

# Thales Security Solutions for Google Workspace

Enhanced Privacy and Confidentiality using Google Workspace Client-side encryption and Thales Identity and Data Protection

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Building a future we can all trust

## Enhancing Key Management for Google Workspace

In a world of digital transformation and cloud-based apps, cloud providers and enterprises are looking for stronger cloud security and compliance. Addressing this challenge, Google Workspace now provides enhanced privacy and confidentiality options with Client-side encryption – a solution that enables enterprise customers to have full control over their encryption keys using the combination of SafeNet Trusted Access and CipherTrust Cloud Key Management.

Adhering to a concept of ‘shared security’, Google recommends that customers use an Identity Provider (IDP) and external key manager (EKM) to ensure that only authorized and authenticated individuals can access protected documents. Only Thales develops an independent IDP and key management solution.

## Google Workspace Client-side encryption with Thales Identity Protection and Key Management: Better Together

Customers using Google Workspace Client-side encryption can achieve stronger security and lower deployment overheads by benefiting from Thales’ integrated end-to-end solution that protects identities and controls encryption keys separate from their sensitive data in the cloud.

Client-side encryption keys protect the user’s privacy by enabling service providers to host encrypted data but not decrypt it. When a user has been authenticated with customer-controlled authentication,

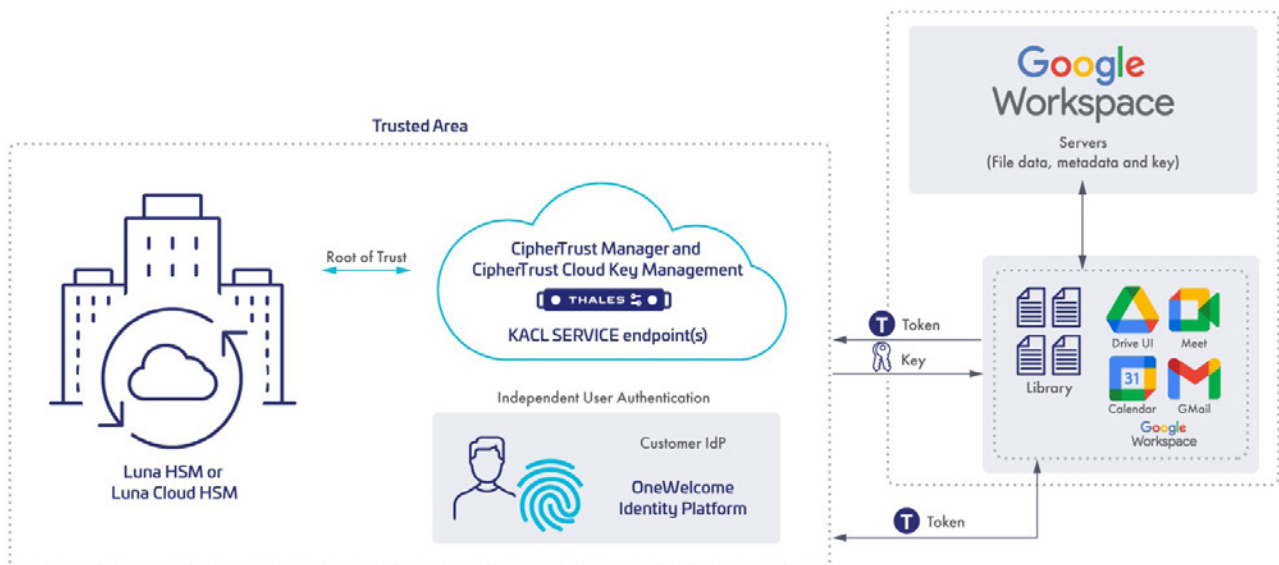
the user can retrieve their encrypted file and decrypt the file, using customer-provided data encryption keys. Thales’ SafeNet Trusted Access (STA) used with CipherTrust Cloud Key Management provides customers with an independent IDP and key management solution from a single vendor, helping you achieve your business goals with a smoother deployment, superior user experience and better value.

Thales is a trusted multi-cloud partner. The combination of STA and CipherTrust Cloud Key Management allows organizations to keep control of both their access security and key management while avoiding vendor lock-in – vital to supporting multi-cloud environments as part of digital transformation initiatives.

## How the Joint Solution Works

A user logs into Google Workspace and is redirected to STA for authentication and identity validation.

