



# Data Protection Solutions for the Snowflake AI Data Cloud with Thales CipherTrust Manager

Thales helps protect sensitive information with defense-in-depth offerings

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Building a future we can all trust

To complement the robust security of Snowflake’s AI Data Cloud and provide customers with advanced security options around the sensitive information, Thales collaborates with Snowflake on several technical integrations and solution offerings to strengthen organizations’ defense-in-depth strategy.

**Snowflake’s AI Data Cloud** is a comprehensive platform that connects organizations to vital data and applications globally, breaking down internal silos and enabling seamless collaboration with partners and customers. Powered by a unique architecture, it integrates data and workloads at any scale, simplifying data management and maximizing value extraction.

While Snowflake already provides strong built-in data protection capabilities, companies handling sensitive data often choose external data protection and key management solutions, such as Thales, for a variety of business and technical reasons.

## Thales Data Protection solutions for Snowflake

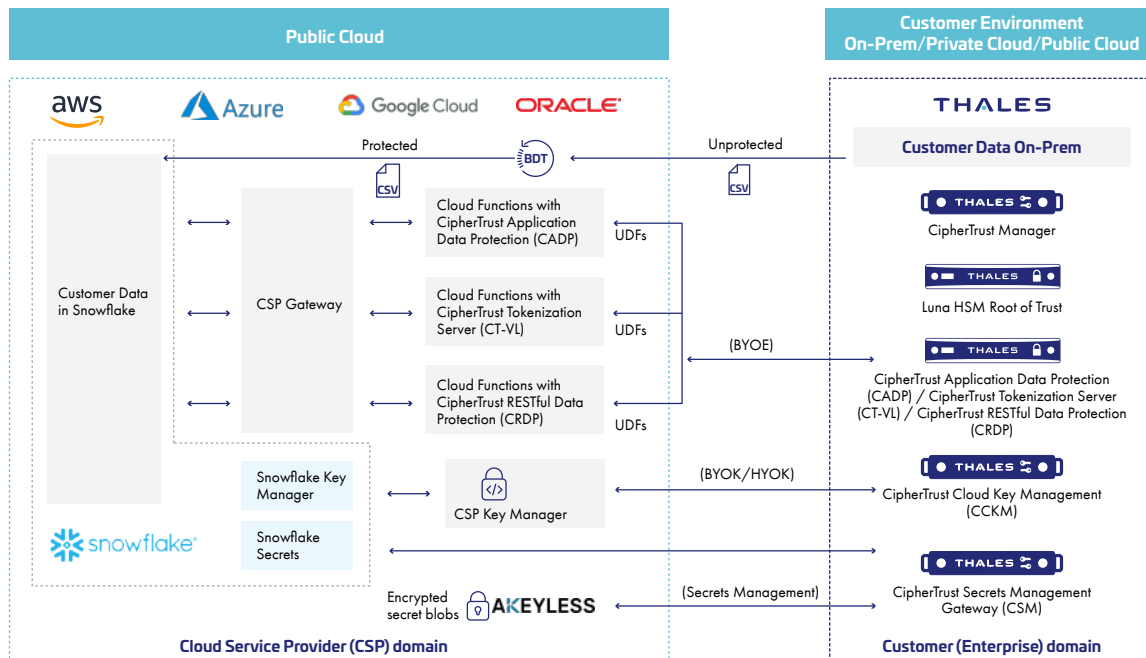
To improve data protection, facilitate regulatory compliance, and empower customer choice, Thales solutions can be deployed for the Snowflake Data Cloud, either independently or in combination with one another.

Thales [CipherTrust Data Security Platform](#) offers joint customers several additional security and data protection measures for their Snowflake deployments such as Bring Your Own Encryption (BYOE), Bring Your Own Key (BYOK), Hold Your Own Key (HYOK), and Secrets Management. Thales [CipherTrust Manager \(CM\)](#) offers an industry-leading enterprise key management solution enabling organizations to centrally manage encryption keys, provide granular access control, and configure security policies. It is available in both virtual and physical appliances integrated with FIPS 140-2 compliant Hardware Security Modules (HSMs) for securely storing keys with the highest root of trust.

