AVAYA

The Power of We™

Overview

- High-performance 10 Gigabit Ethernet Switch with RJ45 sockets
- 24 fixed 10GBASE-T Copper ports per Switch, plus flexible Media Dependent Adaptor slot
- Delivers a system density of up to 32 ports of 10 Gigabit Ethernet, or 24 plus 2 ports of 40 Gigabit
- Features high-capacity Distributed Top-of-Rack virtual backbone connections
- Compatible with existing VSP 7000 Series MDA, Power Supply, and Fan Tray components
- Compatible with existing VSP 7000 Series software and networking features, including conventional IPv4 Routing, and SPB-based Fabric Connect network virtualization

Avaya Virtual Services Platform 7024XT

Energy and space-efficient platform built around a next-generation chipset, delivering wire-speed 10GBASE-T Ethernet for today's connectivity requirements.

The VSP 7000 Series is uniquely future-ready with the embedded flexibility to seamlessly support 40 and 100Gbps Ethernet, and has been built to support network-wide fabric-based virtualized services, lossless environments, and Storage convergence via a software-defined SAN capability.

The new VSP 7024XT model features 24 fixed RJ45 ports supporting the 10GBASE-T standard. In addition the VSP 7024XT also features the VSP 7000's versatile Media Dependent Adapter (MDA) slot that delivers support for a range of high-speed expansion options, such as additional 10 Gigabit Ethernet ports (SFP+ sockets or 10GBASE-T via RJ45) and 40 Gigabit Ethernet ports (QSFP+ sockets) ; and is also future-ready for a 100 Gigabit Ethernet MDA. An innovative design helps ensures that the appropriate portion of the switching fabric's powerful 1,280Gbps performance is dedicated to supporting MDA-based connections, while still providing for wire-speed throughout for all front panel and high-capacity fabric interconnections.

The design of the VSP 7000 Series is sympathetic to the evolving requirements for precisely planned environmental implementations and it offers both front-to-back and back-to-front cooling options for the field-replaceable fans tray and power supplies; this gives the flexibility to conform to a variety of hot-aisle/ cold-aisle design requirements.

The new VSP 7024XT model complements the existing VSP 7024XLS 24-port 10GBASE-SFP+ version.

Features & Benefits

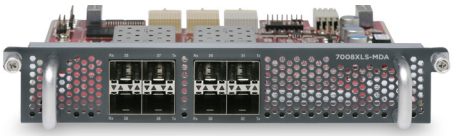
The VSP 7024XT Switch is new variant of the Virtual Services Platform 7000 Series portfolio. This Switch provides 24 fixed ports of 10 Gigabit Ethernet, as per the IEEE 802.3ae standard for 10GBASE-T, and presents with RJ45 ports. This Switch, when deployed with other VSP 7000 Series devices provides very high-density, high-capacity connectivity solutions, particularly suited to high-performance Data Center Top-of-Rack deployments.

The Avaya VENA Distributed Top-of-Rack technology creates a virtual backplane optimizing local traffic flows by always forwarding packets along the shortest path between source and destination, using dedicated high-speed interconnections. This is particularly beneficial in a Data Center environment creating a flatter, latency-free network that encompasses multiple racks of highly virtualized servers. Distributed Top-of-Rack is flexibly available as a scale-out implementation of our FAST-based Stackable Chassis technology

VSP 7024XT Ethernet Switch

Media Dependent Adaptors:

7002QQ 2-Port 40GBASE-QSFP+



7008XLS 8-Port 10GBASE-SFP+

7008XT 8-Port 10GBASE-T

(scaling up to 8 Switches, supporting up to 256 ports across 5.12 Tbps), or leveraging our SPB-based Fabric Connect technology (scaling up to 500 Switches, supporting up to 16,000 ports across 280 Tbps).

The VSP 7024XT adds significant new flexibility to the VSP 7000 Series portfolio, and is compatible will all existing hardware and software-based functionality.

System Compatibility

From a software perspective, the VSP 7024XT was introduced via the VSP 7000 Series 10.3.1 software release, and therefore this is the minimum level of software available to operate the Switch.

The VSP 7024XT Switch is compatible with existing VSP 7000 Series hardware components, such as Media Dependent Adaptors, both Front-to-Back and Back-to-Front Power Supply Units and matching Fan Trays.

