



Encryption Security for High Performance Networks



Certes Networks is the new enterprise IT security kid on the block. Joining the fray of IT security companies in the local regional scene, they bring about a new breed of protection for high performance enterprise networks.

According to Chief Executive Officer (CEO) and Chairman Thomas Gill who spoke exclusively to PC.com, Certes Networks is right on track on its niche IT security offering with the market's increasing focus on security solutions that can bring a balance to the "...age-old problem faced by enterprise network infrastructure systems of having to compromise security for performance."

High performance networks are generally defined by a network infrastructure that is capable of transmitting real-time voice and video data, or transmitting data traffic at very high volumes and frequencies.

"Certes Networks (formally known as CipherOptics) differentiates itself by providing advanced encryption and policy management solutions that secure high performance wide area networks (WANs) used by private and public clouds."

In a time when enterprise IT networks security administrators rely on traditional defenses such as firewalls and Intrusion Prevention Systems (IPS) to secure their enterprise networks, encryption remains the 'last line of defense' especially in the wake of increasingly sophisticated threats and persistent attacks.

Thomas explains, "In the event that network security is compromised and the hackers get hold of encrypted data, they cannot do any harm because the data is still coded and protected."

HOW CERTES' TECHNOLOGY WORKS

Many organisations, especially those operating in industries which are strictly governed by high compliance standards for data privacy requirements, still fall back on encryption to secure their networks at the highest level.

Yet, encrypted data traffic naturally slows down the performance of enterprise networks in terms of throughput speeds and with more latency.

Certes Networks solves this by using 'group' encryption technology as an intuitive and clever alternative to the decade-old method of multipoint 'tunnels' (read: 'tunnel' being the analogy of a virtual private network - VPN) technology deployed in

network traffic optimisation solutions

This way, Certes Networks solutions are still able to support AES 256 - the highest level of non-classified encryption, even for enterprise networks that still need to operate at un-compromisable high performance levels of speed, uptime reliability and maximum security.

The other advantages is that it is the only solution that can encrypt multiple network layers ie. Layer 2 to Layer 4 with a single solution; and can cater to any network topology minus the need to need to deploy the less efficient point-to-point tunnels method.

According to Michael Lyu, Vice President of APAC Sales for Certes Networks, more and more enterprise networks are moving from being IPsec VPN-based, to being MPLS (multiprotocol label switching)-based.

"IPsec VPNs have enjoyed market dominance for quite sometime now, being the standard data communication protocol for a secured data network VPN or 'tunnel'. But MPLS-type networks are on the rise, as they generally offers the key advantage of faster speeds. In fact, about 50 percent of enterprise networks (worldwide) now are MPLS based."

Michael says that as Certes Networks encryption-based IT security also directly advocates make MPLS as an attractive choice for WAN transport by allowing Layer 4 encryption capabilities so that enterprises can maintain Netflow/Jflow, Class of Service (CoS) routing, and other network services.

Certes Networks allows organisations to follow the best practice of separating security and infrastructure management roles by decoupling the security management portion of the MPLS network to provide a much smaller and tighter environment to control the security-policy management of the enterprise network.

Thomas adds, "For enterprise networks in the cloud, Certes' Trust Net Manager security management module allows customers, rather than cloud providers, to control the encryption keys and policies for data flows in-and-out of the cloud. This advantage facilitates secure cloud migrations, allowing companies to leverage the cost-savings benefits of cloud networking."

As TrustNet Manager can dynamically generate and deliver periodic encryption key updates, it makes it nearly impossible for hackers to decrypt traffic do to the constant replacement of security keys

Scalability wise, Thomas shares that Certes Networks currently supports a customer with

deployment over 400 WAN sites. "But with the recent unveiling of TrustNet, Certes Networks offers an engine that is carrier-class, multiple-tenant and can support up to literally thousands of deployments."

The Certes Networks TrustNet solution is based on the CipherEngine Enforcement Point (CEP) Variable Speed Encryptors (VSEs) bandwidth customisable, engine that supports

1. Ethernet frame encryption for Layer 2 networks
2. IP packet encryption for Layer 3 networks
3. Layer 4 data payload encryption for MPLS networks

In order meet to meet the full range of deployment preferences, the Certes Networks solution will be offered both as a customer-owned solution and as a managed Encryption-as-a-Service (EaaS) offering.

BUSINESS IN ASEAN AND LOCAL PARTNERSHIPS

On Certes Networks' expected market growth in this region, Thomas links it to an analogy of IPsec VPN to MPLS type-based networks.

"The y-o-y growth of MPLS-type networks are between 9 - 12 %. Certes Networks is currently privately owned, so there is no obligation for public disclosure of our business performance, however we can share our growth is faster than the growth of MPLS-type network growth - and this indicates market share increase."

In leveraging the growing demand for niche IT security catering to high performance networks in Malaysia, Certes Networks has signed a partnership agreement with leading IT security distributor Secure Source Distribution (M) Sdn Bhd to distribute its multi-layer encryption solutions.

Thomas says, "As the need for scalable network security continues to grow, Certes Networks is expanding its reach into global markets through new partnerships with established regional VARs and Distributors. Secure Source provides us with a strong presence in Malaysia which we need."

With this partnership, Certes Networks' multi-layer encryption solutions are now available as a value-added security option within the Secure Source services portfolio.

Founded in 2007, Secure Source is specializing in Network Security technology and solutions. As the market evolved swiftly and actively, the company has equipped with a team of dedicated, knowledgeable & experience resources to cater and meet the current and also future mission critical business challenges. Partnered with Security industry leading vendors such as Sourcefire, BT Diamond IP, Imperva, Proofpoint, Allgress, AlgoSec, Certes Networks, Netscout, Elfq Networks, BlueCoat, and IntruGuard. With these relationships, it has further enhanced Secure Source's advantage in this competitive marketplace.