Startup Helps Zap Mobile App Errors with Google App Engine

At a Glance

What they wanted to do

- Build a robust bug-tracking service for app developers
- Scale effortlessly to support a fast-growing amount of data
- Avoid buying, configuring and maintaining servers

What they did

- Developed a highly scalable service using Google App Engine
- Improved the service with key Google App Engine features, such as the Datastore and Task Queues
- Added new features easily by deploying new versions of the code without needing to take down the service

What they accomplished

- Scaled without effort to support fast user growth
- Saved nearly $220,000 per year by eliminating the need to purchase and maintain servers and hire additional staff members
- Established itself as a trusted name among app developers

Organization

BugSense, an application error-reporting service, relies on Google App Engine to track and report millions of app errors every day. When smartphone apps crash, BugSense helps developers pinpoint and fix the problem. The startup depends on Google App Engine for the scalability required to deliver first-rate service to its customers, which include VMWare, Samsung, Skype and thousands of independent app developers.

Challenge

Scalability was the top priority for BugSense founder Jon Vlachoyiannis when he began planning his error-tracking service. He knew there would be a high demand for the offering, which provides detailed crash reports to app developers through a web-based user dashboard. Without the right solution to handle all the data, the service would fail.

The small startup didn't have the budget to build its own infrastructure. Vlachoyiannis wanted to get the service up and running quickly, so he and his team decided against using an infrastructure-as-a-service solution that would require configuring and maintaining servers.

"Scaling the service ourselves and handling things like administration and security really weren't options," he says. "We just wanted to start programming."

"Once we deploy our codes, we can sleep tight at night. With Google App Engine, we don't have to worry about anything going wrong."
—Jon Vlachoyiannis, founder, BugSense

Solution

Vlachoyiannis learned about Google App Engine while running an earlier startup, and he thought it was the perfect platform for BugSense. Without hardware to manage, his team could focus on building the best service possible. App Engine also could provide the scalability to effortlessly support customers as the business grew.

BugSense incorporated a number of App Engine features into the service, including:

- **Google App Engine's Datastore** – to provide secure, scalable data storage
- **The XMPP application programming interface (API)** – to push live data onto users' BugSense dashboards so the team can view error-related information as it's generated

About Google App Engine

Google App Engine enables businesses to build and host web apps on the same systems that power Google applications. It offers fast development and deployment, effortless scalability and simple administration, with no need to worry about hardware, patches or backups.

For more information, visit
http://cloud.google.com/appengine

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- **The Task Queue API** – to schedule email notifications to developers who haven't fixed their apps within a specified time period

App Engine makes it easy for Vlachoyiannis and his team to continually improve the service, since they can deploy new versions of their code without taking the operation offline. They also can monitor the service and check response times, errors and other data through App Engine's intuitive, web-based dashboard.

"Managing the service on App Engine takes no time at all," Vlachoyiannis says. "Since Google takes care of administration, all we need to do is check how the system is performing."

Results

BugSense has grown quickly since its September 2011 launch. It now has thousands of customers ranging from independent app developers to large enterprises. Google App Engine has scaled effortlessly to handle that growth, helping establish BugSense as a trusted name.

"Our customers love that we have a very predictable service," Vlachoyiannis says. "They love that we've never had downtime. They know that whenever they log in, everything will run as expected. Google App Engine has helped us accomplish this."

The company is saving nearly $220,000 per year by eliminating the need to purchase and maintain servers and hire two additional staff members. Perhaps more importantly, using Google App Engine has given Vlachoyiannis and his team peace of mind.

"Once we deploy our codes, we can sleep tight at night," Vlachoyiannis says. "With Google App Engine, we don't have to worry about anything going wrong."

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