



Use Case: Personalization

Industry

Genealogy

Challenges

- Existing database technology could not scale in a cost-effective manner
- Anticipated 10-100x more usage of site over next three years
- Deliver seamless customer experience through database transition

Solution

- Selected DataStax Enterprise as its distributed, responsive and intelligent foundation
- Masterless architecture of DSE ensures high availability and no downtime
- Worked with DataStax to develop its own framework for creating new applications

Results

- Customers experience faster response times, high availability and no database downtime
- Routinely serve 125 million transactions per hour during peak usage
- Ability to bring new capabilities to market like Record Hints

PERSONALIZATION

FAMILYSEARCH DELIVERS A POWERFUL ONLINE CUSTOMER EXPERIENCE WITH DATASTAX TO CONNECT RELATIVES ACROSS GENERATIONS

FamilySearch is the largest genealogy organization in the world, helping people create new personal and family discoveries through access to historical records with a powerful and user-friendly online search experience. FamilySearch is a nonprofit, volunteer-driven organization sponsored by The Church of Jesus Christ of Latter-day Saints. Millions of people use FamilySearch records, resources, and services to learn more about their family history.

To help in this great pursuit, FamilySearch and its predecessors have been actively gathering, preserving, and sharing genealogical records worldwide for over 100 years. Patrons may access FamilySearch services and resources for free at FamilySearch.org or through more than 4,921 family history centers in 129 countries, including the main Family History Library in Salt Lake City, Utah.

Family Tree Application Makes Finding New Discoveries Easier Than Ever

The Family Tree application allows users to collaborate with others, edit and delete incorrect data, thereby preserving discoveries for others with shared ancestral lines. Family Tree offers an intuitive and rich customer experience including functionality allowing users to more easily locate and link records to people in their Family Tree.

FamilySearch also proactively scans for record matches on behalf of its users, helping them make new research discoveries. These record matches are presented to the user using a feature called Record Hints. The hints provide users more information as they search through the large amount of new historic records added weekly to the site from its global records preservation efforts.

Popular Applications Drive Massive User Growth

The Family Tree application is extremely popular and generates significant demand from more than 500,000 customers. Over the last year, FamilySearch struggled with their prior database technology as it strained to service their customers' experience expectations.

As the application grew in popularity, FamilySearch realized they had vertically scaled their database technology as far as was cost-effective and found they could not get beyond 60 million transactions per hour for the Family Tree application – which created a technological headwind for future growth.

“We have experienced a tremendous response from customers as the Family Tree application exploded in popularity,” said Michael Nelson, software development manager, FamilySearch. “However, in order to deliver a great customer experience, we needed a more scalable database that could prevent downtime and allow us to deliver even more features for our users.”

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*Michael Nelson
software development manager
FamilySearch*

DataStax Enterprise Helps Drive Growth and Deliver Great Customer Experience

FamilySearch anticipated 10-100X more usage of the site over the next three years and wanted to position themselves to handle this rapid growth. FamilySearch conducted in-depth, head-to-head comparisons between several relational and NoSQL databases including open source Cassandra and DataStax Enterprise.

To support the demands of their growing customer base, FamilySearch selected DataStax Enterprise for its scalability and performance. In addition, the masterless architecture of DataStax Enterprise provides the satisfaction of 100 percent availability with no downtime during traffic surges and cluster maintenance. DataStax Enterprise is the distributed, responsive and intelligent database foundation used to build and run the Family Tree application.

FamilySearch experiences the highest amount of traffic every Sunday, and prior to their database migration, they would approach their capacity limits every week. Fortunately, FamilySearch made the switch just in time. Within two weeks of going live with DataStax Enterprise, they would have hit the capacity limit of their previous system but were able to seamlessly continue delivering the customer experience their users demand. They now routinely serve 125 million transactions per hour during peak usage with plenty of room for future growth.

Results

Selecting DataStax Enterprise put FamilySearch on a solid path for future growth with customers experiencing faster response times, high availability and no database downtime. In addition, FamilySearch brought new capabilities to market with DataStax Enterprise. New applications like Record Hints, which helps users make new research discoveries, were not possible with their previous infrastructure. Since implementing DataStax Enterprise, FamilySearch can focus on building and improving its applications to focus on its mission to connect families across generations.

“FamilySearch helps our customers search for their ancestors and contribute to their family history,” said Nelson. “DataStax Enterprise provides the scalable data platform we need to expand our offering and continue providing a great experience for our customers.”

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About DataStax

DataStax, the leading provider of database software for cloud applications, accelerates the ability of enterprises, government agencies, and systems integrators to power the exploding number of cloud applications that require data distribution across datacenters and clouds, by using our secure, operationally simple platform built on Apache Cassandra™. With more than 500 customers in over 50 countries, DataStax is the database technology of choice for the world’s most innovative companies, such as Netflix, Safeway, ING, Adobe, Intuit, Target and eBay. Based in Santa Clara, Calif., DataStax is backed by industry-leading investors including Comcast Ventures, Crosslink Capital, Lightspeed Venture Partners, Kleiner Perkins Caufield & Byers, Meritech Capital, Premji Invest and Scale Venture Partners. For more information, visit DataStax.com or follow us [@DataStax](https://twitter.com/DataStax).