Solution Brief

Enhance HPE GreenLake Security with Thales TCT CipherTrust Data Security Platform

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Building a future we can all trust

Sensitive data stored in HPE GreenLake deployments must be encrypted from edge-to-cloud. For encryption to successfully secure sensitive data, the cryptographic keys used to encrypt/decrypt data must be secured, managed and controlled by the organization.

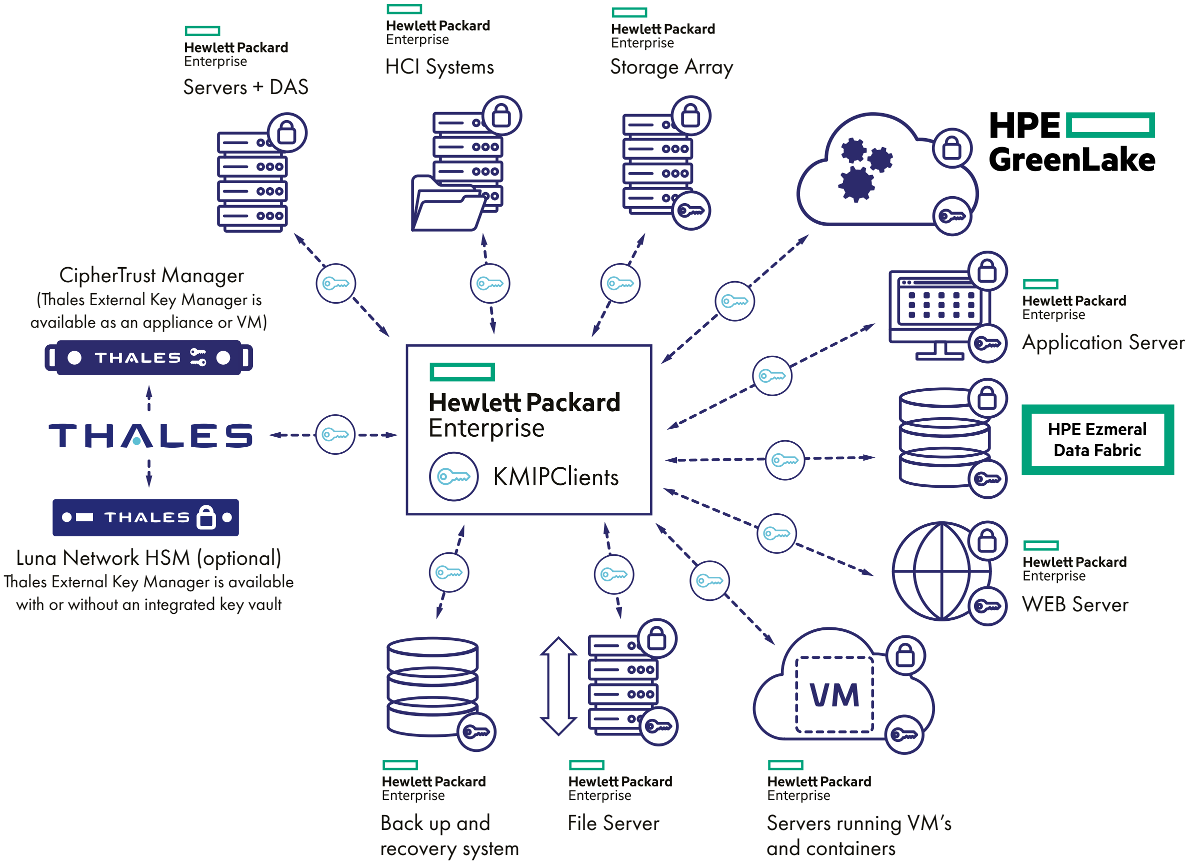
Thales Trusted Cyber Technologies (TCT) CipherTrust Data Security Platform removes complexity from data security, accelerates time to compliance, and secures cloud migrations. It unifies data discovery, classification, data protection, and unprecedented granular access controls with centralized key management—all on a single platform. This results in fewer resources dedicated to data security operations, ubiquitous compliance controls, and significantly reduced risk.

