As security breaches continue with alarming regularity and compliance mandates get more stringent, companies need to discover and protect sensitive data across on-premises, hybrid and multi-cloud environments.

The industry-leading portfolio of data protection products from Thales, enable organizations to secure data at rest and data in motion across the entire IT ecosystem and ensure the keys to that data are always protected and only under your control. It simplifies data security, improves operational efficiencies and accelerates time to compliance. Regardless of where your data resides, Thales ensures that your data is secure, with a broad range of proven, market-leading products and solutions for deployment in data centers, or those managed by cloud service providers (CSPs), or managed service providers (MSPs), or as a Thales-managed cloud-based service.

With Thales data protection products you can:

- **Secure Data at Rest** with the CipherTrust Data Security Platform. Discover, protect and control your organization’s sensitive data anywhere with next-generation unified data protection.

- **Protect Data in Motion** with dedicated physical and virtual high speed network encryptors. Protect sensitive data, real-time video and voice, as it moves from data center to data center or site-to-site, or to back up and disaster recovery sites, and in the cloud with High Speed Encryptors.

- **Manage Encryption Keys** securely, with separation of duties, and over the entire lifecycle of the keys either with the CipherTrust Data Security Platform or as a service with the CipherTrust Key Broker services available on Data Protection on Demand (DPoD).

- **Control Cryptographic Functions** using Luna Network Hardware Security Modules (HSMs) and Luna Cloud HSMs to securely manage, process and store crypto keys and functions inside a hardened, tamper-resistant, FIPS 140-2 validated appliances available as hardware for your premises or in the cloud as a service on DPoD, or together as a hybrid solution.

- **Efficient Transaction Security** for retail payment processing environments, payment applications and PIN processing is accomplished with payShield payment HSMs.

- **Share Files Securely** between internal and external users by allowing them to store, share and synchronize files in the cloud and on-premises with SureDrop, an enterprise-class solution using defense-grade security.

**Key Benefits**

- **Strengthen Security and Compliance**
  Thales data protection products and solutions address the demands of a range of security and privacy mandates, including the electronic IDentification, Authentication and trust Services (eIDAS) regulation, Payment Card Industry Data Security Standard (PCI DSS), the General Data Protection Regulation (GDPR), the Health Insurance Portability and Accountability Act (HIPAA), the Federal Information Security Management Act (FISMA) and regional data protection and privacy laws.

- **Optimize Staff and Resource Efficiency**
  Thales delivers the broadest support of data security use cases in the industry with products designed to work together, a single line to global support, a proven track record protecting from evolving threats, and the largest ecosystem of data security partnerships in the industry. At Thales we are hyper focused on ease of use, APIs for automation and responsive management to assure your teams can quickly deploy, secure and monitor the protection of your business. In addition, our Professional Services and partners are available for design, implementation and training assistance to assure fast and reliable implementations with the least amount of your staff’s time.

- **Reduce Total Cost of Ownership**
  The Thales data protection portfolio delivers a comprehensive set of data security products and solutions that easily scale, expand into new use cases, and have a proven track record of securing new and traditional technologies. With Thales, you can future proof your investments while reducing operational costs and capital expenditures.
Protecting Data at Rest
CipherTrust Data Security Platform unifies data discovery, classification, data protection, and unprecedented granular access controls with centralized key management— all on a single platform. This results in less resources dedicated to data security operations, ubiquitous compliance controls, and significantly reduced risk across your business. The platform includes:

**CipherTrust Manager**
CipherTrust Manager is the central management point for the platform. It offers an industry-leading enterprise key management solution enabling organizations to centrally manage encryption keys, provide granular access controls and configure security policies. It 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, and offers developer friendly REST APIs. It provides centralized management of encryption keys and policies for its data protection connectors, discussed below. CipherTrust Manager is available in both virtual and physical form-factors that are FIPS 140-2 compliant up to level 3 for securely storing keys with an elevated highest root of trust.

**CipherTrust Data Discovery and Classification**
CipherTrust Data Discovery and Classification locates regulated sensitive data, both structured and unstructured, across the cloud, big data, and traditional data stores. A single pane of glass delivers understanding of sensitive data and its risks, enabling better decisions about closing security gaps, prioritizing remediation actions, and securing your cloud transformation and third-party data sharing. The solution provides a streamlined workflow from policy configuration, discovery, and classification, to risk analysis and reporting, helping to eliminate security blind spots and complexities.

**CipherTrust Transparent Encryption**
CipherTrust Transparent Encryption delivers data at rest encryption, privileged user access controls and detailed data access audit logging. Connectors protect data in files, volumes and databases on Windows, AIX and Linux OS’s across physical and virtual servers, in cloud and big data environments. The Live Data Transformation extension is available for CipherTrust Transparent Encryption, providing zero-downtime encryption and data rekeying. In addition, security intelligence logs and reports streamline compliance reporting and speed up threat detection using leading security information and event management (SIEM) systems.

**CipherTrust Application Data Protection**
CipherTrust Application Data Protection delivers crypto functions for key management, signing, hashing and encryption services through APIs, so that developers can easily secure data at the application server or big data node. The solution comes with supported sample code. CipherTrust Application Data Protection accelerates development of customized data security solutions, while removing the complexity of key management from the developers’ responsibility and control. In addition, it enforces strong separation of duties through key management policies that are managed only by security operations.

**CipherTrust Tokenization**
CipherTrust Tokenization is offered both vaulted and vaultless, and can help reduce the cost and complexity of complying with data security mandates such as PCI-DSS. The vaultless offering includes policy-based dynamic data masking, whereas the vaulted offering has additional environment specific APIs. Both offerings make it easy to add tokenization to applications via RESTful APIs.

