Database Migration from MySQL to NoSQL

Overview

Choosing between schemaless NoSQL databases and strong-schema relational designs isn't an either-or decision, as this case study points out. When dealing with their big data problem, Our client decided that their MySQL servers could use a little help from MongoDB, and putting the two technologies together created a better system with greater availability, scalability and performance.

Real Challenges

Our client handles a huge amount of new data every day, with a constant need for maintaining a data-warehouse for better and faster analytics. MySQL sufficiently handled the daily traffic and requests, but due to the structured and partially inflexible nature of any huge MySQL DB warehousing had become a headache. We needed a flexible and robust data warehousing and data analytics solution given the clients complex data analytics needs.

Our Approach

Pegasus One decided upon a hybrid setup - where the MySQL DB took care of the current persistant data, which it was capable enough to handle, and the historical data was migrated over to NoSQL for data-warehousing and analytics.

This gave our client the flexibility to have a flexible, fast and robust data warehouse with all the benefits that come along with NoSQL, while still enjoying the ease and compatability of MySQL for their operational data.

Results

Better Analytics

NoSQL data warehouse resulted in an efficient and reliable analytics engine

Easier Maintanence

Upgradation and maintainence of persistent MySQL databases become simple as it did not affect the vast amount of warehoused data

High Performance

Speed and flexibility of NoSQL lead to a fast and scalable Data Warehouse with better data analytics capabilities

NoSQL solutions are especially great for data warehousing needs, as demonstrated by this case study. Highlighting a few of the features that make NoSQL DB great for data warehousing are:

Flexibility, Rich Query Language

Sharding (Easy scaling)

High Performance

High Avaialbility

Wide storage engine support.