



Use Case: Fraud Detection

Systems that identify out-of-the-ordinary patterns to prevent malicious attacks on digital and physical assets from unauthorized applications and individuals.

Industry

Social Media Security

Challenges

- Unpredictable, ever growing amounts of social media data
- Performance limitations due to complexities in relational database architecture
- Supporting an ever growing user community with limited resources

Solution

- Real-time search on social media trends with Solr
- 100% uptime, no matter what
- Flexible data store that performs at scale

Results

- Superior read / write performance even at peak hours
- Flexibility to scale linearly to any size at lowest cost possible
- Operational simplicity handled by a single administrator

FRAUD DETECTION

NEXGATE SECURES SOCIAL MEDIA, PROTECTS CUSTOMER PRIVACY WITH DATASTAX

Nexgate is the visionary leader in social media security. Providing social media security and compliance solutions and products, Nexgate has won dozens of industry honors, broken new ground in security research, established industry-first capabilities with every release. Nexgate is the only social media security vendor recognized by Gartner and Forrester, and earned the trust of more than 116 brand name customers.

The Challenge

The soaring demand of organizations using social media for customer acquisition is driving concerns about security, privacy and compliance such as account hacking, content and publishing mistakes, and fraudulent representation of brands. Over the years, Nexgate has successfully developed social media security technology to implement and manage social media risks and controls. Nexgate's solution classifies social information to monitor, analyze, and respond to anomalies on social channels in real time.

Nexgate required a strong database infrastructure with flexible linear scale to accommodate growing volumes of social media data. Having started with MySQL based on years of experience, the team soon hit a scale wall due to limitations in relational database technologies. Delivering high performance to analyze trends was another big concern.

The Solution

Nexgate had three major requirements in selecting a new database technology. First, it was imperative that the database technology support trend monitoring and fast search on social content. Second, operational and development simplicity with parallel design of database node architecture to simplify read/write functions to any node was required. Finally, Nexgate needed seamless horizontal scale to handle ever-growing volumes of social media data.

Nexgate evaluated DataStax Enterprise, MongoDB and Riak. "It was very important to me, operationally, to have a solution that was multi-master, where every node in the cluster was itself a master," explained Nexgate CTO Rich Sutton. "So we quickly ruled out MongoDB because we wanted seamless replication based on how we define the data model, where every node in the system was a master."

The team ended up looking at DataStax Enterprise and Riak. "Those were the two that we put head to head," Sutton continued. "This was because our final requirement was integration with Solr, which both technologies possessed. On running benchmarks, DataStax Enterprise won hands-down in terms of reliability, ease of use, and the speed with which we can scale our application horizontally. 24x7 professional support was also very important to us. Even though I'm very careful with where we spend our limited resources, I knew that we wanted DataStax Enterprise."

“When we ran benchmarks, Cassandra won hands-down in reliability, ease of use, and the speed with which our application can horizontally scale. It just won technologically.”

*Rich Sutton
CTO
Nexgate*

The Results

With DataStax Enterprise, Nexgate’s security and compliance suite benefits from real-time search via Solr, operational simplicity and 100% uptime. Relying on DataStax Enterprise as its database backbone guarantees Nexgate predictable scale at a fraction of the cost of a traditional relational database system.

Today, Nexgate scans and classifies about a million items a day and is running 80 reads per second and 40 writes per second at peak hours. “Another nice thing DataStax brings us is that we don’t have to tear data down. As data volumes grow, I can have it all right there. Our system stays up all the time and the fact that we can bring individual nodes into a cluster without downtime is very cool. And we don’t need to think about hot backups or secondary clusters,” Sutton said.

Thanks to DataStax Enterprise, Nexgate can classify social contact data to monitor and analyze trends and anomalies of accounts and content on social channels, and is able to take action in real time. With DataStax, Nexgate protects customer privacy across all major social networks by providing a secure social media infrastructure for customers to discover and communicate with each other.

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About DataStax

DataStax is the fastest, most scalable distributed database technology, delivering Apache Cassandra to the world’s most innovative enterprises. Datastax is built to be agile, always-on, and predictably scalable to any size.

With more than 500 customers in 45 countries, DataStax is the database technology and transactional backbone of choice for the world’s most innovative companies such as Netflix, Adobe, Intuit, and eBay. Based in Santa Clara, Calif., DataStax is backed by industry-leading investors including Lightspeed Venture Partners, Meritech Capital, and Crosslink Capital. For more information, visit DataStax.com or follow us @DataStax.

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