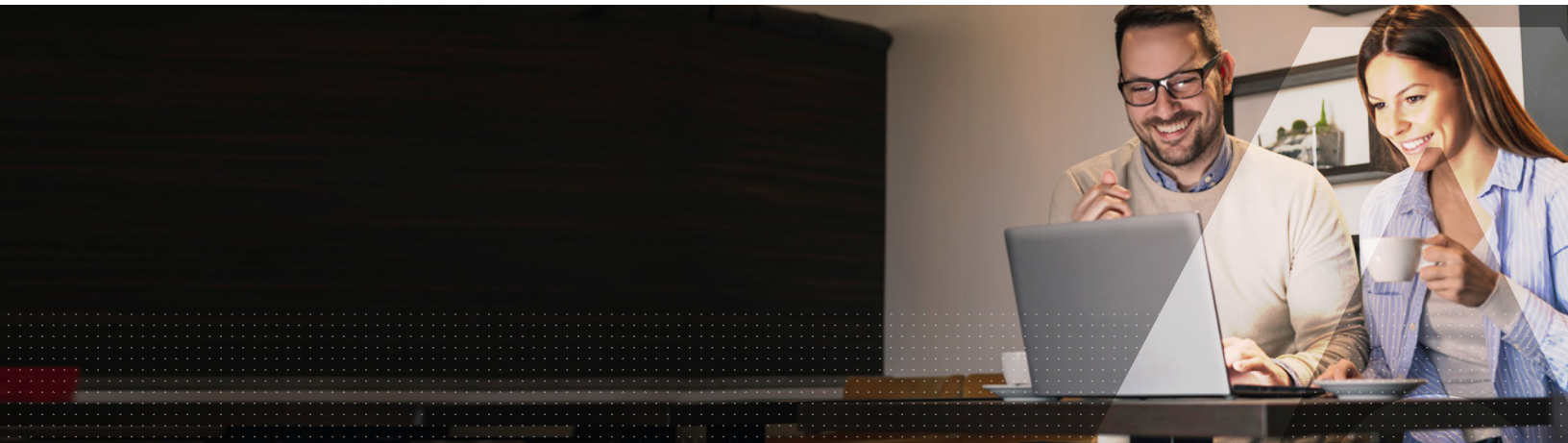


Thales Security Solutions for Google Workspace

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



Enhancing Key Management for Google Workspace

Cloud providers and organizations are looking for stronger cloud security and compliance. Addressing this challenge, Google Workspace now provides enhanced privacy and confidentiality options for Gmail, Google Calendar, calls over Google Meet, and Google Drive with Client-side encryption – a solution that enables enterprise customers to have full control over their encryption keys using CipherTrust Cloud Key Manager and the OneWelcome Identity Platform in combination or independently.

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

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

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

Client-side encryption keys enable service providers to host encrypted data but not decrypt it, protecting the user’s privacy. For example, when a user retrieves their file, the corresponding data encryption key is decrypted using customer-provided keys only after the user has been authenticated with customer-controlled authentication.

Thales’s OneWelcome Identity Platform used with CipherTrust Cloud Key Manager 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. CipherTrust Cloud Key Manager and OneWelcome, used in combination or independently, allow organizations to keep control of both their key management and access security 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 OneWelcome for authentication and identity validation.

- OneWelcome authenticates the user and creates an authentication token
- When the user creates a Client-side encrypted file, Gmail, Google Calendar, or call over Google Meet, the OneWelcome-generated authentication token and a separate Google-generated authorization token are sent to the CipherTrust Cloud Key Manager with a Google-generated Data Encryption Key (DEK)
- CipherTrust Cloud Key Manager validates the OneWelcome-generated authentication token with OneWelcome and validates the Google-generated authorization token with Google
- If both tokens are validated, CipherTrust Cloud Key Manager 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 Manager which permits authorized parties to unwrap the KEK and access the DEK and the file

Pivotal Benefits

Organizations that are moving workloads and applications to the cloud frequently leverage collaboration suites such as Google Workspace. While offering immense benefits in terms of easy, anywhere access from any device, adding external encryption and identity gives you the ability to control your 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 independent key management, IDP, and authentication, enabling organizations to meet cloud security best practices on how to secure Google Workspace with client-side encryption.

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

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

Highlights

Key Management for Google Workspace

CipherTrust Cloud Key Manager provides external key management and policy control to ensure that encrypted documents, Gmail, Google Calendars and calls over Google Meet can only be accessed by authorized users.