**CipherTrust Database Protection**
CipherTrust Database Protection solutions integrate data encryption for sensitive fields in databases with secure, centralized key management and without the need to alter database applications. CipherTrust Database Protection solutions support Oracle, Microsoft SQL Server, and IBM DB2 and Teradata databases.

**CipherTrust Enterprise Key Management**
CipherTrust Key Management delivers a robust, standards-based solutions for managing encryption keys across the enterprise. It simplifies administrative challenges around encryption key management to ensure that keys are secure and always provisioned to authorized encryption services. CipherTrust Key Management solutions support a variety of use cases including:

- **CipherTrust Cloud Key Manager** streamlines bring your own key (BYOK) management for Amazon Web Services, Microsoft Azure, Salesforce and IBM Cloud. The solution provides comprehensive cloud key lifecycle management and automation to enhance security team efficiency and simplify cloud key management.
- **CipherTrust TDE Key Management** supports a broad range of database solutions such as Oracle, Microsoft SQL, and Microsoft Always Encrypted.
- **CipherTrust KMIP Server** centralizes management of KMIP clients, such as full disk encryption (FDE), big data, IBM DB2, tape archives, VMware vSphere and vSAN encryption, etc.
Protecting Data in Motion

Thales offers High Speed Encryptors (HSEs) that provide network independent encryption (Layers 2, 3 and 4) for data in motion ensuring data is secure as it moves from site-to-site, or from on-premises to the cloud and back. Our HSE solutions allow customers to better protect data, video, voice, and metadata from eavesdropping, surveillance, and overt and covert interception — all at an affordable cost and without performance compromise. Thales HSEs are available as both physical and virtual appliances, supporting a wide spectrum of network speeds from 10 Mbps to 100 Gbps, with platforms ranging from single to multi-port appliances.

- The **CN series** is a hardware network appliance that delivers network layer independent (Layers 2, 3 and 4) encryption for data in motion. These hardware encryptors are certified for FIPS 140-2 Level 3 and Common Criteria EAL 2 and 4+.
- The **CV series** is a hardened virtual appliance that delivers robust encryption for data-in-motion across high speed carrier WANs and SD-WAN links, using Network Function Virtualization (NFV).

Hardware Security Modules

Achieve compliance and scale to meet high performance use cases, by confidently securing critical environments with Thales HSMs - high-assurance FIPS 140-2 Level 3-validated, tamper-resistant appliance. Securing the keys for data at rest and in transit, they act as trust anchors to protect the master keys that encrypt your data, digital identities, and transactions. Thales offers the following types of purpose-built HSMs:

- **Luna General Purpose HSMs** are the foundation of trust for an organization's overall ecosystem including devices, identities and transactions. Luna HSMs ensure the integrity of your cryptographic keys and functions, protecting them within a variety of form factors including a network attached appliance, an embedded PCIe card, or a portable USB appliance. Simplify integration and development with a wide variety of APIs, superior performance, and hundreds of out-of-the-box technology partner applications to secure crypto key life cycles and operations. Easily manage and monitor Luna HSM cryptographic resources with Crypto Command Center - a centralized platform that provides on-demand monitoring, reporting, provisioning and alerting in minutes.
- **Payment HSMs** deliver a suite of payment security functionality including transaction processing, sensitive data protection, payment credential issuing, mobile card acceptance and payment tokenization. Thales payShield HSMs are used throughout the global payment ecosystem by issuers, service providers, acquirers, processors and payment networks. The latest model, payShield 10K, has a range of global and regional security certifications including PCI HSM v3, FIPS 140-2 Level 3 and AusPayNet.
Data Protection on Demand

The award winning Thales Data Protection on Demand (DPoD) is a cloud-based platform, providing a wide range of Luna Cloud HSM, CipherTrust Cloud Key Management, and payShield Cloud Payment services through a simple online marketplace. Data security is now simpler, more cost effective and easy to manage because there is no hardware to buy, deploy and maintain. Just click and deploy the protection you need, provision services, add security policies and get usage reporting in minutes. DPoD is also ideal for Managed Security Providers and Managed Security Service Providers who want to provide their customers unrivaled data-protection-as-a service solutions, bundled with their other cloud and security services.

Luna Cloud HSM Services

DPoD provides a wide range of cloud-based HSM services within Data Protection on Demand allows customers to store and manage cryptographic keys used for data encryption in the cloud while retaining complete control of their keys. The DPoD marketplace offers Cloud HSM services for a wide variety of use cases and integrations across cloud, hybrid and on-premises environments.

CipherTrust Cloud Key Management Services

Key Broker services on the DPoD platform provide Bring Your Own Key (BYOK) capabilities as a cloud-based service. With DPoD, you can ensure simple and secure control of your keys and related security policies for encryption within your cloud service providers IaaS and PaaS environments and SaaS vendors.

Secure File Sharing

The work anywhere, with anyone culture is on the rise, and no matter where or how the people in an organization work, there is always the need to share and sync files - both internally and externally. While enabling collaboration may be top of mind, data security should always be the first priority. If not, the risk of noncompliance and data breaches become a serious problem. SureDrop is an enterprise-class, cloud-based or on-premises solution for secure file sharing and collaboration with end-to-end encryption security. Secure by design, SureDrop is developed for organizations that have strong security policies around file storage, but still need the productivity benefits of a fully-featured file-sharing solution.

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.