

# Thales CipherTrust Manager for MongoDB Encryption

## Key Management for MongoDB Native Encryption



MongoDB and Thales offer customers a simple, secure consolidated approach to the challenges businesses face in the era of Big Data.

### Solution

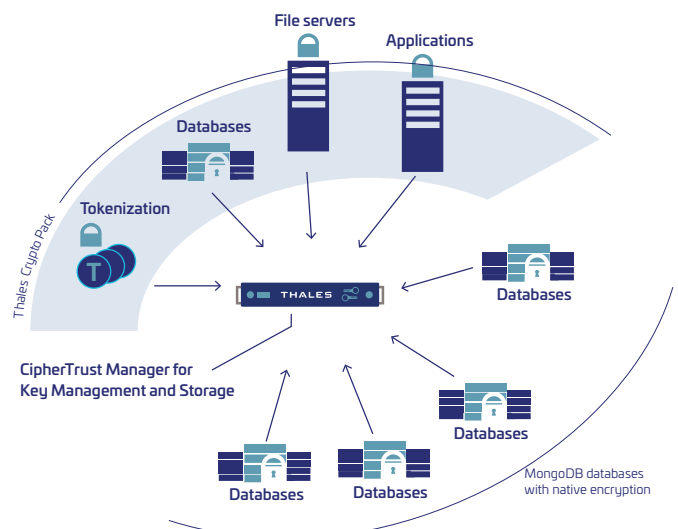
Organizations are accumulating more data than ever. Sensors from the burgeoning Internet of Things, mobile applications with sensitive personal information, and websites delivering tailored advertisements, all send significant amounts of information to servers. The insights gleaned from this data drive operations and profits; to find success, organizations need to be able to handle this data efficiently, at scale, and with the security to keep it safe. Fortunately, MongoDB and Thales have a solution to meet these challenges.

### MongoDB Enterprise Advanced

MongoDB is a cross-platform document-oriented database capable of incorporating any data type irrespective of where it comes from or what it looks like. Customers use MongoDB to consolidate disparate data types under a single view to gain real time perspectives on their data stores. Built-in scaling features and a flexible schema let the database grow automatically and transparently as customers collect increasing amounts of data in different types. For security, MongoDB offers customers native encryption to secure database files and address customers' security and compliance concerns.

### Thales CipherTrust Manager

CipherTrust Manager is an encryption and key management appliance that securely stores MongoDB native encryption keys. Centralized key storage and management improves security by making surveillance, rotation, and deletion easier. Its access control features allow for the separation of duties so that no single administrator is responsible for the entire database environment. Additionally, unifying and centralizing policy management, logging, and auditing makes information more readily accessible and demonstrating compliance with data governance requirements simple.



## Benefits

### Transparent, Strong Encryption

- Transparent Data Encryption secures data as it resides in the database, and as it is replicated and backed-up.

### Maximum Key Security

- CipherTrust Manager is available in a FIPS 140-2 Level 1 algorithm-safe and Level 3 tamper-proof hardware appliance – or as a virtual hardware appliance

### Apply granular access control policies

- Manage keys centrally in FIPS-certified key manager
- Prevent rogue root administrators from impersonating other users and accessing protected data

### Achieve Compliance

- Separate duties among administrators
- Track and audit access to protected data and keys

### Secured, Assured Availability

- Flexible high-availability configurations suitable for geographically dispersed datacenters or service provider environments.

## Key Features

### Separate Duties Among Administrators

The ability to separate duties based on business need-to-know is an important security best practice. It ensures regulatory compliance and secures data from risks posed by privileged users. CipherTrust Manager offers granular access controls to native encryption keys that decouple administrative duties from data and encryption key access. Administrators responsible for the management of the datacenter's physical infrastructure will be barred by access controls from viewing the data in the MongoDB databases that reside on the server being managed. Concurrently, CipherTrust Manager administrators can only manage the security policies and keys on the key manager.

### Improve Compliance

CipherTrust Manager's integration with MongoDB native encryption helps customers achieve compliance with a variety of regulations that require encryption of data including, but not limited to, credit card numbers for Payment Card Industry Data Security Standard (PCI DSS) compliance, Personally Identifiable Information (PII) to comply with state data breach and data privacy laws, and Electronic Patient Health Information (EPHI) in accordance with HIPAA.

### Simplified, Consolidated Key Management

CipherTrust Manager centralizes key administration behind an intuitive graphical user interface to make management easy. Additionally, its ability to consolidate keys from a broad ecosystem of encryption vendors, along with those used for MongoDB databases, from across the customer's infrastructure simplifies the organization's global encryption deployment. This simplified and consolidated approach to key management reduces risk by improving visibility and lessening the chance for error while also reducing the amount of time and investment needed to manage encryption throughout the organization.

## Conclusion

The era of Big Data is here and organizations need to prepare for the rapid pace of innovation and analysis afforded by this additional data. The increase in opportunity comes with a distinct increase in the level of risk associated with that data. MongoDB and Thales offer organizations a joint solution to meet current and future needs in an efficient, agile and secure manner.

## 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.