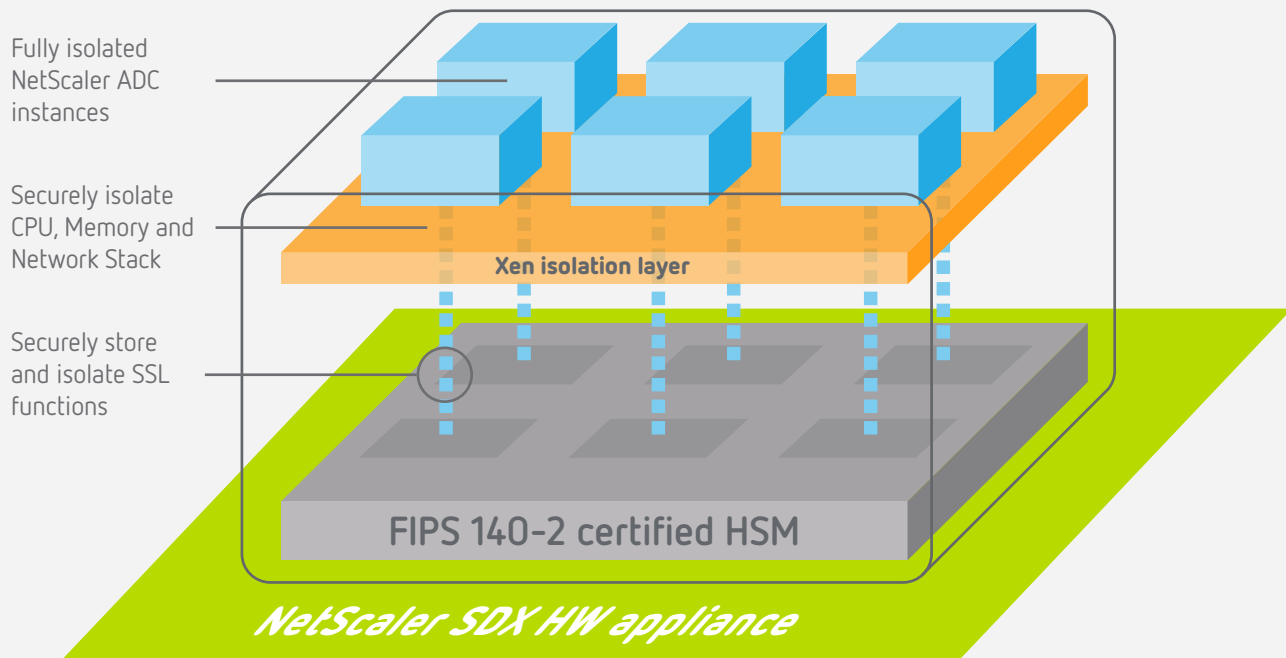## Consolidate your critical data security infrastructure with NetScaler SDX FIPS

Solution Benefits

- FIPS 140-2 Level 2 security for encryption of sensitive Government data
- Government and/or high security environments compliance
- FIPS level security for critical data
- SDX consolidation for lower cost of ownership and increased flexibility
- Increased security with new SSL cipher support

FIPS compliant security on the world's most flexible App Delivery Controller

ADC instances secured by FIPS 140-2 Level 2 Certified Hardware Security Module (HSM)

Fully isolated NetScaler ADC instances

Securely isolate CPU, Memory and Network Stack

Xen isolation layer

Securely store and isolate SSL functions

FIPS 140-2 certified HSM

NetScaler SDX HW appliance

FIPS Compliant Security and Scalability on a Multi-tenant ADC

Advanced Virtualized Consolidation without Sacrificing Functionality

Virtualization of compute, storage and network infrastructure is enabling the transformation of the enterprise datacenter towards hybrid and multi-cloud topologies. The enterprise now has an unprecedented ability to consolidate infrastructure without compromise: no change to service level agreements (SLAs), no loss of performance or scale, and no regression in the organization's overall security posture. This inevitably results in a meaningful reduction in operating and capital costs, and allows the business to demonstrate a dramatic ROI on these technology investments. While server and storage virtualization have become mainstream elements of the modern datacenter, emerging high performance virtualized application delivery controllers (ADC) promise to extend the benefits of virtualization to the core of newer software-defined network frameworks. Citrix continues to lead the way in the ADC market with the new NetScaler SDX FIPS secure multi-tenant appliance.

Why use NetScaler FIPS with SDX?

NetScaler SDX is a proven multi-tenant platform that allows you to consolidate multiple MPX appliances on to a single hardened appliance. The foundation for the SDX FIPS appliance leverages a FIPS compliant HSM card that secures each instance and the critical resources needed to support them.

Creating individual NetScaler instances offers you a significant amount of flexibility. Each instance can handle specific workloads or applications, and be completely isolated from one another.

When cryptographic keys are handled outside the boundary of a FIPS compliant HSM, they are vulnerable to attack, and can lead to compromised security. HSMs are the only proven and auditable way to secure valuable cryptographic material. Customers who take advantage of FIPS protection are able to trust that their critical data infrastructure is secure.

NetScaler is the world's first, multi-tenant FIPS appliance in the ADC market. This offers FIPS compliant protection on a platform that allows customers to consolidate multiple FIPS ADC appliances onto multiple virtual instances on a single physical appliance.

The advantages of NetScaler SDX FIPS span various key deployment and security criteria, including:

- High Virtual Instance Density — the NetScaler SDX FIPS series enables up to 25 virtual ADC instances that run concurrently on a single appliance.

- Complete ADC Isolation — NetScaler SDX FIPS provides full resource isolation per instance, including SSL, bandwidth and compression. Each instance is completely isolated and cannot impact the performance of adjacent instances. This also results in increased security with unique per instance MAC addresses that are only known to that instance

- 100% Feature Parity — Only NetScaler supports all ADC features on each virtual instance so that physical FIPS devices can be consolidated with no loss of functionality.

- Flexible Pay-As-You-Grow Elasticity — NetScaler SDX FIPS can be upgraded for increased capacity and performance in software without requiring a hardware refresh

Use Cases for NetScaler SDX FIPS

Cisco ACE migration. Cisco ACE is no longer a supported platform by Cisco. NetScaler SDX FIPS provides offers feature parity with ACE, and a superior approach to multi-tenancy compared to ACE Contexts. It also offers differentiated integration with Cisco Nexus switches with support for RISE, enabling NetScaler to act as a module on the Nexus.

Simplify development and staging environments. NetScaler SDX FIPS allows you to create virtual instances of NetScaler for dev, staging and production all on the same physical appliance. This eliminates the need to manage multiple appliances, and accelerates application rollouts.

Cross network isolation. As networks transform to software-defined topologies, each instance can be deployed across a flat network while retaining full instance isolation on the appliance.

FIPS/CJIS/PCI Compliance. NetScaler SDX FIPS provides role-based access at the SVM level, which allows for more flexibility in provisioning and securing individual instances.

Additional Resources

- For more detailed technical specifications on the new release of SDX FIPS, please use to the NetScaler datasheet at: https://www.citrix.com/content/dam/citrix/en_us/documents/products-solutions/netscaler-data-sheet.pdf

- For FIPS support FAQ, please refer to: http://support.citrix.com/article/CTX129543

Model	Throughput	SSL TPS	Virtual instance
SDX 14080 FIPS	80 Gbps	33,000	25
SDX 14060 FIPS	60 Gbps	25,000	25
SDX 14030 FIPS	30 Gbps	18,000	10

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