

NEXT GENERATION SSL ACCELERATOR

nCipher's SSL acceleration solutions handle SSL processing to free up server capacity, reducing the requirement for additional servers and software, lowering overall security infrastructure costs.

EXTENDING SSL SECURITY

The SSL standard and its successor TLS have emerged as the benchmark for secure communications over IP networks. SSL provides both privacy and authentication in any situation where data may be compromised and, as a result, is used almost universally to protect e-commerce transactions and other web-based communications. Recently the use of SSL has expanded to secure corporate communications in the form of VPNs and server-to-server connections between front-office and back-office applications.

However, the use of SSL has traditionally come at a price. The intensive cryptographic processing and protocol handling required to establish SSL sessions can cripple a server by exhausting CPU horsepower, slowing down critical applications. This can result in acute server bottlenecks, particularly in the case of back-office or application servers where CPU capacity is already under pressure. Consequently, many security architects have faced a stark choice; to deploy SSL very sparingly, for example limiting its use to web-based services, or to deploy large numbers of expensive servers to handle the increased processor load.

nCipher's family of SSL accelerators contains two distinct product ranges:

Ultra Products: High performance PCI Cards that replace a server's Network Interface Card (NIC) to offload all SSL processing from the application. https ciphertext passing through the Ultra's network interface is translated and provided in plaintext TCP/IP, providing a complete SSL subsystem for any IP-enabled application running on Windows, Solaris or Linux Operating Systems.



Accelerator Products: PCI Cards that accelerate SSL operations by processing the asymmetric (RSA) cryptography that can cause significant performance bottlenecks. These products handle only the most CPU hungry SSL processing, requiring the application itself to be SSL-enabled in order to process the remaining SSL load. They are best-suited to environments where substitution of the NIC is not appropriate or where specialist Operating Systems such as AIX or HPUX are deployed.

MARKET-LEADING PERFORMANCE

A single nFast offload card allows servers to achieve a sustained throughput of up to 10,000 SSL connections per second. This performance means that it is possible to handle even the highest peaks of internet traffic. The nFast enables the deployment of SSL across Web and internal application servers with confidence.

With the attention of IT security professionals shifting from perimeter to internal security, the nFast provides a way of expanding Internet-proven security techniques, such as SSL, to cover internal networks while, at the same time, providing future-proofing against unpredictable growth in network traffic.

nFAST OFFLOAD

FEATURE	BENEFIT
FULL OFFLOAD OF SSL PROCESSING	Transparent addition of SSL security to existing and new applications via a single, comprehensive solution
DEDICATED HARDWARE SOLUTION FOR SSL PROCESSING	By offloading all SSL processing from host, CPU performance is preserved to efficiently handle other critical server functions
HIGH PERFORMANCE CRYPTOGRAPHIC PROCESSING	Capable of supporting up to 10,000 new SSL/TLS connections per second and combined throughput of 300 MBS Full Duplex
PLUG-AND-PLAY INTEROPERABILITY	Runs with any TCP-enabled application running on Windows, Solaris or Linux OS
INTEGRAL NETWORK INTERFACE ADAPTER	Operates as a full-duplex 10/100/1000 RJ-45 Ethernet network interface to facilitate easy installation with unencrypted traffic passing to the host server transparently
ROHS COMPLIANT	As of July 1, 2006 this product complies with the Restriction of Hazardous Substances (RoHS) directive (2002/95/EC) of the European Parliament

nFAST ACCELERATOR

FEATURE	BENEFIT
OFFLOAD OF CRYPTOGRAPHIC PROCESSING	Removes bottlenecks and frees your server to respond to more requests
INCREASE THE VOLUME OF SECURE TRANSACTIONS	Improves the return on your security investment without adding additional Web
FAILOVER CAPABILITY	Transparently passes all of the processing activities to the next nFast if a device becomes unavailable while in service
PLATFORM INDEPENDENT PLUG-AND-PLAY DEVICE	Can be installed on most common operating systems and Web server which supports existing security standards software combinations
SCALABLE ARCHITECTURE	Allows you to increase your processing power as demand for your business grows
ROHS COMPLIANT	As of July 1, 2006 this product complies with the Restriction of Hazardous Substances (RoHS) directive (2002/95/EC) of the European Parliament

PRODUCT SPECIFICATIONS

Full product specifications can be viewed at www.ncipher.com/cryptographic_hardware/ssl_acceleration/22/nfast/

ABOUT NCIPHER

nCipher protects critical enterprise data for many of the world's most security-conscious organizations. Delivering solutions in the fields of identity management, data protection, enterprise key management and cryptographic hardware, nCipher enables businesses to identify who can access data, to protect data in transit and at rest, and to comply with the growing number of privacy-driven regulations. nCipher is listed on the London Stock Exchange (LSE:NCH).

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