THALES

# Thales and SAP HANA secure database files in Microsoft Azure without affecting business operations

Consistently Manage and Secure Sensitive SAP HANA data in Microsoft Azure

- Encrypt structured and unstructured data and files in place
- Avoid need to re-architect databases, files, or storage in the cloud
- Maintain database operational performance
- Provide granular and configurable auditing and reporting
- Facilitate compliance to growing data security mandatesat

The problem: compliance drivers are increasing the need for security of SAP HANA Data

SAP HANA provides the operational heartbeat for many enterprises. These repositories often contain large volumes of sensitive data that are regulated by internal governance rules and external compliance mandates. An evolving threat landscape and increased pressure from a growing data governance environment, is causing enterprises to mandate strong data security controls, including encryption over their data stores. These considerations take on added importance with the deployment of these databases in cloud environments. Regulatory regimes like the US Health Insurance Portability and Accountability Act (HIPAA) and the Health Information Technology for Economic and Clinical Health (HITECH) act, as well as European
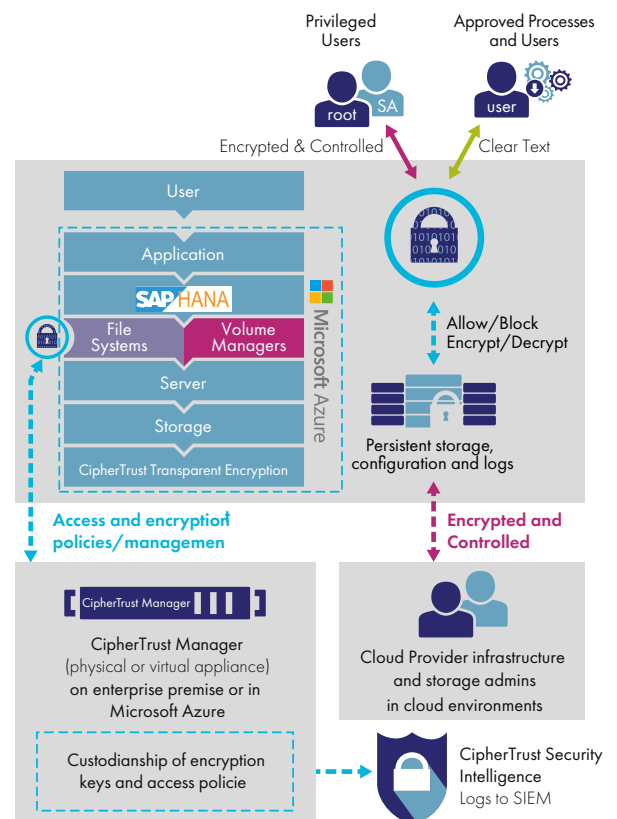
CipherTrust Transparent Encryption protects data and prevents unauthorized access, facilitating regulatory compliance without having to change database or hardware.

legislation such as the UK Data Protection Act and EU Data Protection Directive, and the General Data Protection Regulation (GDPR), call for safeguarding individual data. However, security is often difficult to ensure in remote Cloud environments, or comes at the cost of database performance

The challenge: securing sensitive data without affecting performance

Securing dispersed structured and unstructured data in cloud environments is a high-visibility tasks that must be done carefully. The optimal approach must satisfy privacy and audit requirements transparently to the database application, and with minimal impact on IT and Cloud operations. Securing data with encryption meets compliance needs and complements Database Activity Monitoring (DAM) that secures against misuse of data, but these may not fully address regulatory requirements for data privacy.

The solution: SAP HANA and Thales' CipherTrust Transparent Encryption establish consistent and common security best practices

SAP HANA is an in-memory, column-oriented relational database management system that can be deployed onpremises or in the cloud. The system lets organizations accelerate business processes and deliver more intelligence. By providing a foundation for all data needs, SAP HANA removes the burden of maintaining separate legacy systems.

When deployed with CipherTrust Transparent Encryption and CipherTrust Manager, organizations can create and enforce security policies to protect SAP HANA and prevent unauthorized system administrators, root users, and privileged users from gaining access to data - whether SAP HANA is deployed on-premises or in Microsoft Azure. CipherTrust Transparent Encryption secures data that requires protection to meet rigorous compliance requirements without having to change the underlying database or hardware infrastructure. This approach provides granular and configurable auditing and reporting of access requests to data, and changes to policies and keys to meet governance requirements. Whether securing an existing SAP deployment, or upgrading to a new version, CipherTrust Transparent Encryption delivers a proven approach that can scale to thousands of systems and files and quickly secure SAP data in Microsoft Azure while ensuring continued operation at optimal performance.

Why use CipherTrust Manager with SAP HANA database?

Inserted above the file system and/or logical volume layers, CipherTrust Transparent Encryption is transparent to users, applications, databases, and storage subsystems. It minimizes administrative overhead with key and policy management functionality providing a secure and easy method for administering encryption keys. CipherTrust Transparent Encryption enables organizations deploying SAP HANA in Microsoft Azure to establish consistent and common best practices for managing both structured and unstructured data protection across SAP systems.

CipherTrust Transparent Encryption with CipherTrust Manager protects data with file and volume level at-rest encryption, controls access, and provides data access audit logging – without having to re-engineer applications, databases, or infrastructures. Together, organizations can:

- Protect against privileged escalation by OS root users
- Minimize encryption impact on service level agreements and need for additional computer resources through use of a distributed agent-based deployment model
- Manage security and encryption policies, as well as, aggregate logging and reporting from a central location

CipherTrust Manager provides policy and encryption key management to deliver scalability, flexibility, and efficiency. When combined with SAP HANA, CipherTrust Transparent Encryption mitigates the risks of increasingly sophisticated advanced persistent threats. With software installed on virtual machines in Microsoft Azure to enforce data security and compliance policies, deployment is scalable and fast.

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.

SAP

As a market leader, SAP develops enterprise software to manage business operations and customer relations. SAP is at the center of today's business and technology revolution with innovations that help over 350,000 customers worldwide to work more efficiently and use business insight more effectively. For more detailed technical specifications, please visit www.cpl.thalesgroup.com or www.saphana.com