Identity Protection for Client-side encryption

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

Enhancing Authentication and Secure Access to Google Workspace

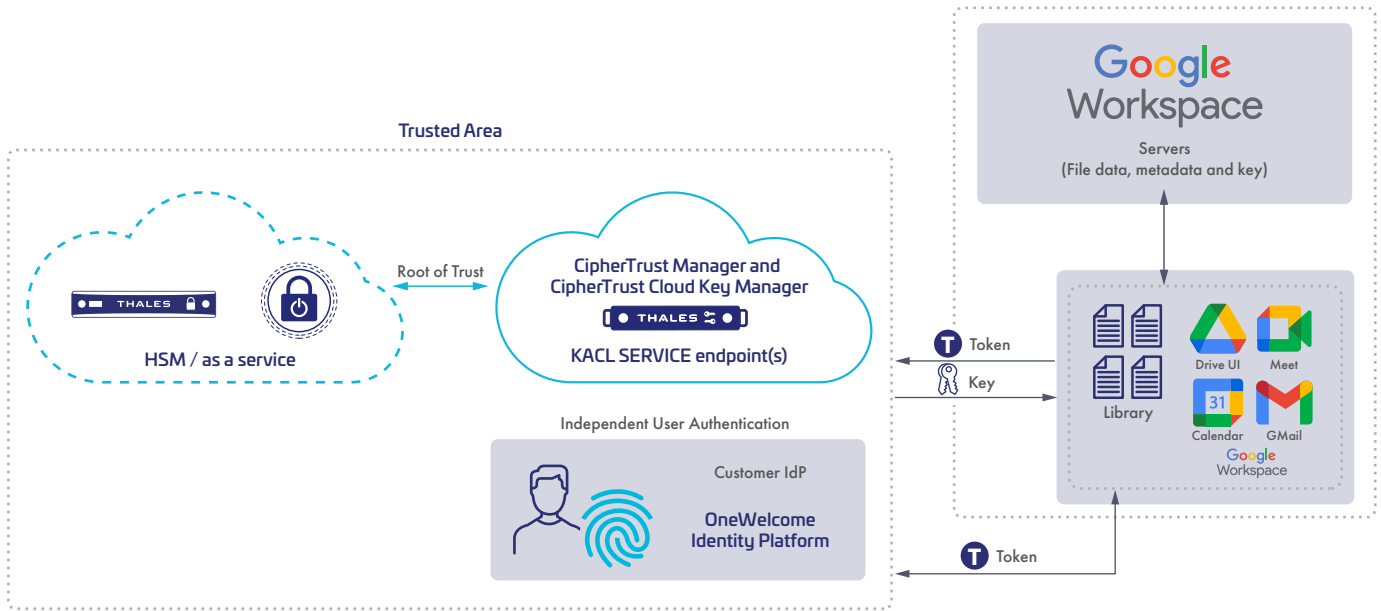
OneWelcome federates with Google Workspace via a SAML integration, enabling single-sign-on, and enforcing the appropriate level of authentication when users log into their Google service.

Simple and Strong Authentication

Apply a Zero Trust security model by enforcing authentication 1st, access later concepts, with strong and continuous authentication, single-sign-on, and multifactor authentication to all resources. Authentication methods include: FIDO, hardware tokens, software tokens (OTP apps), out-of-band (OOB) push authentication, certificate-based authentication (CBA), pattern-based authentication, OOB via SMS and email, and contextual authentication.

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.



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, Google Calendar, Drive, Docs, Sheets, Slides, and more. Learn more at workspace.google.com.

About Thales OneWelcome Access Management

Thales's industry-leading Access Management and Authentication solutions let enterprises centrally manage and secure access to enterprise IT, web, and cloud-based applications with a Zero Trust approach. Utilizing policy-based conditional access, rigorous SSO, and universal authentication methods, enterprises can effectively prevent breaches, migrate securely to the cloud and simplify regulatory compliance.

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 Trusted Cyber Technologies

Thales Trusted Cyber Technologies, a business area of Thales Defense & Security, Inc., protects the most vital data from the core to the cloud to the field. We serve as a trusted, U.S. based source for cyber security solutions for the U.S. Federal Government. Our solutions enable agencies to deploy a holistic data protection ecosystem where data and cryptographic keys are secured and managed, and access and distribution are controlled. For more information, visit www.thalestct.com