Gigya gives millions of users something to talk about with Google App Engine

gigya

At a Glance

What they wanted to do:

- Host customers' apps on a platform that scales to handle traffic surges quickly and easily
- Develop a competitive pricing model that doesn't charge customers for unused capacity
- Provide a reliable, flexible system with minimal downtime for customers

What they did:

- Migrated their social chat solution onto Google App Engine
- Provided a highly reliable, SLA-backed service to customers

What they accomplished:

- Supported some of the world's most visible live events with robust, reliable social chat services
- Kept customer downtime to a minimum
- Improved the scalability of their own apps through lessons learned using Google App Engine

Organization

If you want to know what people are talking about online, ask Gigya (www. gigya.com). The company's Software as a Service (SaaS) technology integrates Facebook, Twitter, LinkedIn® and other social networking features into popular online destinations. From NASCAR® to The Academy Awards® , Gigya's applications support 280 million users each month on more than 500,000 websites.

The Gigya team switched to Google App Engine to solve capacity and scaling problems with their chat application; Google App Engine keeps Gigya's chat services running, no matter how many users log on.

Challenge

Gigya enables its customers to integrate social media into their website applications through hosted solutions and services such as social login and gamification. One of Gigya's most popular apps lets customers enhance live events–such as awards shows and industry conventions–with online, real-time social chat tools. Traffic can spike from 10 people to 100,000 people within a few seconds of an event going live, so Gigya needed a hosting platform for its live chat customers that could accommodate these unpredictable traffic surges.

The Gigya team quickly realized that its platform hosting solution was not ideal. "We were managing the process ourselves," explains Raviv Pavel, vice president of research and development at Gigya. "In order to add capacity, we had to manually add more machines, which takes time. We also then had to pay for capacity we weren't using."

Gigya began looking for a hosting solution that was more flexible and scalable.

Solution

After careful consideration and a great deal of load-testing, Gigya moved its social chat services to Google App Engine.

"The idea that Google App Engine could theoretically scale indefinitely and the fact that you only pay for the capacity you use was very attractive," Pavel says.

"Google App Engine helps us handle huge projects that wouldn't have been possible with our previous hosting platform."
—Raviv Pavel, vice president of research and development, Gigya

The migration from the previous chat platform to Google represented a learning curve for the Gigya team, but Pavel says the experience was rewarding. "It required a shift in how we architected our systems," he says. "But that's not a bad thing, since it has changed the way we develop new systems for the better."

The Gigya developers built their chat app in Java and used Google App Engine's Eclipse plug-in, which allowed them to build, test and deploy the app from a single user interface. The developers also relied heavily on Google App Engine's rich caching features such as the MemCache API and the management dashboard. The dashboard has been especially helpful, allowing Gigya to measure everything from requests-per-second to latency.

Google App Engine's Service Level Agreement (SLA) is equally important to Gigya. As a service provider, Gigya needs to ensure uptime through its own SLAs with customers. "Our customers are paying us for a service, and they expect the system to be 100% flexible and operational," Pavel says. "We couldn't provide an SLA to our customers if Google didn't provide one to us."

As a high-profile app, Gigya's social chat services are always under the spotlight. With some of the world's largest companies as customers, Gigya needs to perform under pressure—a challenge when your own company is far smaller than those you support.

Pavel explains, "Google App Engine helps us handle huge projects that wouldn't have been possible with our previous hosting platform. If you don't want to buy machines and just want to write code and not worry about anything else, Google App Engine is an amazing service."

Results

Gigya's social chat solutions continue to be the center of conversation. Take for example E3 Expo 2011, the popular video gaming conference. During the event, E3's online social chat application saw peaks of 3,000 requests per second and 120,000 simultaneous users.

"It's hard to predict how many users you'll have with a social chat application when an event happens," Pavel says. "Google App Engine helps us handle them so we're not reacting when it's too late."

Google App Engine is equally attractive to Gigya during lower-traffic periods because of its pay-as-you-use pricing model. "Even when you're getting a trickle of requests, customers expect the solution to work," Pavel says. "Google App Engine lets us deliver great service around the clock and still be competitive in terms of price."

As an early adopter of Google App Engine, Pavel and his team enjoy seeing new features added, like the High Replication Datastore. But his favorite feature remains the easy-to-use interface. "I can be sitting with a laptop in a café, press a button, and suddenly my application can be rapidly deployed on one of the most powerful infrastructures in the world. That's very appealing to a developer."