THALES

SafeNet ProtectDB for Oracle Database
Column-level database encryption to secure sensitive data

Organizations' often store their most valuable data in Oracle databases. Protecting that data from the devastating impact of a breach is imperative; encryption provides a critical last line of defense by applying security directly to the sensitive data itself. However, some database encryption approaches can have important performance impacts, require application code changes, or may not adequately address logical risks to the database data. Fortunately, Oracle and Thales work together to address these challenges for enterprises storing sensitive data in their Oracle deployments.

Thales' SafeNet ProtectDB provides transparent column-level encryption of structured, sensitive data residing in Oracle databases. SafeNet ProtectDB lets large amounts of data move in and out of Oracle data stores by efficiently encrypting and decrypting specific fields only. With SafeNet ProtectDB, no application code changes are required, and organizations maintain the ability to scale encryption in order to support multiple data centers in on-premises, virtual, and public cloud environments.

SafeNet ProtectDB Benefits

Persistent Protection

With SafeNet ProtectDB, organizations ensure encrypted data remains secure throughout its lifecycle, while also providing authorized users and processes access to secured data when needed. Lifecycle protection increases overall security and facilitates collaboration by mitigating risks as databases are backed-up, stored or transferred.

Efficient Encryption

With SafeNet ProtectDB, large amounts of sensitive data can be moved in and out of Oracle data stores rapidly by encrypting or decrypting specific fields in bulk within files that can contain millions of records. By focusing on select fields, organizations encrypt and decrypt data efficiently, in a fraction of the time that it might take for the entire database file. Additionally, format preserving encryption functionality lets customers continue to run analytics on their data even though it is encrypted.

Secure Collaboration

SafeNet ProtectDB's flexible encryption functionality and granular access policy controls give enterprises options to avoid an all-or-nothing approach to security. With SafeNet ProtectDB, organizations encrypt data at the column-level in databases on-demand, or during batch-driven data transformation and transaction processes. SafeNet ProtectDB also lets administrators define access by variables such as role, user, and time of day.

Ensure Compliance

SafeNet ProtectDB features robust logging and auditing functionality to track encrypted data and key access. Enterprises can use these logs to effectively address their internal policies and relevant regulatory obligations such as encrypting personally identifiable information (PII) and other sensitive, confidential data for the Payment Card Industry Data Security Standard (PCI DSS) and the Health Insurance Portability and Accountability Act (HIPAA).

Leverage the Cloud Securely

SafeNet ProtectDB works in any cloud or virtualized environment to keep data secure so organizations can confidently pursue their cloud strategy. Even though data is in the cloud, customers remain in full control of both their data and their encryption keys.

SafeNet ProtectDB highlights

Transparent and Efficient Column-level Encryption

- Transparently encrypt column-level database data
- Apply granular access controls to ensure only authorized users or applications can view protected data
- Prevent database administrators (DBAs) from impersonating other users to access sensitive data

Support Cloud Initiatives

- Deploy across on-premises, virtual, and public cloud infrastructure

Streamline Ongoing Management Activities

- Reduce administration and overhead costs with centralized policy and key management

Deliver High Performance

- Perform cryptographic operations locally or offload to SafeNet KeySecure for external processing power

Achieve Compliance

- Address requirements for mandates, such as PCI DSS and HIPAA, which specify data encryption and separation of duties

SafeNet ProtectDB supports the following Oracle Database versions:

- 11gR1
- 11gR2
- 12c
- 18c

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.

SafeNet ProtectDB and SafeNet KeySecure

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