

Thales Network Encryption Solutions for Education



Thales Network Encryptors are hardware-based, stand-alone appliances that deliver robust encryption and FIPS 140-2 Level 3 tamper-resistant key management capabilities. Rigorously tested and certified to be in compliance with the requirements of Common Criteria and the Federal Information Processing Standard (FIPS), the solutions have been vetted by such organizations as the Defense Information Systems Agency (DISA UC APL) and NATO. Transforming the network encryption market, Thales Network Encryptors are the first to offer Transport Independent Mode (TIM) - network layer independent (Layers 2, 3, & 4) and protocol agnostic data in motion encryption. By supporting Layer 3, Thales Network Encryptors offer network operators more configuration options using TCP/IP routing for securing critical data.

Thales High Speed Encryption solutions encrypt network traffic using the robust AES-256 algorithm (CFB, CTR, GCM) and supports Suite B cryptographic algorithms for encryption, key exchange, digital signature, and hashing, including Elliptic Curve Digital Signature Algorithm (ECDSA), Elliptic Curve Diffie-Hellman (ECDH) and SHA-256/SHA-384/SHA-512). Using NIST certified random number generators, High Speed Encryptor keys are generated and stored in hardware, ensuring that the keys are always under your control, even in multi-tenant environments.

Interconnecting Campuses and Buildings

University networks can span multiple site buildings and campuses. With Thales High Speed Encryption solutions, there are several deployment options to fit specific needs and objectives. The encryptors can be used in single locations and in complex environments that span multiple locations. Administrators can manage these encryptors directly using a command line interface to integrate into an existing environment or they can leverage management solutions that enable central, efficient, and secure administration of any number of Thales High Speed Encryptors. Plus, the management software can function as a certificate authority for X.509 certificates.

Thales High Speed Encryptors

Thales offers a range of Network Encryptors to ensure the right mix of features and capabilities tailored to your needs and budget. The products in our portfolio are fully interoperable, so a single platform can be used to centrally manage encryptors across single customer links or distributed networks. Each of the encryptors offered can support up to 512 concurrent encrypted connections. Hardware encryptors are certified for FIPS 140-2 Level 3 and Common Criteria EAL+2.

Thales Network Encryptor Portfolio

- **CN9000 Network Encryptors**
Delivering 100,000,000,000 bits per second of high assurance and secure encrypted data, the CN9000 Series provides mega data security (100 Gbps), with the lowest latency in the industry (<2µs).
- **CN6000 Network Encryptors**
The CN6000 Series encryptors offer variable-speed licenses from 100 Mbps to 10 Gbps. The CN6140 has a multi-port design that makes this encryptor variable, with speed licenses up to 40 Gbps (4x10 Gbps), highly flexible and cost effective.
- **CN4000 Network Encryptors**
The CN4000 Encryptors are versatile and compact, offering 10 Mbps-1 Gbps encryption in a small-form factor (SFF) chassis. The CN4000 series is ideal for branch and remote locations, offering high-performance encryption, without comprising network performance.
- **CV1000 Virtual Encryptor**
The CV1000, the first hardened virtual encryptor, is instantly scalable and may be deployed rapidly across hundreds of network links, providing robust encryption protection for data-in-motion. The Thales CV1000 Virtual Encryptor is a Virtual Network Function (VNF) that delivers an agile network and reduces capital expenditure requirements. Ideal for organizations that are virtualizing network functions and taking advantage of Software Defined Networking (SDN).

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.