



CASE STUDY: One Great Family and Perfect Search



With a name like One Great Family, one can quickly surmise the company's industry niche. Unlike other genealogical organizations, the ultimate goal of One Great Family was to connect all its customers into one enormous family tree.

Tracking relationships between husbands and wives, parents and children, from generation to generation, requires vision and strategic design, coupled with unique and powerful technological capabilities. What's required is a system that enables linkage of each individual's family tree to the trees of all other subscribers, thereby achieving the goal of one contiguous, connected tree.

Problem:

One Great Family's subscriber base has resulted in 250 millions rows of data—data that must be searched in order to achieve results. The data repository is in an Oracle database but the search was slow and difficult. In order to speed up the search process, the data was moved into a MySQL database that was optimized solely for queries and search. MySQL performance was superior to what was experienced with Oracle, but the time and complexity of updating genealogical data and keeping all the families links together made it very difficult to maintain a reporting copy of the data on MySQL. Moving the data to MySQL caused a problem whereby the data would be posted to the Oracle database, but the reformatting of the data for the MySQL database required so much processing that it could only be done once a month. As a result, customers were usually accessing obsolete data and were very frustrated.

A second problem that One Great Family encountered was that genealogical records include two-way links to address family relationships. To traverse a family tree required a great deal of time and was very expensive.

Solution:

Perfect Search was asked to deliver a solution that would compile customer data into a searchable form, eliminating the one-month delay while, at the same time providing a search experience that was superior to MySQL and Oracle. The Perfect Search solution: a Web Service, eliminated the delay in updating the search engine as it easily allowed data to be simultaneously written into the Oracle database as it was pushed to the Perfect Search index. Moreover, replacing the MySQL database gave increased performance in search for the customers of One Great Family, and they are now working on current data.

Results:

Simultaneously posting data to the Perfect Search indexing engine, while data was being written to the Oracle database, gave customers instant access to their uploaded data. Reducing the time between upload of data and access to data from one-month to instantaneous provided the ultimate solution to One Great Family.

For large results sets, query response times were over 1000 times faster when compared to MySQL and Oracle. Complex queries with many query parameters were over 100 times faster than either Oracle or MySQL.

“After implementing Perfect Search, the wait time for our users to get responses to their search has been virtually eliminated,” said Kirby Glad, VP of Technology/CIO, “This has been coupled with a corresponding increase in customer satisfaction. The performance of Perfect Search has allowed queries that were impractical to ask of the old system (like determining how many cousins a person has) to now be done quickly and easily.”

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- Kirby Glad, CIO
One Great Family

Chart

Test	MySQL	Perfect Search	Times faster than MySQL
Latency from time data was loaded until it was searchable	30 days	<10 seconds	Incredibly Fast
Simple query, large result set (1000 rows)	51 seconds	.0021	24,000 times faster
Complex Query, multiple parameters – returns a single row	32 seconds	.072	440 times faster

About Perfect Search Corporation

Founded in 2007, Perfect Search Corporation is an enterprise search solution delivering 10 to 1000 times faster and more scalable search across exponentially growing data sets. Through software innovation, the company enables the world's fastest search, requiring far fewer hardware resources, so companies can quickly and cost-effectively access and use information from structured and unstructured data sets all across the enterprise. Offering both search engine SDK for OEM and search appliance solutions, Perfect Search enables enterprises to find the information they need when they need it. Learn more at www.perfectsearchcorp.com.