

Database Emailer Finds Database Stability and Business Growth with Infobright

By Mike Fisch, Editor

A Large and Unwieldy Database

Database Emailer ran into serious challenges when its MySQL database grew too large. MySQL is a popular and functional open source database, but the scale of the company's data was more than the platform could effectively handle. "We had partitioned the database into over 70 partitions," said Al Inga, President and CEO of Database Emailer. "And we were still crashing due to the amount of records. We had about 20 columns in relation with 300 million rows. We went to MySQL and said, 'What can we do here?'"

Based in Little Falls, New Jersey, Database Emailer is the largest opt-in email database in the United States. Opt-in means that people have expressly agreed to receive product offers and specials by email. The company sells email lists that can be targeted by multiple criteria or "selects," such as geographic location and demographics (e.g. income, gender, dwelling status). Its customers then market to these lists.

For Database Emailer, its database is its business. The ability to perform fast queries and generate lists for each customer request is essential. But its large and unwieldy database meant the IT department had to spend about 100 hours per week performing manual queries. "We couldn't run queries effectively," said Inga. "If someone came to us and wanted to run four or five or six different selects – for instance,

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women between 30 and 50 years old who make an income of X amount of dollars who live in New York City and own a home – there was no way that could be run on the website." In such cases, the IT staff ran the query directly on the MySQL server and determined the number of records. After reporting back to the customer, the number of records was often too small or too large for the customer's needs, so they had to change the parameters and run another query. "At that point, you're just going back and forth, back and forth, tying up the IT department with doing queries because it can't be run through a website interface," he said.

Manual queries slowed down the sales process and cost the company up to \$1,000 per day in IT staff time.

A Smooth Transition to Infobright

In response to Database Emailer's request for help, MySQL recommended its partner Infobright, which offers a self-managing, scalable data warehouse that is optimized for analytics and integrated with MySQL. Database Emailer downloaded a free, open source version called Infobright Community Edition.

After trying it out, they decided to purchase and deploy the commercial version, Infobright Enterprise Edition (IEE).

Infobright is a column-oriented database, so data is stored column-by-column instead of row-by-row. This architecture enables more efficient data compression of 10:1 or better instead of the typical 2:1 or 3:1 compression ratios. A 50 TB database could be stored in only 5 TB of capacity – a significant storage savings. The database is self-managing, so administrators do not have to manually create and manage indexes. Infobright also organizes and tracks data in a way that enables very fast queries.

Infobright's integration with MySQL eased the transition. Database Emailer was able to keep its MySQL code base, and the IT department could apply its existing knowledge and skills to the Infobright solution. "My IT guys were very quickly able to learn the Infobright infrastructure. A lot of it was very common. If they knew MySQL, they could quickly learn this," said Inga.

They used the same server and storage hardware for the Infobright solution. "It required zero outlay for additional servers. The Infobright engine was able to handle it. We were only running 4 gigabytes of RAM," he said.

Online Queries Mean Business Growth

With the new, robust Infobright database, Database Emailer could offer online queries of the entire database, including the United States and Canada. "So now everyone can do queries 24 x 7 x 365 on their own," said Inga. "If they want to increase their data sample, they can just change one of the variables and increase or decrease the record count. Once they lock it in,

they can hit the button and we have a debit-credit system set up where they can store credits on the account. When they download the data, it debits their account. No intervention from the IT department. So we literally have spent 100 hours a week less time doing queries."

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The fast online queries have made the sales process more competitive. "People are now using it more and more because of the access to immediate information. Whereas before, they might wait for a quote from us and we might not be able to get back to them for several hours or the next day. In the meantime, they are shopping around three or four other places. Now, they know they can get immediate quotes right from us. We are the first source they go to, and most of the time we have what they want," he said.

"Business has increased since March probably 200 or 300 percent," he continued. "Interestingly enough, the money that was going towards the IT people is now heading towards customer service. We actually have more customers now than ever, and more sales calls coming in. So sales and customer service are increasing, but IT costs have substantially decreased."

Inga is proud of how well his company is able to compete with these new capabilities: "Major data supplier corporations' websites don't have one-tenth of the queries that we are able to run on our website. We are virtually a mom-and-pop operation that is able to compete with

companies that are hundred million, five hundred million, billion dollar corporations.”

In short, Inga is pleased the new Infobright platform. “We’re real happy,” he said. “It literally has caused the business to increase substantially.”



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