

# RIAK KV® ENTERPRISE SOFTWARE POWERS PAYMENT CARD INDUSTRY SOLUTION

Auric Systems International is a level 1 PCI DSS validated service provider and custom software development house specializing in Payment Card Industry (PCI) solutions. In June 2010, Auric was approached by Archway Marketing Services, Inc., a supply chain management and fulfillment service company that was interested in moving their PCI environment outside of their corporate environment. Auric's PaymentVault data availability would still have to be provided by the backend database.

According to Ray Cote, CEO of Auric Systems, "We are very familiar with Oracle and Postgres, but when it comes to replication, these get hard to manage. You end up getting caught in a primary and secondary failover situation."

## MARKET

eCommerce, Direct Marketing,  
Card Not Present

## CHALLENGE

Reduce the burden and cost  
associated with database replication  
while increasing developer flexibility

## SOLUTION

Use Riak KV® Enterprise Software,  
a NoSQL distributed database that  
provides transparent data replication

## AURIC SELECTS RIAK KV® ENTERPRISE SOFTWARE

While researching the latest trends in database products and designs, Auric came across Riak KV® Enterprise Software. Riak KV® Enterprise Software is a distributed NoSQL database that at its very core is designed for replication. Regardless of which node or component you talk to, Riak KV transparently and automatically replicates data, ensuring that critical data is always available. According to Ray Cote, Auric's CEO, "Riak KV was a perfect match for our Payment Vault system. And the fact that we got free data replication out-of-the-box was important to us." In addition to transparent data replication, Riak KV's HTTP interface

allowed Auric to use standard tools to talk to the database and place the database behind the load balancer for automatic load balancing. Auric also discovered along the way that, rather than having to write code and perform periodic checks, Riak KV could be configured to automatically age-out credit cards. Auric selected Riak KV and began development in December 2010.



“*The fact that we got free data replication out-of-the-box was important to us.*”

- Ray Cote, CEO, Auric Systems International

## A SMOOTH TRANSITION

During the data transition phase of the project, Auric became concerned about throughput. This particular task required Auric to take all of the credit cards Archway had stored in their system and tokenize them, in a matter of hours, as they switched-over the systems. Six clients were earmarked for the move with a total of more than 2 million credit cards. The tokens had to be stored in a matter of hours. Using Riak KV, Auric was able to accomplish this transition in only 1.5 hours.



## ABOUT AURIC

Auric Systems International, a trusted leader in PCI compliant solutions, has been producing payment transaction processing applications since 1987. Auric is a Level 1 PCI DSS validated service provider, skilled in PCI business process, design, and implementation. The company's innovative software, services, and solutions are deployed by businesses that range in size from small businesses to Fortune 100 enterprises. Auric Systems International has expertise in PCI compliant software development, payment applications, tokenization, and database performance.

## 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](http://Basho.com) which is full of interesting use cases, customer case studies and product detail, or [docs.basho.com](http://docs.basho.com) for technical documentation.