Product Specifications

General Performance & Capabilities

- Physical Connectivity:
  - 24 x 10GBASE-T RJ45 Ports[2] (front)
  - 1 x Media Dependent Adapter Slot (front)
  - 4 x High-Speed Fabric Interconnect Ports (rear) Switching Fabric Architecture: 1,280 Gbps Full Duplex
- Frame Forwarding Rate: 960 Mpps
- Nominal Latency: 0.5 Qsec
- Nominal Jitter: 12 – 14 Qsec
- Frame Length: 64 - 1518 Bytes
- Jumbo Frame: up to 9,026 Bytes
- Multi-Link Trunks: up to 64 Groups, with 8 Links per Group
- VLANs: up to 1,024 (up to 4,094 VLAN IDs)
- Multiple Spanning Tree Groups: 8
- MAC Address: up to 131,000
- DHCP Relay Entries: up to 256
- ARP Entries: up to 4,096
- IP Interfaces: up to 256
- IPv4 Routing: RIP, OSPF
- IPv4 Routes: up to 4,096
- OSPF Areas: up to 4
- OSPF Adjacencies: up to 64
- ECMP Paths: up to 4
- VRRP Instances: up to 256
- IPv6 Routing: Static
- Avaya VENA Distributed Top-of-Rack technology:
  - Stack-mode of up to 8 units leveraging 5.12 Tbps of virtual backplane capacity to support up to 256 10 Gigabit ports, or up to 192 10GbE/16 40GbE ports
  - Fabric-mode of up to 500 units leveraging 280 Tbps of virtual backplane capacity to support up to 16,000 10 Gigabit ports, or up to 12,000 10GbE/1,000 40GbE ports
- Avaya VENA Switch Cluster technology:
  - Standalone & Stacked deployments
  - Triangle & Square configurations
  - 64 MLT Links
  - 128 SLT Links
  - VRRP Backup Master
  - SLPP, SLPP Guard
- Avaya VENA Fabric Connect technology:
  - Standalone or Stacked mode
  - L2 Virtual Service Networks, L2 VSNs with Multicast[1], IP Shortcut Routing[1]
  - up to 500 Nodes
  - 24 IS-IS Adjacencies
  - up to 500 Customer VLANs
  - 11,000 Service Identifiers
  - 4,096 Switched UNIs
- Software-Defined SAN/Fibre Channel over Ethernet
- Port Mirroring

[1] Indicates a roadmap feature that is forecast to be delivered in a future software release

[2] 10GBASE-T interfaces also support connection at 100/1000Mbps (Full Duplex); for both 7024XT and 7008XT.

- Remote Switch Port Analyzer (RSPAN)
- Unicast Storm Control

Physical

- Height: 4.37 cm, 1 RU
- Width: 43.82 cm
- Depth: 60.00 cm
- Weight: 9.00 kg
- MTBF Rating: 241,000 hours (27.51 years)[3]

Electrical

- Input Current:
  - 2.6-3.2 A @ 100-120 VAC
  - 1.3-1.6 A @ 200-240 VAC
- Power Consumption (without MDA): 240 W
- Power Consumption (with MDA): 315 W
- Thermal Rating (typical): 820 – 1,076 BTU/h

Environmental

- Operating Temperature: 0 – 50° C
- Storage Temperature: -40 – 85° C
- Operating Humidity: 0 – 95%
- Operating Altitude: 0 to 3,692 maximum
- Storage Altitude: 0 to 12,192 maximum
- Acoustic Noise: less than 45 – 55 dB at 35° C[3]

RoHS Compliance

- Virtual Services Platform 7000 Series Switches and field-replaceable components are RoHS compliant

Safety Agency Approvals

- Global basis for certification: EN 60950 current edition with CB national member deviations
- Mexico: complies with NOM Electromagnetic

Emissions & Immunity

- Global basis for certification: CISPR 22 Class A & CISPR 24, IEC 60950 with CB member national deviations
- US: complies with FCC CFR47 Part 15
- Canada: complies with ICES Class A
- Europe: complies with EN 55022 Class A; EN 55024; EN 300386 V1.3.3 Class A
- European Union & EFTA: complies with EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3
- Japan/Nippon: complies with VCCI
- Taiwan: complies with BSMI CNS 13428 & 14336, Class A
- Korea: complies with MIC Class A

High Availability Power & Cooling

- Up to 2 field-replaceable hot-swappable AC or DC internal Power Supplies
  - Front-to-Back or Back-to-Front Cooling
- 2 field-replaceable Fan Trays
  - Front-to-Back or Back-to-Front Cooling

Warranty

- Lifetime Next Business Day shipment of replacement hardware
- Lifetime Basic Technical Support
- 90-Day Advanced Technical Support
- Optional Software Release Service also available:
  - GW5300EKU - Direct
  - GW6300EKU – Express Wholesale

Country of Origin

- China (PRC)

Ordering Information

The VSP 7024XT Switch is globally available and orderable using the product codes:

- AL7000S2B-E6. Virtual Services Platform 7024XT 24-port Ethernet Switch, supporting 24 x 10GBASE-T RJ45 ports, plus MDA Slot. Configured for Back-to-Front Cooling.
- AL7000S2F-E6. Virtual Services Platform 7024XT 24-port Ethernet Switch, supporting 24 x 10GBASE-T RJ45 ports, plus MDA Slot. Configured for Front-to-Back Cooling.

These order codes include the Base Software License, Fan Tray, & 19/23" Rack Mount Kit. Power Supply Units and Transceivers sold separately; please refer to the Avaya Price List for the relevant ordering information.

More Information

For further information about the Avaya Virtual Services Platform 7000 Series please visit www.avaya.com/products, and for the complete Avaya Networking portfolio, **www.avaya.com/networking**.

[3] Planning assumption as of April 2014

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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