basho

mGage
the mobile engagement company

HIGHLY AVAILABLE MOBILE PLATFORM WITH RIAK KV ENTERPRISE SOFTWARE

INTERACTIVE SERVICES LAUNCHED

Velti, now called mGage, is a global mobile marketing and advertising technology provider. In 2005, mGage's interactive subscriber services were launched to large commercial television broadcasters in the United Kingdom. mGage's interactive subscriber services provide television broadcast audiences the ability to interact with programs using their mobile phones, to vote on people or things, give feedback, or participate in contests. At some point during a television program the viewing audience is prompted to participate. Within seconds, text messages flow into the system through a mobile network gateway, received and processed by mGage to determine results.

COMPANY
mGage

INDUSTRY
Mobile

CHALLENGE
Build a highly available, scalable mobile interactive platform.

DEMAND DRIVES NEW ARCHITECTURE

By 2009, mGage's UK customer base had grown to include nearly all of the broadcasters in the United Kingdom, as well as three of the UK's five mobile operators . With volumes of users and participation growing rapidly, the 2003 era .NET SQLServer platform was increasingly becoming an area of concern. With an indeterminate number of people responding at any point in time, mGage needed an architecture that could gracefully handle traffic spikes. The legacy platform wasn't originally architected for the level of scale, flexibility, availability, and elasticity required to drive mGage's interactive services moving forward . The team at mGage determined it was time to build a new, scalable, fault-tolerant infrastructure that was highly available, had the ability to handle high volumes of traffic, and gave them more control. Because they had been working with Erlang, an open source programming language originally developed by Ericsson to support distributed, fault-tolerant non-stop applications, mGage brought in Erlang Solutions to help architect their next generation platform. Riak KV Enterprise Software was selected as the new platform database because it was written in Erlang and was architected to be distributed, elastically scalable, highly available, and provide data durability.

To minimize potential catastrophic outages, in 2010 mGage built two geographically separated, mirrored sites and migrated all data to the new system. The two sites were synchronized using a very early version of the Multi-Data Center replication mechanism available in Riak KV. When mGage experienced a synchronization problem, they immediately contacted Basho. According to Marcus Kern, VP of Technology at "Basho provided a high level of support and responsiveness to address issues quickly." By September 2010, mGage released their new mGage™ platform into production.

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>
> - Marcus Kern, VP of Technology

> *Riak gives us the ability to meet and exceed requirements for scale, data durability, and availability.*
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HIGH AVAILABILITY, DURABILITY, AND SCALABILITY-DELIVERED

Today the mGage platform is running on 18 servers across 2 data centers (9 nodes in each data center), each server running both the Erlang applications as well as Riak KV. Riak KV is used as a hot database that is online, real time, and involved in transactions. mGage applications are split into 3 parts that each run over 3 nodes in each data center.

Riak KV is exceeding all expectations and requirements originally set by mGage. The new platform is site redundant, queue behavior has improved significantly (especially for large queue populations), and after moving to Riak 1.2, mGage has noticed the difference in disk space utilization thanks to improvements in merge management. Marcus Kern summarizes, "We operate a 24/7 service for over 140 customers. We cannot afford a single minute of downtime . Riak KV gives us the ability to meet and exceed our requirements for scale, data durability, and availability."

ABOUT MGAGE

mGage, formerly known as Velti, is the leading global provider of mobile marketing and advertising technology and solutions that enable brands, advertising agencies, mobile operators and media to implement highly targeted, interactive and measurable campaigns by communicating with and engaging consumers via their mobile devices . mGage was acquired by GSO Capital Partners, LP, a division of Blackstone Group, LP in January 2014. For more information,visit www.mGage.com.

ABOUT BASHO

Basho, the creator of the world's most resilient databases, is dedicated to developing disruptive technology that simplifies enterprises' most critical distributed systems data management challenges. Basho has attracted one of the most talented groups of engineers and technical experts ever assembled devoted exclusively to solving some of the most complex distributed systems challenges presented by Big Data and IoT.

Basho's database, Riak® KV, the industry leading distributed NoSQL database, is used by fast growing Web businesses and by one-third of the Fortune 50 to power their critical Web, mobile and social applications. Built on the same foundation, Basho introduced Riak TS, which is the first enterprise-ready NoSQL database specifically optimized to store, query and analyze time series data. Basho also provides Riak integrations for a variety of Big Data technologies like Apache Spark, Redis, Mesos, and Apache Solr.

For more information visit Basho.com which is full of interesting use cases, customer case studies and product detail, or docs.basho.com for technical documentation.

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