

FAST, SECURE, AND READY FOR GOVERNMENT CLOUDS

It's time to consider Enterprise NoSQL.



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DURING THE PAST 25 years, relational databases have been instrumental in helping agencies store, manage, and analyze everything from financial and payroll data to personnel data—in short—anything requiring the query, analysis, and reporting of structured data. In most cases, relational databases are still the gold standard in these areas.

Over the last decade, though, agencies have gathered a staggering amount of information. And most of that is unstructured data from documents, emails, social media, geospatial, institutional knowledge, and sensors. These sources have become critically important in helping organizations make decisions and identifying areas of concern.

Also, agencies are collaborating with each other more than ever before. These factors have strained relational databases to the breaking point. In many cases, it is virtually impossible to modify the databases and schemas fast enough to react to the constant flow of new data types, much less analyze that data.

Here is a simple example: There was a time when government could keep up with world events by monitoring a few TV and radio channels. With this information, they would be sufficiently informed to respond to everything from financial crises to emergencies. Today, however, a tweet from a private citizen could beat a large media outlet in relaying important news. Which means agencies would have to monitor thousands of news channels and multiple social media outlets to even have a chance of keeping up.

For situations where agencies have to ingest and quickly analyze many different sources of data, it makes sense to consider a NoSQL database. Unlike relational databases, NoSQL databases are ideal for ingesting, organizing, and

analyzing large volumes of disparate data types, from geospatial and temporal data to semantic, textual, and statistical information. For mission critical workloads—when security and data integrity is paramount—agencies can leverage an Enterprise NoSQL database to gain insight and make timely decisions.

Monitoring suspicious activity is a critical task for many government agencies these days. Doing this effectively means tracking and analyzing many types of information, including social media, the Internet footprints, location data, incident reports, log files, cyber alerts and more—all in real time. With a NoSQL database supporting this process, analysts can quickly find hidden relationships and patterns within the data that can help the mission succeed.

Whether considering a NoSQL database for better situational awareness, intelligence analysis, information sharing, or simply to manage multiple data types and feeds, it's important to ensure the NoSQL database you choose can handle government requirements. Not all NoSQL databases are enterprise-grade, but it's critical for government. Enterprise-grade NoSQL solutions can safely store and manage mission-critical information in compliance with government policies and regulations.

More than ever, now is the right time to consider NoSQL. Government agencies must manage, analyze and share more disparate data sets quickly and securely. At the same time, NoSQL databases are easier to use and more feature-rich than ever before. Today's enterprise-grade NoSQL databases are secure and ready for government clouds, which helps accelerate their agencies' mission while decreasing costs.

Idriss Mekrez is Public Sector CTO of MarkLogic.



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