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Avaya Virtual Services Platform 8284XSQ

Compact Form-Factor Ethernet Switch designed to deliver sophisticated yet simplified functionality in deployments for mid-sized business.

Avaya heralds the introduction of a new concept in networking, the Compact Form-Factor Ethernet Switch, a concept that seeks to address the needs of middle business; from the mid-market up to mid-sized Enterprises.

Mid-sized businesses are increasingly dependent upon application access and IT systems – much like their larger siblings – however they typically do not have the same levels of IT or funding resources available to build-out reliable networks using conventional techniques and products. They too seek advanced networking capabilities, but need these to be delivered in a streamlined, simplified, and cost-effective package.

The new VSP 8000 Series features tight integration between the Industry's leading hardware and Avaya's proven VSP Operating System and this delivers a compelling package of enhanced levels of functionality and robustness. Leveraging Avaya's unique virtualization technologies, businesses can benefit from real-time service agility, avoiding the delays associated with conventional design, and the outages introduced in trying to maintain them. The Compact

Form-Factor (CFF) design revolutionizes the cost/benefit proposition for the mid-market/mid-sized Core Switch role; delivering higher port density, better price/port, lower entry price-point, enhanced power efficiency, reduced maintenance, smaller physical footprint, and easy scalability. Essentially, the CFF gives business what they need, and at the same time helps them avoid the 'Chassis Tax'.

The VSP 8284XSQ is the first model in the new VSP 8000 Series range of products. With it, businesses can easily transition their network from the inefficiencies of legacy technologies, migrating to a genuine next-generation solution that dramatically reduces the operational burden and helps realize revolutionary operational benefits. Every IT department is seeking solutions that enable them to spending less of

VSP 8284XSQ 84-port Switch

Front View

Rear View

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their time maintaining basic operations; the VSP 8284XSQ is just such an offering. The platform can deploy and operationalize quickly, minimize ongoing operational burden, and enable real-time, in-service change and maintenance. The VSP 8284XSQ enables businesses to put their finite IT resources to work on important value-adding projects. Additional benefits include lifetime warranty, reduced maintenance costs, and all-inclusive software licensing; combining to deliver a package with a dramatically enhanced total cost of ownership.

Leveraging both next-generation hardware and software technology provides a solution that is ready to support both today's requirements and tomorrow's emerging needs. The VSP 8284XSQ enables business to future-proof with a highly software-definable network virtualization solution.

Product Overview

The new Avaya Virtual Services Platform 8284XSQ Ethernet Switch provides a total of 84 fixed ports, configured as 80 ports of 10 Gigabit Ethernet, presented as SFP+ sockets, and 4 ports of 40 Gigabit Ethernet, presented as QSFP+ sockets.

The innovative design leverages the most advanced chipset from the Industry's leading supplier, featuring 2.56Tbps of switching and 1,428Mpps of frame forwarding performance. The chipset is designed to deliver Terabit-scale, wire-speed capabilities, with a

fully integrated 10/40/100 Gigabit ASIC architecture that facilitates multiple design opportunities. Latency has been optimized, with a 40% advance over current best examples. New intelligent buffer technology self-tunes thresholds for excellent burst absorption, offering a 5x efficiency gain over existing static designs. A flexible, Unified Forwarding Table allows for future in-field optimization, with up to four mission profiles supported. This chipset also includes embedded support for a range of enabling technologies such as DCB, SPB, VXLAN, PIM, FCoE, and NAT/PAT.

Benefits

The VSP 8284XSQ adds significant flexibility to the Avaya Networking portfolio, and is compatible with, and complementary to, existing products and technologies. A new product, introducing the Compact Form-Factor concept, the VSP 8284XSQ, when deployed with other Avaya or third party Ethernet Switches devices, provides very high-capacity, high-performance connectivity solution for mid-sized Campus networks.

Building the Core using the cost-effective VSP 8284XSQ and the Avaya VENA Switch Cluster technology enhances the resiliency posture normally available to mid-sized business. In addition to the various high-availability factors offered by expensive Chassis-based products (i.e. CPU, Switch Fabric, Power, Cooling, and of course Link), the combination of Switch Cluster and

distributed hardware delivers total physical independent, including the ability to have the 'Core' split and deployed in different physical locations, independent and isolated control planes (meaning genuine process separation, isolation, and protection), and in-service software upgrades and be easily enacted. The VSP 8284XSQ brings to the mid-sized Core the advantages that deploying Switch Cluster on Avaya's Chassis-based products has delivered for many years to larger networks, but now offering it at a price-point more compatible with mid-sized business.