Secure and Manage GreenLake Cryptographic Keys with CipherTrust Manager

CipherTrust Manager, central management point for CipherTrust Data Security Platform, enables organizations to centrally manage and store cryptographic keys and policies associated with encrypted data stored in HPE GreenLake deployments. CipherTrust Manager manages key lifecycle tasks including generation, rotation, destruction, import and export, provides role-based access control to keys and policies, supports robust auditing and reporting.

CipherTrust Manager is available in both virtual and physical form-factors that integrate with FIPS 140 validated Thales TCT Luna T-Series Hardware Security Module (HSM) for securely storing master keys with highest root of trust. These appliances can be deployed within GreenLake infrastructure from the edge to the cloud. This allows customers to address compliance requirements, regulatory mandates and industry best practices for data security.

In addition to GreenLake deployments, CipherTrust Manager can integrate with a wide-range of HPE platforms.


Hewlett Packard Enterprise
Servers + DAS
Hewlett Packard Enterprise
HCI Systems
Hewlett Packard Enterprise
Storage Array
HPE GreenLake
CipherTrust Manager
(Thales External Key Manager is available as an appliance or VM)
THALES
THALES
THALES
Luna Network HSM (optional)
Thales External Key Manager is available with or without an integrated key vault
Hewlett Packard Enterprise
KMIPClients
Hewlett Packard Enterprise
Application Server
HPE Ezmeral Data Fabric
Hewlett Packard Enterprise
WEB Server
VM
Hewlett Packard Enterprise
Back up and recovery system
Hewlett Packard Enterprise
File Server
Hewlett Packard Enterprise
Servers running VM's and containers

Cloud-to-Edge Deployment Options

CipherTrust k570

CipherTrust k570 is an enterprise-level centralized key management platform that manages cryptographic keys, certificates, applications in a tamper-proof hardware appliance. CipherTrust k570 utilizes an embedded FIPS 140 Level 3 Thales TCT Luna T-Series HSM for securely storing master keys with highest root of trust.

CipherTrust k170v & k470v

CipherTrust k170v & k470v are enterprise-level virtual key management platforms that protect cryptographic keys that can be easily adapted to a wide range of cloud & virtual environments.

CipherTrust k160

CipherTrust k160 is a compact cryptographic key management platform that can be utilized in GreenLake deployments at the edge. This small form factor appliance includes a FIPS 140-2 Level 3 token or a high assurance cryptographic token as its hardware root of trust. The token HSM operates as a secure root of trust by encrypting all sensitive objects (e.g. keys, certificates, etc.) in CipherTrust k160 with keys that are generated by, and reside in, the token HSM.

CipherTrust Manager Key Features

- **Full Key Lifecycle Management and Automated Operations.** Simplifies management of encryption keys across their entire lifecycle, including secure key generation, backup/restore, clustering, deactivation, and deletion. It makes automated, policy-driven operations easy to perform, and generates alarms for events of interest.
- **Centralized Administration and Access Control.** Unifies key management operations with role-based access controls and provides full audit log review. Authenticates and authorizes administrators and key users using existing AD and LDAP credentials.
- **Multi-Tenancy Support.** Provides capabilities required to create multiple domains with separation of duties to support large organizations with distributed locations.
- **Robust Auditing and Reporting.** Includes tracking of all key state changes, administrator access, and policy changes in multiple log formats (RFC-5424, CEF, LEEF) for easy integration with SIEM tools.
- **Root of Trust.** CipherTrust Manager can use Thales TCT's Luna T- Series HSMs as root of trust. Meeting government mandates for U.S. Supply Chain, the high-assurance, tamper-resistant Luna T-Series HSMs are designed, developed, manufactured, sold, and supported in the United States. CipherTrust k160 uses a removable FIPS 140-2 certified token or high assurance token as a root of trust.

Layered Security Capabilities Through CipherTrust Data Security Platform

Users can easily deploy added layers of security through the additional capabilities of CipherTrust Data Security Platform. The CipherTrust Data Security Platform provides comprehensive data security capabilities, including file-level encryption with access controls, application-layer encryption, database encryption, masking, vaultless tokenization with policy-based dynamic data masking and vaulted tokenization to support a wide range of data protection use cases.

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