- STA authenticates the user and creates an authentication token
- When the user creates a Client-side encrypted file, the STA-generated authentication token and a separate Google-generated authorization token are sent to CipherTrust Cloud Key Management with a Google-generated Data Encryption Key (DEK)
- CipherTrust Cloud Key Management validates the STA-generated authentication token with STA and validates the Google-generated authorization token with Google
- If both tokens are validated, CipherTrust Cloud Key Management encrypts the DEK with a CipherTrust-generated Key Encrypting Key (KEK) – and returns the encrypted DEK to Google
- Subsequent file opens or saves require validation by CipherTrust Cloud Key Management to permit authorized parties to unwrap the KEK and access the DEK and the file



**Google Workspace Client-side encryption**

## Highlights

### Identity Protection for Client-side encryption

STA serves as an independent third party IDP and authenticates users to Google Workspace. STA enables authentication for Google Workspace Client-side encryption via an OIDC integration.

### Enhancing Authentication and Secure Access to Google Workspace

STA federates with Google Workspace via a SAML integration, enabling single-sign-on, and enforcing the appropriate level of authentication when users log into their Google service.

### Simple and Strong Authentication

Apply a Zero Trust security model by enforcing authentication and access management, including: Multi-Factor Authentication (MFA), contextual and risk-based access policies, smart Single Sign-On (SSO) to all resources. Supported passwordless authentication methods include: phishing-resistant FIDO and certificate-based authentication (CBA), hardware tokens and cards, software tokens (OTP apps), out-of-band (OOB) push authentication, pattern-based authentication, OOB via SMS and email.

### Convenient and Easy

Re-authentication can be configured to use the existing credentials within a pre-determined time period – which decreases user friction without compromising security.

### Key Management for Google Workspace

CipherTrust Cloud Key Management provides external key management and policy control to ensure that encrypted documents can only be accessed by authorized users.

- **Smooth deployment:** Single vendor integration with Google Workspace ensures quick, smooth deployment
- **Superior user experience:** Users benefit from single-sign-on to Google Workspace and their other cloud services and apps

## About Thales Data Protection

The CipherTrust Data Security Platform is a cloud-ready portfolio of products designed to alleviate many of the challenges faced by security teams as they strive to support multi-cloud strategies. The platform offers an unparalleled breadth of solutions to address both data security and encryption key management efforts. CipherTrust Cloud Key Manager is a component of the platform.

## About Thales

As the global leader in data security, Thales helps the most trusted brands and organizations around the world protect their most sensitive data and software, secure the cloud, provide seamless digital experiences, and achieve compliance through our industry-leading data encryption, identity and access management, and software licensing solutions.

## About Google Workspace Client-side encryption

Google Workspace Client-side encryption helps customers strengthen the confidentiality of their data and may address a broad range of data sovereignty and compliance requirements. Customers have direct control of encryption keys and the identity service they choose to access those keys. Customer data is indecipherable to Google, while users can continue to take advantage of collaboration, access content on mobile devices, and share encrypted files externally.

## About Google Workspace

Google Workspace is a unified collaboration and communications platform that provides companies of all sizes with everything they need to connect, create, and collaborate. Google Workspace includes apps such as Gmail, Google Meet, Calendar, Drive, Docs, Sheets, Slides, and more. Learn more at [workspace.google.com](https://workspace.google.com)

## About Thales OneWelcome Identity and Access Management Solutions

Thales' digital identity products and solutions empower billions of people and things with digital identities worldwide. The Thales OneWelcome Identity & Access Management portfolio enables organizations to build frictionless, trusted and secure digital journeys for customers, business partners and employees. The OneWelcome Identity Platform provides a variety of capabilities from identity verification, single sign-on, passwordless and multi-factor authentication to fraud management, adaptive access, dynamic authorization and consent & preference management for the highest levels of assurance. More than 30,000 organizations trust us with their IAM and data security needs, enabling them to deliver secure digital services to their users.

## Pivotal Benefits

Organizations that are moving workloads and applications to the cloud frequently leverage collaboration suites such as Google Workspace. While collaboration suites offer immense benefits in terms of easy, anywhere access from any device, adding external identity and encryption gives you the ability to control the corresponding encryption keys and provides an additional layer of privacy and security to your sensitive enterprise assets in the cloud.

Thales is the only security provider that offers an independent IDP, authentication, and key management solution, enabling organizations to meet cloud security best practices on how to secure Google Workspace with client-side encryption.

The integrated access and key management solution from Thales offers tangible benefits including:

- **Security:** Allows organizations to reduce the risk of data breach and penalties by owning their access security and key management

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