Implementing a Secure Big Data environment

Thales data security for Mongo DB

- Data-at-Rest Encryption
- Privileged User Access Control
- Security Intelligence Collection
- High-performance
- Ingress and Egress Protection
- Field to File-level Encryption
- Centralized Policy and Key Management

Mongodb and Thales

The evolution of Big Data is in high gear. It is an exciting time for marketers, scientists, analysts and others looking for competitive advantages and new discoveries by examining their data sources in new and unique ways. As organizations increasingly leverage Big Data, they are looking at ever-larger data sets across files and databases, as well as building on their previous Big Data results. These strategic and aggressive efforts to draw enhanced insight out of a growing number of data sets commonly involve sensitive or regulated information.

MongoDB is among the leaders in next-generation database technology, empowering businesses to be more agile and scalable. Found in more than 1/3rd of Fortune 100 companies and startups alike, MongoDB is being used to create new classes of applications, improve customer experience, accelerate time to market and reduce costs. With its dynamic schema, MongoDB is

made to store, manage, and analyze rapidly changing structured, semi-structured, and unstructured data. MongoDB was designed to ensure data security and offers a host of protection technologies including robust authentication, role-based access control, encrypted communications, and strong auditing capabilities.
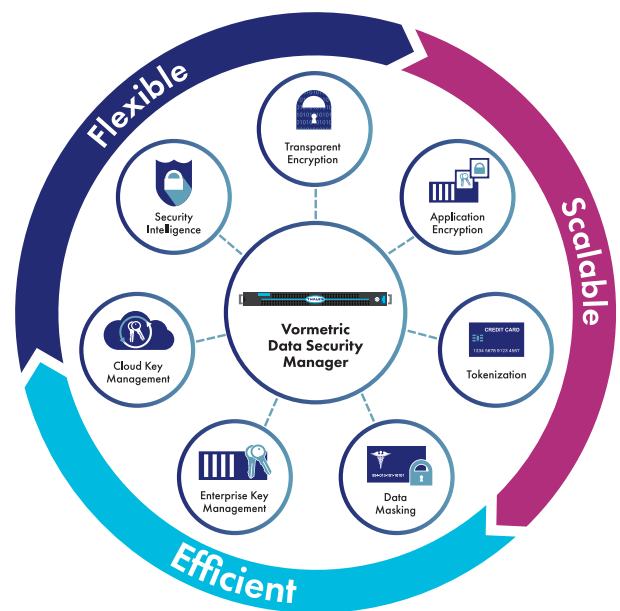
The Vormetric Data Security Manager centralizes and simplifies organization-wide data-at-rest security and control

However, it is also critical to protect data-at-rest against privileged users who have no need to access the data and attacks that bypass the database and target the underlying servers or physical storage. This data-at-rest includes the collection of unstructured files and structured databases, query reports, log files and other data sets that might contain sensitive or regulated information spread and copied across the infrastructure.

The Vormetric Data Security Platform from Thales

Thales, a MongoDB Advanced Partner, complements MongoDB security by delivering high-performance encryption, easy to use integrated key management, privileged user access control, and generates data access security intelligence with the Vormetric Data Security Platform. The platform enables data protection as granular as specific columns within a relational database or fields within a document in MongoDB, or it can protect all the data within a given directory or volume. The platform supports the broadest range of operating systems and environments in the industry, delivers operations efficiencies through high-performance and centralized management with the Vormetric Data Security Manager (DSM) from Thales.
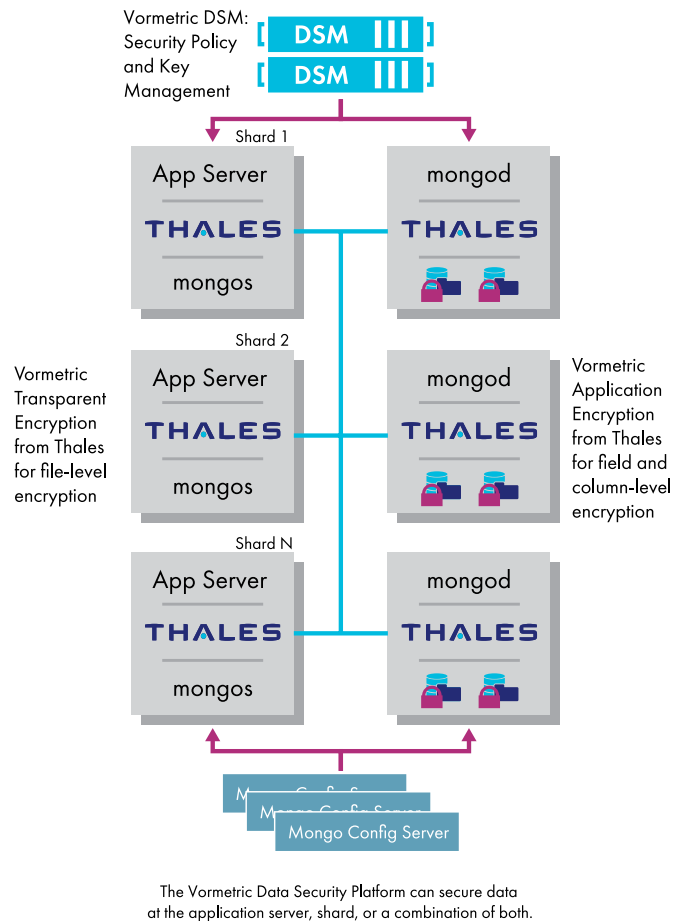
The Vormetric Data Security Platform with MongoDB

- Transparently protect new and complex structured and unstructured data types without application engineering with Vormetric Transparent Encryption
- Simplify adding document-level encryption with tools that include sample code and API support (Java and C/C++) for MongoDB application integration with Vormetric Application Encryption
- Generate security intelligence on data access by users, processes and applications accessing data anywhere across the MongoDB infrastructure
- Maintain SLAs with high-performance encryption and high-availability data security architecture

Example Customer Use Cases

A leading healthcare organization launched a service powered by MongoDB making use of Private Health Information (PHI), requiring them to adhere to HIPAA/ HITECH regulations. The combination of MongoDB and Thales enabled the company to deploy their service with the required performance and security level.

A Fortune 500 industrial manufacturer was required to collect sensitive and valuable data from systems in the field and provide that data to regulatory agencies. MongoDB with Thales was selected by IT and approved by the agency auditors to handle this large data set, in a compliant manner, without disrupting the existing SLAs.

The Vormetric Data Security Platform can secure data at the application server, shard, or a combination of both.

MongoDB

MongoDB makes development simple.For tens of thousands of organizations, MongoDB provides agility and the freedom to scale. Fortune 500 enterprises, startups, hospitals, governments, and organizations of all kinds use MongoDB because it is the best database for modern applications. Through simplicity, MongoDB changes what it means to build. Through openness, MongoDB elevates what it means to work with a software company. Please visit www.MongoDB.com to learn more.

About Thales

The people you rely on to protect your privacy rely on Thales to protect their data. When it comes to data security, organizations are faced with an increasing number of decisive moments. Whether the moment is building an encryption strategy, moving to the cloud, or meeting compliance mandates, you can rely on Thales to secure your digital transformation.

Decisive technology for decisive moments.