

“Microsoft has really found a great partner in F5 Networks.”

Mike Corrigan
Director of Technology

MSNBC.com Deploys BIG-IP Local Traffic Manager and BIG-IP Global Traffic Manager to Handle Traffic Demands for Winter Olympics Coverage



Industry:

Multimedia News and Information Services

Challenges:

- Handle enormous traffic loads
- Improve user experience
- Deliver high availability on a local and wide area scale

Solution:

F5's BIG-IP Local Traffic Manager and BIG-IP Global Traffic Manager

Benefits:

- 99.98% site availability
- Security for both internal and external applications
- Reduced administration and management

Overview

MSNBC.com was tasked to build, design and maintain a Web site for the 2002 Winter Olympics in Salt Lake City, Utah. During the games, and after the now infamous pairs ice skating controversy erupted, traffic to the site cumulated with over 9 million daily visitors and over 74 million page views – yet the site maintained 99.98% availability at the core (according to independent measurements by Keynote) thanks in part to a strong infrastructure, smart planning, and traffic management products from F5 Networks.

Challenge

After the now infamous skating controversy erupted on February 14 at the 2002 Winter Olympics in Salt Lake City, with 31 million page views served and 5.6 million users logging on that day (internally measured), you might have expected Mike Corrigan, director of technology at MSNBC.com, to worry. After all, over the next several days following the controversy, traffic began to increase, cumulating with 9 million daily visitors and over 74 million page views (internally measured) on February 21st – a heavy load for any site to handle.

But Corrigan was already familiar with the pressure – he and his team had been tasked to build, design, and maintain the official Olympic

Web sites in less than six months. The stakes were high – the success or failure of such a high profile site would not only reflect poorly upon the Olympic games themselves, but also the public perception of the companies behind it. “The site couldn’t go down,” said Corrigan. “Failure was not an option for the Olympic Committee, MSNBC, or Microsoft.” As the numbers of visitors during that fateful day began to scale up, Corrigan was confident they were prepared and could handle the load.

“During the finals of the women’s ice skating, our site egress and page views were similar to what we had experienced during 9/11 – yet during 9/11 our site was only available about 43% of the time. Given the interest in the skating finals, and with a similar amount of traffic as on 9/11, we had 99.5% site availability,” Corrigan said. “An incredible feat.” The difference in site performance Corrigan attributes to careful site planning, comprehensive testing, a strong internal operations team, and the help of external IT specialists that F5 provided.

Solution

F5 Networks develops Application Delivery Networking products, including BIG-IP LTM and BIG-IP Global Traffic Manager (formally 3-DNS). BIG-IP LTM is a local area





application delivery solution that intercepts, inspects, transforms, and directs all IP-based traffic to the correct resource or application within the data center, depending upon capacity, performance, or pre-defined business criteria. BIG-IP Global Traffic Manager (GTM) is a wide area traffic management solution for multi-site domains that uses real-time network performance metrics to optimize the routing of requests – ensuring that end users are sent to a site or application that is available and provides the best response. Both products can be used together to form an integrated network platform designed to successfully deliver Web applications and services.

“Early on, in the design phase, we knew we would be looking at the leading vendors in load balancing,” Corrigan stated. “It became clear that F5 would be the choice for providing both a local and global load balancing capability. We were also looking for additional layers of security protection against people trying to attack our back-end servers. The F5 solution helped us with all of this.”

Before the Olympics, MSNBC.com was housed in a single data center in Redmond, Washington. Corrigan realized that for the Olympics, the site would require more of a high-availability architecture, including redundant data centers, more active load balancing, and better

security. An additional data center was opened, with more than fifty servers deployed between the two sites. Four pairs (for redundancy) of BIG-IP LTM products were deployed, with a GTM product deployed in each data center to intelligently balance traffic loads between each data center.

The F5 solution provided:

- **High availability** on both a local and wide-area scale.
- **Security** through numerous features that provide an extremely scalable, highly available, and secure solution for both internal and external applications.
- **Increased ROI** by maximizing application availability, lowering maintenance duties and reducing administration overhead.
- **Improved performance** of the site and the experience end user experience.

The success of the site may best be judged by the lack of issues that occurred during the 17 days that the Games took place. During the Games, internal measurements indicated 99.98% availability at the core, with availability at the edge of the Internet reaching 99.8%, according to independent

measurements by Keynote. “We had no serious issues,” Corrigan stated. “And we were quite happy with the overall performance of the site. It’s very unusual for a content site to be able to push out a gigabit worth of traffic – and the site certainly had some instances where it was doing extraordinary things.”

So extraordinary that Corrigan plans to continue using F5 products at the MSNBC site. “Going forward, it’s (F5’s solution) now part of our architecture because it enhances our overall availability. We’ll be making some backend changes – but the F5 infrastructure will stay. It will allow us to push our availability even higher than it’s been. Overall, we’re very happy with the solution – it’s very effective.”

MSNBC.com certainly deserves a gold medal for its performance at the Winter Olympic games – thanks in part to smart planning, real-world testing, and the integrated local and global traffic management solution from F5 Networks.

“Microsoft has really found a great partner in F5 Networks,” Fort concluded. “Together, we’re building comprehensive solutions for customers.”

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