loads without adding servers
- Improved user experience
- Reduced servers by two-thirds for cost savings
- Increased security

Internet Data Center (IDC) machine rooms in Beijing, Shanghai and Xi'an to undertake load balancing of traffic during peak hours.

IMPROVING USER EXPERIENCE AND SERVER PERFORMANCE AND REDUCING MAINTENANCE COSTS

Citrix NetScaler is a high-performance load-balancing appliance with excellent connection-optimization functionality. Citrix NetScaler TCP multiplexing — consolidating multiple user TCP sessions into fewer sessions on the Web servers — effectively offloads TCP handling from the Web servers, allowing them to focus on processing user requests. This offloading eliminated application response delays previously experienced by SINA users. After Citrix NetScaler was deployed, the servers' load dropped dramatically, while throughput experienced a strong increase — all without the cost of adding more servers.

After deployment of Citrix NetScaler, SINA was able to reduce the number of servers required to support its Web site by 66 percent. Furthermore, all of the 40 sets of servers that were intended for capacity expansion are now used to support other systems. This not only reduced SINA's expenditure on server purchases, but also lowered spending on racks, power consumption and related facilities costs.

In addition, the number of maintenance staff needed fell accordingly, which resulted in a sharp decrease in server maintenance and management costs.

Li Songbo, vice president of SINA's Engineering Department, noted, "The outstanding performance of Citrix NetScaler has exceeded our expectations. It effectively improved the performance of SINA's application and content delivery, while ensuring strong security. Web users only have visibility to the virtual IP instead of the true IP now that we have deployed Citrix NetScaler. Thus, we minimized the chances of attacks by hackers and have effectively ensured our system's security. It does well even during peak hours. This allows us to deliver a seamless user experience to millions of customers."

As a result of this initial success, SINA has also successively deployed Citrix NetScaler software in its Web email, authentication and SSL VPN systems. SINA is planning to apply NetScaler to SSL acceleration, online compression and content cache functions in the future.

Networking Environment

- Ten Citrix® NetScaler® 9950HA appliances
- Two Citrix NetScaler 9500HA appliances

About Citrix NetScaler System: Citrix® NetScaler® System optimizes the delivery of Web applications — improving performance up to 15x, increasing security, and potentially doubling Web server capacity at half the cost. This comprehensive network system combines high-speed load balancing and content switching with state-of-the-art application acceleration, layer 4-7 traffic management, data compression, static and dynamic content caching, SSL acceleration, numerous network optimizations, and robust application security into a single, tightly integrated solution.