A10 Lowers Brainshark’s IT Costs While Improving Scalability and Utilization Rates

Brainshark, launched in 1999, is a software as a service (SaaS) provider that allows customers to access its unique business communications platform. Brainshark’s customers can upload previously-created presentations, such as Microsoft PowerPoint® files, to the company’s Website at www.brainshark.com. At that point, Brainshark converts the files into an online video presentation format (that’s also mobile-ready), and the customer can then choose to add audio narration to the presentation. Once the presentation is finished, the customer can share the video with an audience, and those viewers can then watch the presentation anytime and anywhere – on their computer, iPad, iPhone, Android, Blackberry, or other smartphones.

Brainshark enables customers to increase the impact of their business communications while reducing the cost of training and marketing. For these reasons, the software is popular in sales, marketing, channels and HR departments, with more than 1500 enterprise companies (including one-third of those listed on the Fortune 100) as customers.

**Brainshark: A Growth Story with the Usual Growing Pains**

In the last year, Brainshark has seen huge growth in the amount of bandwidth the business is consuming, with an increase in traffic from approximately 40 Mbps to peaks at 100 Mbps. According to Brainshark’s IT Director, Jim Long, projecting future growth has influenced its purchasing decisions because they needed to ensure that their network equipment will last for several years “without running hot right out of the gate.”

Brainshark’s Website also needs to be available at all times, so that when a customer sends a link to a presentation, viewers can watch that presentation on-demand. While the Website traffic is not as bursty as some other sites, the Website still can experience heavy traffic. A Brainshark video presentation is created every 3 minutes worldwide, and a presentation is viewed every 2.5 seconds.

"After the cutover to the A10 Application Delivery Controllers, when I look at the A10 ADC traffic statistics page, none of the CPUs have gone over 5 percent during our peak hours. So that’s a lot of headroom for my organization - both now and in anticipation of our future growth."

Jim Long
Director of Information Technology
Brainshark, Inc.
Challenges with Previous Solution

Brainshark’s network is composed of 64-bit Microsoft Windows 2008 servers, streaming servers and media servers that enable customers to record audio files for their video presentations. Brainshark had been using another vendor’s appliances to provide server load balancing, as well as Web application firewall services. These devices had gone to end of life status and Brainshark’s IT team had to make a decision on whether to re-up with them or go with another vendor.

Brainshark had two appliances in their production environment, additional units in the development lab and one in the disaster recovery facility. Brainshark deployed lower end models for the disaster recovery and development environments, and a pair of higher-end units in the production environment. Although this approach allowed them to stay within budget, it also added complexity when troubleshooting any issues that occurred, because if something broke in the lab, it was difficult to be certain that the problems weren’t platform-specific. In addition, when technical problems occurred with the equipment and the IT team had to place a support call, they often did not receive the level of responsiveness and assistance required.

A10: Problems Solved with Room to Spare

Brainshark chose to install Imperva for its Web Application Firewall (WAF) appliance, and it was Imperva who recommended A10 Networks’ Application Delivery Controllers, which are new generation server load balancers. By using Imperva’s WAFs and the A10 ADC distributed denial of service (DDoS) functionality to protect against SYN Floods, “Ping of Death”, TCP Syn-Frag, and other common threats, Brainshark was able to build a network with multiple layers of security.

Due to the lower pricing and higher performance of the A10 ADC, Brainshark’s IT team was able to make a uniform purchase of A10 ADCs for both their development and production environments. This meant the labs would have the same model of server load balancer as the production networks, thus simplifying troubleshooting.

The A10 ADCs entry-level 64-bit appliance, delivered an affordable option that made things easier for Long and his team. “From our standpoint, we have the same model of server load balancer in our different network environments, and this just makes things much easier for us because we don’t have to worry about whether there’s a difference between this lower end product and that higher-end product,” said Long. “We’ve got the exact same features in all of our locations.”

Another advantage of the A10 ADC is its powerful aFleX Layer 7 scripting tool. aFleX uses the industry-standard TCL programming language to enable customers to customize Application Delivery, for example, localizing content, optimizing data center resources, or in Brainshark’s case, merging namespaces and providing a single URL for the Website’s customers.

A year ago, before the A10 ADC was installed, Brainshark’s customers had to navigate to the URL www.brainshark.com to upload their videos, while the main corporate Website was located at a different (and slightly unwieldy) URL, presentation.brainshark.com. However, by leveraging the A10 ADC’s aFleX scripting tool, the company was able to integrate the two URLs, successfully redirecting requests for the main corporate Website to the simplified URL. Although the content and applications for the two URLs still exist on different server farms, Brainshark has been able to merge the namespaces to make it appear that everything is happening in one place.
A10 ADC: Additional Benefits that can Help All Growing Companies

While Brainshark leverages the above A10 ADC benefits, additional business advantages include:

- **64-bit Platform:** The 64-bit A10 ADC includes purpose-built 64-bit hardware and the 64-bit Advanced Core Operating System (ACOS), freeing up each processor, core, and thread from the 4 GB memory limitations associated with all other 32-bit OS, and giving Brainshark an end-to-end 64-bit solution with Windows 2008. This enhances performance and frees up resources to significantly increase scalability.

- **Advanced Features and Ease-of-use:** Brainshark benefits from a single platform for disaster recovery with Global Server Load Balancing (GSLB), application acceleration with SSL Offload, advanced server load balancing with Cookie Persistence, scripting with aFleX and more, all included without licensing fees. The A10 ADCs’ Graphical User Interface (GUI) has been designed to provide a user-friendly experience. For power users, the A10 ADC also offers an industry-standard Command Line Interface (CLI).

- **Two-tiered Security Architecture with Imperva WAF:** By installing Imperva’s award winning Web Application Firewall (WAF) technology and simultaneously using the A10 ADCs bundled security features, Brainshark received defense-in-depth protection against DDoS (SYN Flood), “Ping of Death,” TCP Syn-Frag and more.

Success: A10’s Solution Prepares Brainshark for Future Growth

By replacing its previous solution with the A10 ADC, Brainshark got a solid load balancing system capable of handling its rapid traffic growth, while offering superior performance, high scalability and availability, and powerful scripting tools to provide the flexibility for whatever comes up in the future.

Jim Long, Brainshark’s Director of Information Technology, said his team is very happy with the A10 ADC, “Any time you switch what you’re doing, there’s always some risk involved. But in making the transition to A10, that really proved not to be a problem for us. The A10 boxes have provided us with the exceptional value proposition of 2 for 1, so we didn’t have to make any sacrifices in performance or features to keep costs down. In the end, we got what we wanted at a great price.”

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 ADC 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](http://www.a10networks.com/products/application_delivery_controllers.php)

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](http://www.a10networks.com)