Accelerating Online Shoppers Globally with Scalable Load Balancing

“...We deployed multiple A10 ADCs prior to the 2008 holiday shopping season, and the appliances easily handled the increased traffic. A10 ADC delivers the new generation of server load balancers required to ensure our eCommerce site is highly scalable with consistent low latency, and always operational.”

Burzin Engineer
VP of Technology
Shopzilla

Shopzilla® is dedicated to helping shoppers around the world compare and find the right price on millions of products from thousands of stores. Shopzilla properties also include the renowned BizRate.com® consumer feedback network, which collects more than one million merchant and product reviews with ratings each month.

With multiple data centers throughout the US and Europe, 20 million unique visitors a month, and 50,000 – 70,000 concurrent users at any given time, Shopzilla relies upon best-of-breed server load balancing solutions to remain competitive in the eCommerce market. Low latency and the capacity for a high volume of simultaneous connections are critical to handling peak loads, especially during the holiday season when traffic spikes dramatically.

For a highly scalable eCommerce site, server load balancers that service the data center Web server tier are business critical. Predicted traffic growth signaled a need for additional load balancer capacity, so Shopzilla required an alternative to the installed Juniper DXs, which had reached end of life. A10 Networks® ADCs’ server load balancers were selected as they addressed both the low latency and high simultaneous connection requirements.

In addition, the A10 ADC uniquely met the business drivers for Shopzilla and BizRate to excel during the 2008 holiday shopping season and beyond, with features and benefits that helped exceed expectations.
A10 ADC: The New Generation Server Load Balancer

Data Center Efficiency and 3 to 1 Consolidation: Shopzilla chose A10 ADCs to replace the existing Juniper DX devices. Standardizing on the high-performance A10 ADC platform reduces the amount of required load balancers in Shopzilla’s data centers by consolidating the legacy solutions at a ratio of 3 to 1. Through data center consolidation with A10 ADCs, Shopzilla streamlines deployment and reduces administrative overhead, rack space and power consumption, while increasing efficiency and return on investment (ROI).

Three-to-one consolidation was also facilitated by the powerful Virtual IP (VIP) of a VIP feature, which delivers the ability to share existing resources when more resources are needed in the event of peak traffic, anomalies or outages. The A10 ADC has the flexibility to redirect traffic due to a network anomaly and/or utilization threshold, or to send traffic to an alternative destination based on a criteria policy. The powerful VIP of a VIP feature provides the ultimate server load balancer flexibility based on detection of an issue and action to remediate the issue, while remaining seamless to the end user.

High Performance and Low Latency: Shopzilla uses redundant multi-tier networks in each data center, accompanied with the A10 ADC for content load balancing. With the A10 ADC, content is distributed based on traffic levels in each geographic region. This design minimizes latency to the end user due to A10 ADCs’ optimized application acceleration features combined with purpose-built hardware.

Shopzilla also required the A10 ADC to load balance user requests to multiple destination targets where user requests are evenly distributed to the target servers by dynamically assigned server weights based on Layer 7 requests. Servers with few outstanding Layer 7 requests are the better performing servers and are assigned higher weights, and therefore receive more requests than servers with lower weights. This algorithm takes the guesswork out of traditional Layer 4 only weight-based methods. Traffic will continue to be evenly distributed to multiple server targets even as servers are taken out of rotation due to maintenance tasks or unexpected server failures.

Customized Features and Support: Shopzilla benefits from the ability to work with A10 on designing new feature sets to continually increase the customer experience and reduce costs. For the ultimate customization, with A10 ADCs’ high-performance and flexible aFleX® Layer 7 scripting engine and the ability to retrieve server and service-level state statistics, the A10 ADC can be programmed to dynamically pull/in/out resources as needed to make websites highly available, which improves the overall user experience and response time.

The A10 service and support experience proved far superior to experiences with competitors. A10’s approach of treating network issues as if they are A10’s own problems to solve until proven otherwise, versus the common vendor approach to first suggest the problem could be the customers’ or other another vendors’ equipment, ensures a far better overall experience.

Reliability and Room for Growth

With the deployment of the A10 ADC high availability pairs in its data centers, Shopzilla has reduced costs, accelerated the user experience and ensured a scalable solution for significant future growth, all fundamental to eCommerce success. The A10 ADC represents a new generation of affordable, enterprise-grade server load balancing appliances delivering a significant price/performance advantage over the competing and incumbent solutions.

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/application_delivery_controllers.php

About Shopzilla, Inc.

Shopzilla® is the largest, easiest-to-use and most comprehensive shopping search site on the Web. With an index of millions of products from thousands of stores, Shopzilla empowers shoppers to instantly find virtually anything on sale from anyone, anywhere on the Web – at the best price for their lifestyle. Shopzilla also operates the BizRate Research® division and consumer feedback network that collects more than one million consumer reviews of stores and products each month. Based in Los Angeles, Shopzilla has sites in the US, United Kingdom, France and Germany and the company is owned by Scripps Networks Interactive Inc. (NYSE: SNI), which include national lifestyle TV networks such as HGTV, The Food Network, Fine Living and more. For more information, please visit: www.shopzilla.com
About A10 Networks

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