



Company:
Friendster

Industry:
Online Community and Social
Networking

Key Metrics:
More than 2 billion page views
and 81 million emails handled
each month

Between 1 to 2 billion MySQL queries a
day, 18 million registered users worldwide
and 632 million stored friend relationships

Awards:
Time Magazine's 50 Coolest Websites of 2004
and Coolest Inventions of 2003

Recognized in 2005 as Application of the Year by
MySQL AB, developer of the popular open
source database

Internap Products & Services:
Flow Control Platform™ (FCP) - Premise-Based
Optimization

Performance IP™ - Network-Based Route
Optimization

“For any sufficiently large network, I’m convinced that operating an Internap FCP should pay for itself in less than six months. Owning an FCP on a network like ours is like having a license to print money. That’s rarely something an operations person can say.”

Dave Kochbeck
Director of Technology, Friendster

Client Challenge

Privately owned and headquartered in Mountain View, California, Friendster supports a worldwide online community that boasts over 18 million registered users and hundreds of millions of stored ‘friend relationships.’ Since its founding in 2002 the company has witnessed dramatic growth, including a tripling of traffic to its website between spring 2004 and 2005. The company needed to manage its continuously escalating monthly bandwidth costs and have a better picture of how its frequent software releases and applications traffic – essential to support the dynamics of a worldwide, online community – were impacting its website’s performance.

Internap Solution

As a means to address its growing bandwidth needs, Friendster installed the Internap® premise-based Flow Control Platform™ (FCP) solution at its California headquarters and witnessed an immediate elimination of all wasted bandwidth and network overage charges, saving the company \$15,000 in the first month alone. Friendster was subsequently able to reduce its engineering staff headcount, optimize usage of its available bandwidth and gain critical visibility into the minute-by-minute performance of its network.

Business Benefits

Since installing the Internap FCP solution Friendster has been able to:

- ▶ Immediately reduce network latency worldwide by as much as 90%, improve network speed by 20% and increase network availability from 97% to 99.997%
- ▶ Maximize usage of available bandwidth, halting a monthly trend of escalating bandwidth costs and time-consuming negotiations with Internet Service Providers (ISPs)
- ▶ Gain visibility into its network, allowing the company to monitor the impact of software releases and application traffic – such as email – in real time
- ▶ Fully automate routing changes that were previously performed manually by network engineers
- ▶ Reduce headcount in its network engineering staff and rededicate remaining staff to other vital network operations
- ▶ Eliminate complex justifications for new network expansion projects and simplify bandwidth budgets and plans





“I don’t have to negotiate with my bandwidth vendors every month and ... we don’t make our own routing changes anymore. We have analysis of where traffic’s coming from for all over the world. There are a lot of things that have changed in how we do our jobs.”

Dave Kochbeck
Director of Technology, Friendster

Overview

Friendster is the world’s largest online social networking community, founded in 2002 and privately held by a consortium of corporate investors. The increasing adoption of the Internet as a means for millions of people to make and broker relationships has fueled the company’s astronomical growth. With over 60 million page views daily, 632 million stored ‘friend relationships’ and a daily peak sustained bandwidth of 550 Mbps, Friendster’s complex operation boasts 500 systems in total – keeping users within ‘six degrees of separation’ and relentlessly connected to each other around the globe.

To support its formidable traffic demands and usage spikes, Friendster was hostage to monthly negotiations with its Internet Service Providers (ISPs) to continually ramp up bandwidth – and its network engineers were spending enormous amounts of time manually tuning daily routing and traffic flows. But traffic volume and spiking had become costly problems and, in spite of monthly increases in its bandwidth provisioning, Friendster was paying hefty bursting charges.

Stop the Madness

Soon after joining Friendster as its Director of Operations in 2004, Dave Kochbeck witnessed the tremendous costs – in dollars and manpower – to manage the network and support the company’s global user community. “In my first four months here we had to increase our monthly commitment with one of our bandwidth providers every month,” he said. “Back then I was looking to make sure our bandwidth costs didn’t grow anymore.”

Kochbeck also realized that Friendster did not have a clear view into how the network was performing in real time, or how software releases or applications impacted network traffic – knowledge vital to manage and budget network growth.

Instant ROI

Already using Internap proprietary Network-Based Route Optimization service, Friendster installed the Internap premise-Based Flow Control Platform (FCP) and saw immediate – and dramatic – results. “In real terms there were about 120 Mbps of raw bandwidth that was going unused,” notes Kochbeck, adding that in the first month they saved \$15,000 by utilizing fallow capacity. Performance problems on the site – due to latency inherent in the Internet’s Border Gateway Protocol (BGP) – vanished, and customers were better able to reach the site and receive data back from it.

The Internap FCP immediately eliminated wasted bandwidth. “The amount of bandwidth that we buy now is exactly the bandwidth we use,” said Kochbeck. “We don’t have to preplan how much bandwidth we use each month – the FCP handles all of that.” Spiking is no longer the expensive problem it once was; since installing the Internap FCP solution Friendster has had no overage charges and can control its network expenditures.

Equally important, Friendster realized meaningful savings in opportunity costs. It was able to reduce headcount since the FCP “simply does more in a day than even the best routing engineer is capable of doing in a year.” The FCP makes thousands of route updates daily for Friendster, reducing its worldwide latency by as much as 90 percent and boosting average network speed by 20 percent from day one.

Redefining Success

Initially Kochbeck hoped to contain out-of-control network provisioning costs, itself a challenge, but one that was met immediately upon installing Internap’s FCP. Since then he uses the the FCP analytical tools to assess other business-critical information, such as tracking bandwidth or the amount of traffic running across a particular application, like email. “From a moment-to-moment basis I can see how a software release, for example, affected bandwidth. Real-time data gives you the opportunity to debug problems by using real-time bandwidth data,” says Kochbeck, adding that they “can know instantly if a release has caused harm, if an important piece of equipment has gone down, or if we’re being attacked just by looking at the rises and falls in traffic.”

“When you’re trying to figure out a problem, it helps tremendously to be able to see that the real traffic in an application is normal without having to scan through logs or mess with services on fifty different boxes.”

According to Kochbeck, the most valuable and far-reaching benefit of the Internap FCP solution is the visibility into Friendster’s network performance. Although the ability to contain escalating bandwidth costs, eliminate overages from usage spikes and reduce headcount now saves Friendster \$20,000 per month, Kochbeck finds even more value in the FCP’s ability to see into and proactively manage the network.

“I strongly feel that every multi-homed network needs an FCP,” says Kochbeck. “Friendster loves the FCP product.”

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