

Google App Engine Helps Web Publisher Unite African Communities



At a Glance

What they wanted to do

- Build a virtual message board service
- Find a scalable platform that supports rapid user growth
- Allow developers to easily refine the service

What they did

- Chose Google App Engine to leverage Google's highly scalable infrastructure
- Integrated App Engine features, such as Federated Login/OpenID and the Geolocation API to facilitate sign-in and allow users to pinpoint their locations
- Monitored service performance and viewed error logs through an intuitive, web-based dashboard

What they accomplished

- Eliminated the need to add and maintain hardware as the user base expands
- Forged partnerships with leading television and radio stations to embed the service in their websites, accelerating its growth
- Won the app demo competition in the 2012 Open Innovation Africa summit

Organization

Online news publisher Umuntu Media used Google App Engine to develop a virtual message board for southern Africa. With internet connectivity skyrocketing in the region, the startup seized the opportunity to create an online platform that allows visitors to post community events, items for sale and other notices just as they would on a physical message board.

Challenge

Umuntu Media founder and CEO Johan Nel needed a scalable solution to build his new virtual message board, called Mimiboard. He wanted to support as many users as possible since he expected the service to spread quickly throughout Africa. Nel also hoped to avoid the cost of hosting the service in-house.

"I couldn't run out and buy new servers if the service suddenly reached 5 million new users," he says. "I needed to have confidence that it would remain available no matter how large the increase."

Nel also wanted an agile system so his developers could easily refine the service as it evolved. He thought a cloud-based solution might be the answer, but he wasn't sure which one could best bring his plans to life.

Solution

Nel turned to David Campey, owner of the software development firm Information Logistics, to build Mimiboard for the Cape Town-based publisher. Campey had used Google App Engine previously, so he knew it offered the effortless scalability Nel wanted. App Engine's rich application programming interfaces (APIs) and easy testing and deployment processes would also help Campey's team build a robust service quickly.

"Whenever I speak with potential partners, I have to assure them we won't fall down because we're suddenly adding a lot of people to our service. Running on Google App Engine gives me that confidence."
—Johan Nel, founder and CEO, Umuntu Media

Information Logistics used the platform's Webapp framework – which allows Python-based web applications to run on a range of web servers – to simplify development. The firm used several App Engine features to enhance Mimiboard, including:

- **Federated Login/OpenID** – so Mimiboard users could sign in using their Google, Facebook or other web service user names and passwords

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>

“Running the operation on its final infrastructure from the first day has been a tremendous advantage. Without hardware or maintenance to worry about, Google App Engine has allowed us to focus on building the service.”
—David Campey, lead developer,
Mimiboard project

- **App Engine’s High Replication Datastore** – to provide scalable storage for the service’s data
- **The Google Maps and Geolocation APIs** – to add maps to the Mimiboard website, pinpoint users’ locations and help them find virtual notice boards in their area

Campey and his team use App Engine’s intuitive, web-based dashboard to monitor the service’s performance and check response time and error rates.

“We would generally have to put time and effort into creating error logs, but App Engine has made them available from the beginning,” he says. “That’s just one example of the advantages this platform brings us.”

Results

Shortly after Mimiboard launched in May 2012, the service won the app demo contest at the 2012 Open Innovation Africa summit. The service added 10,000 users in the first month, a number that Nel expects will skyrocket as radio and television stations across Africa embed the notice board in their websites.

“Whenever I speak with potential partners, I have to assure them we won’t fall down because we’re suddenly adding a lot of people to our service,” he says. “Running on Google App Engine gives me that confidence.”

The platform allowed Umuntu Media to launch Mimiboard for a relatively low cost. Compared with other services Campey has used to build and host applications, App Engine is saving Nel thousands of dollars a year.

“Running the operation on its final infrastructure from the first day has been a tremendous advantage,” Campey says. “Without hardware or maintenance to worry about, Google App Engine has allowed us to focus on building the service.”