## External Key Management: Bring Your Own Key (BYOK) / Hold Your Own Key (HYOK)

Security best practices and newer compliance mandates, such as the SCHREMS II ruling on Digital Sovereignty, mandate organizations to retain control over their encryption keys. This is especially relevant for companies who rely on cloud-based or Software-as-a-Service (SaaS) offerings to run their businesses. While data may physically reside in the Snowflake AI Data Cloud, an organization that retain logical key control ultimately also maintains control over their sensitive data. This is because whoever controls the keys is able to dictate who can see and use the information.

Thales [CipherTrust Cloud Key Manager \(CCKM\)](#) can be used in combination with a Snowflake-maintained key management system to create a composite master key to protect data. This feature in



Snowflake is called [Snowflake Tri-Secret Secure](#). Thales CCKM enables customers to create and manage their encryption keys (BYOK) in a FIPS certified appliance that is entirely under their control. These keys can then be used to support Snowflakes Tri-Secret Secure. CCKM also enables customers to store and manage their encryption keys outside (HYOK) Snowflake Data Cloud in a virtual or physical appliance that is entirely under their control.

## Bring Your Own Encryption (BYOE) Encryption/Tokenization

Thales CipherTrust offers a broad offering of Bring Your Own Encryption (BYOE) solutions to organizations using Snowflake's Data Cloud. These include traditional encryption, format preservation encryption, data masking or tokenization.

Sensitive data is transformed, rendering it unreadable or unusable, to prevent the misuse of sensitive information. The data types to be protected could include credit cards, Social Security numbers, Drivers licenses, Passport numbers, and National Identity numbers. BYOE is considered the highest level of protection since the customer owns both the encryption/tokenization and the related keys.

As an External Encryption and Tokenization partner to Snowflake, [CipherTrust Tokenization](#), [CipherTrust RESTful Data Protection](#), and [CipherTrust Application Data Protection](#) are BYOE solutions that support the ability to use Snowflake Remote External Functions and UDFs.

## Secrets Management

Thales [CipherTrust Secrets Management \(CSM\)](#) is a state-of-the-art Secrets Management solution, powered by the Akeyless Vault Platform, which protects and automates access to mission-critical secrets across DevOps tools and cloud workloads, including secrets, credentials, certificates, API keys, and tokens.

Customers can leverage Thales CipherTrust Secrets Management (CSM) to protect and automate access to secrets across the Snowflake AI Data Cloud tools and workloads to ensure dynamic and secure access to credentials. CSM also enables comprehensive secrets management including static secrets, dynamic secrets, secrets rotation, SSH keys management, auditing, and analytics, across hybrid multi-cloud environments, via a scalable as-a-service deployment.

## Business Highlights for Joint Customers

**Defense in Depth** - Thales offers several robust third-party security and data protection solutions for Snowflake customers needing to protect sensitive information. Ensuring customer choice, these protections are offered across a range of deployments (virtual, physical) and can be used across multi-cloud and hybrid-cloud environments.

**Support Data Sovereignty Requirements** – Thales ensures that encryption keys can be stored and managed by Snowflake customers. This approach helps address some of the key privacy and data sovereignty requirements organizations face while making it easier to demonstrate compliance to regulators.

**Improve DevSecOps** - Thales offer data protection and automation solutions that can easily plug into existing Snowflake Data Cloud environments to help teams embrace DevSecOps.

## About Snowflake

Snowflake makes enterprise AI easy, efficient and trusted. Thousands of companies around the globe, including hundreds of the world's largest, use Snowflake's AI Data Cloud to share data, build applications, and power their business with AI. The era of enterprise AI is here. Learn more at [snowflake.com](https://snowflake.com) (NYSE: SNOW).

## 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. Learn more at <https://cpl.thalesgroup.com/>.