

CipherTrust Tokenization for SAP ERP Solutions

Integrating Data Protection to Facilitate Data Privacy Compliance on Google Cloud Platform



Key Benefits:

- Secure SAP ERP data without changing your architecture or code
- Field-level security protects private data before it is written to database
- Protect your sensitive data (PII, PCI, etc) in the Google Cloud Platform (GCP) from privileged user risk
- Secure development environments and remain compliant by using tokenized production data

The Business Challenge

Modern enterprises today are defined by applications. Every aspect of a business's identity is defined by how its many different applications access, analyze, and use. From HR to Finance, the typical business day comprises hundreds of different applications operating together with SAP ERP offerings often at the heart. The trending migration of S/4HANA to GCP means that the perimeter of where sensitive data comes from and goes to has greatly expanded beyond the walls of the main corporate data center.

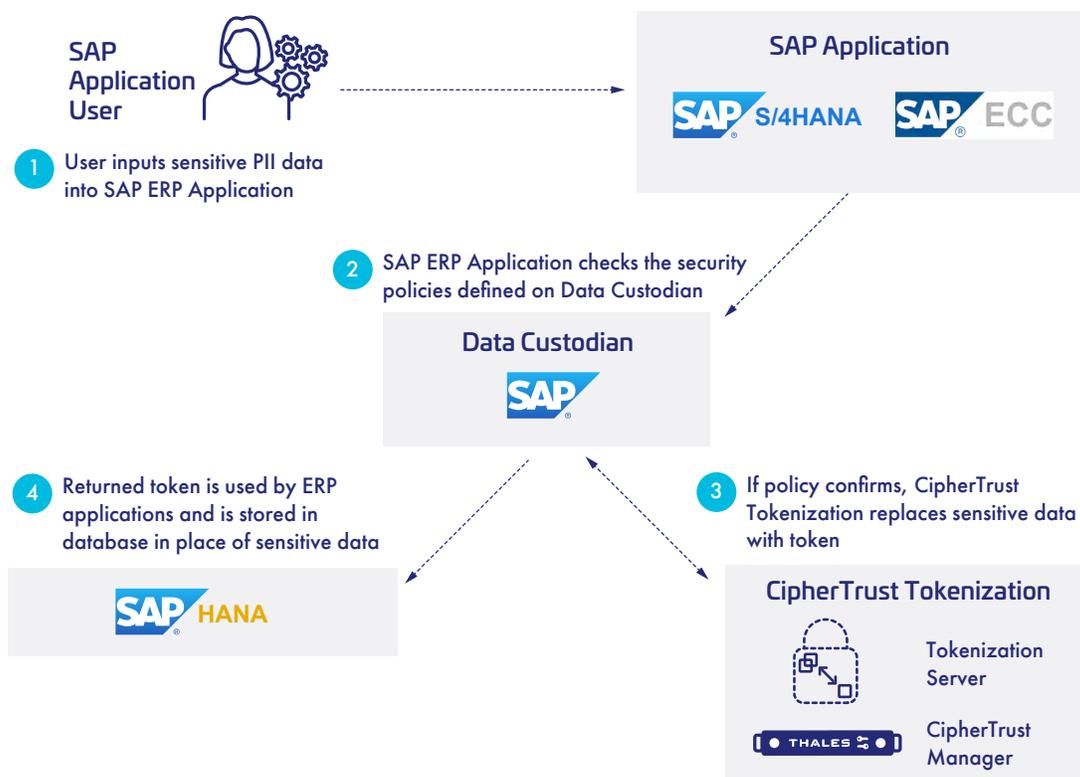
This reality poses new challenges to data management, protection, and sovereignty. How can you enable the flow of this data, within a company and to and from GCP, while still maintaining control? How do you migrate HR functions to the cloud while still protecting employee privacy? Can you enable a developer's access to S/4 HANA without exposing PII? Is it possible to orchestrate sensitive data across a growing array of disparate functions and still meet regulatory and compliance requirements?

In addition, data breaches are an ever-increasing threat to data security.

Arguably, the ultimate strength of an organization's security protections is preventing breaches. Respondents reported breaches at a relatively high rate, with 56% globally identifying a security breach at some point. Out of these, 41% said they experienced a breach in the last 12 months

Co-Innovated with SAP®

SAP Data Custodian & Thales CipherTrust Portfolio



The Solution

Thales and SAP have established a co-innovation partnership to provide an integrated data protection solution for SAP's ERP applications. Thales CipherTrust Tokenization now secures SAP S/4HANA and ECC 6.0 data on GCP via the SAP Data Custodian.

The sooner an organization can secure its data, the better. Tokenizing data at the application level replaces sensitive data with randomized values – optionally also of the same length and format – as soon as it is created. In place of sensitive data, databases will store tokens. Since these tokens have no inherent value, databases aren't storing sensitive information which makes them less of a data security risk and outside of the scope of many regulatory mandates.

Via the SAP Data Custodian, SAP customers on GCP can choose to tokenize specific fields and assign access policies that determine which users have access to sensitive data. Specific functions such as HR, Finance, and Legal may all have access to the same application, but have permissions to see different application fields. Any field that isn't authorized will show token values in place of real data.

Key Features and Benefits

- Schrems II alignment by masking protected data in GCP from outsourced contractors, developers, and internal privileged access users
- Go live with sensitive data in production deployments within days rather than in months

- Access controls ensure only authorized users or applications can view tokenized data
- Thales Luna HSMs available to provide root-of-trust key protection to help attain FIPS 140-2 regulatory requirements

In Summary

SAP ERP solutions provides the heartbeat of today's enterprise across many corporate functions. The sensitive information these applications hold frequently requires protection. Given the criticality of SAP deployments, the optimal solution to secure S/4 HANA data needs to overcome the challenges of privacy and compliance, without stifling new software development. CipherTrust Tokenization delivers on the need.

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.