The VSP 8284XSQ also natively supports the Avaya VENA Fabric Connect technology. Some of the key advantages that Fabric Connect delivers include:

- Making the need to configure network-wide VLANs obsolete

- Replacing multiple sequential legacy protocols with this one single unified technology

- Totally removing the risk of network loops

- Delivering the Edge-only provisioning model which seamlessly integrates with orchestration and automation

- Fully optimizing all links and all devices enabling businesses to get the most out of infrastructure investments

Traditionally, to provision new services or to change existing ones, required engineers to touch every device in the service path, configuring each device to enable both the active

and redundant links. The bigger the network the more complex and risky this becomes. Leveraging Fabric Connect to virtualize the network delivers fundamental change. Rather than the network appearing as a mass of individual devices it becomes an opaque cloud, where we only need to touch the single unique device that is providing service directly to the end-point. Fabric Connects automatically and instantly propagates all of service attributes to every other node within the cloud.

Fabric Connect has the added advantage of separating and segmenting traffic to unique service constructs. This has advantages in delivering 'stealth networking' solutions that help with compliance for business processes such as PCI and HIPAA.

Creating an autonomic network delivers crucial advantages. It means that businesses no longer need to configure the Core of the network for every service change; service change is only configured at the Edge of the network, and this has dramatic impacts for the entire change paradigm. Network segmentation means that each service is uniquely encapsulated and carried independent of every other service. Leveraging a single unified protocol, with integrated IP Multicast, enables Fabric Connect to deliver the Industry's premium solution for simplified, scalable, and resilient IP Multicast-based applications. The Edge-only provisioning model delivers significant advances in how

the network interacts with VM mobility. Layer 2 VLANs can be easily and seamlessly extended throughout the Data Center whether that is a single site or multi-site, and traffic flows are automatically load-balanced across all available links.

System Compatibility

From a software perspective, the VSP 8284XSQ will be introduced with the launch of the VSP 8000 Series and the initial 4.0 software version; this will therefore be the minimum level of software available to operate the Switch.

Features & Capabilities

- Non-blocking, wire-speed switching architecture

- Integrated design that is optimized for low latency

- Flexible table architecture delivers MAC, ARP, and IP Routing scalability

- Feature-rich support for conventional VLAN, Multi-Link Trunking, Spanning Tree technologies

- IPv4 Routing includes support for Static, RIP, OSPF, ECMP, VRRP, and VRF

- Avaya VENA Switch Cluster technology supports Triangle & Square configurations, with both Layer 2 and Layer 3 functionality

- Avaya VENA Fabric Connect technology supports L2 Virtual Service Networks, Inter-VSN Routing, and IP Shortcut Routing

High Availability Power & Cooling

• Up to 2 field-replaceable, hot-swappable AC internal Power Supplies

• 4 field-replaceable Fan Trays

Warranty

• Lifetime Next Business Day shipment of replacement hardware

• Lifetime Basic Technical Support

• 90-Day Advanced Technical Support

Software Licensing

• Base Software Licensing includes support for existing feature-set; no additional licensing is required

Ordering Information

The Avaya VSP 8284XSQ Switch will be globally available and orderable using the product code:

• EC8200*01-E6. Virtual Services Platform 8284XSQ 84-port Ethernet Switch, supporting 80 x 10GBASE-SFP+ & 4 x 40GBASE-QSFP+ ports. Includes single 800W AC Power Supply (no Power Cord), four Fan Trays, and Base Software License. Slide Rack Mount Kit sold separately
(the seventh character of the Order Code is used to denote country-specific power cord selection, where appropriate)

Additional Power Supply Units, Rack Mount Kit, and Transceivers are sold separately; please refer to the Avaya Price List for the relevant ordering information.

The VSP 8284XSQ is currently pre-GA, with launch forecast for mid-2014.

Additional Information

For further information about the Avaya Virtual Services Platform 8000 Series please visit www.avaya.com/products, and for the complete Avaya Networking portfolio, **www.avaya.com/networking**.

About Avaya

Avaya is a global provider of business collaboration and communications solutions, providing unified communications, contact centers, networking and related services to companies of all sizes around the world. For more information please visit **www.avaya.com**.

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