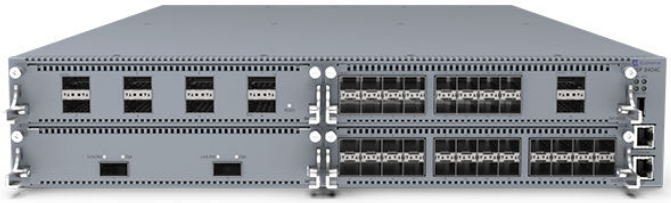
Virtual Services Platform 8400

Highlights

- High-performance 10/40/100 Gigabit Ethernet Switch
- Flexible pay-as-you-grow semi-modular design
- Flexibly supports high-density 10 Gigabit, 40 Gigabit, 100 Gigabit, and Combination modules
- At home in both the Campus Core and as the Spine Switch in a Data Center Spine/Leaf Top-of-Rack deployment
- Efficient compact form-factor that reduces power and footprint consumption
- Supports both conventional Routed IP and/or Fabric-based network deployments
- Delivers high-end functionality, performance, and scalability while helping to avoid the traditional "Chassis Tax"



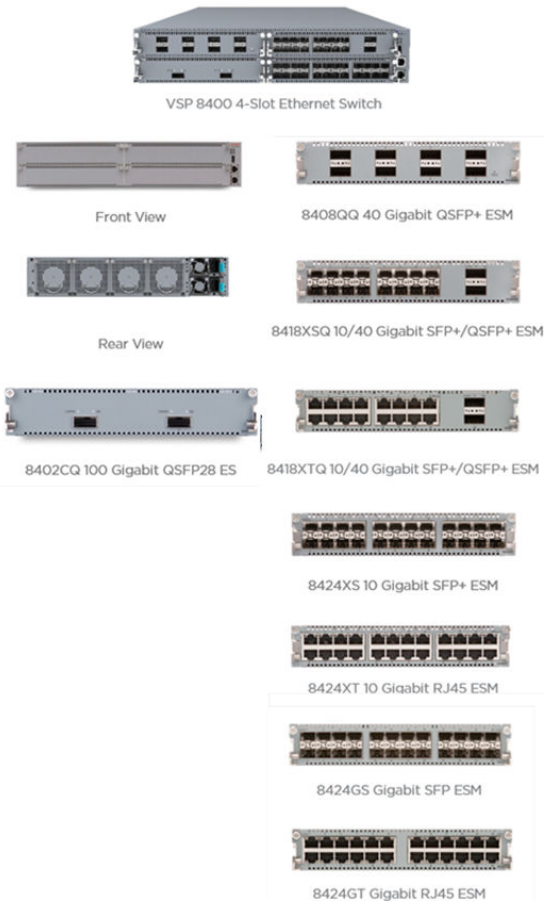
BUILT ON BROADCOM

Flexible, Compact Form-Factor Ethernet Switch Designed to Deliver Sophisticated Functionality for Mid-Sized Enterprises

The VSP 8400 Series introduces the Compact Form-Factor Ethernet Switch to address the unique networking need of mid-sized enterprises. The Compact Form-Factor design transforms the cost/benefit proposition for the mid-sized core switch; delivering higher port density, better price/ port, enhanced power efficiency, smaller physical footprint, and easy scalability. Essentially, it gives mid-sized enterprises a solution that fits their needs, while avoiding the ‘Chassis Tax’ associated with larger modular chassis options.

By tightly integrating the switching hardware with Extreme Networks’ proven VSP Operating System, the VSP 8400 delivers a compelling package of enhanced functionality and robustness. It supports Extreme Networks’ innovative Fabric Connect technology, as well as conventional IPv4 and IPv6 routing, to satisfy a range of deployment scenarios. This enables businesses to easily transition from inefficient legacy technologies to an agile solution that dramatically reduces operational overhead and total cost of ownership.

The VSP 8400 shares the same next-generation hardware and software technology as the existing VSP 8200 Series. This positions the product line to support both today’s requirements and tomorrow’s emerging needs.



Product Description

The VSP 8400 Ethernet Switch provides four front-panel slots that support the flexible deployment of high-density VSP 8400 Series Ethernet Switch Modules. By default, the VSP 8400 is a “zero port” system, with a Chassis that integrates the switching fabric and all associated control and management electronics. Ethernet interfaces are delivered by the addition of one or more field-replaceable and hot-swappable Ethernet Switch Modules (ESMs).

Extreme Networks has expanded the capability of the VSP 8400 Series with the introduction of the VSP 8404C 100G-capable Chassis. This variant features a new switching fabric that has been specifically optimized to support 100 Gigabit Ethernet and the companion 8402CQ 2-port 100 Gigabit Ethernet ESM. In every other respect, the new VSP 8404C Chassis is identical to the original VSP 8400: form, fit, and function; power and cooling, size and weight.

In this manner, the VSP 8400 provides a low-cost, pay-as-you-grow solution formid-sized businesses that wish to retain a high degree of flexibility as they develop solutions for their networking requirements.

TheVSP 8400 Series Ethernet Switch odules are as follows:

- 8402CQ 2-port 100 Gigabit Ethernet QSFP28 ESM
- 8408QQ8-port 40 Gigabit Ethernet QSFP+ ESM
- 8418XSQ 16-port 10 Gigabit Ethernet SFP+ and 2-port 40 Gigabit Ethernet QSFP+ Combo ESM
- 8418XTQ 16-port 10 Gigabit Ethernet RJ45 and 2-port 40 Gigabit Ethernet QSFP+ Combo ESM
- 8424XS 24-port 10 Gigabit Ethernet SFP+ ESM
- 8424XT 24-port 10 Gigabit Ethernet RJ45 ESM
- 8424GS 24-port Gigabit Ethernet SFP ESM
- 8424GT 24-port Gigabit Ethernet RJ45 ESM

It should also be noted (refer to the product technical documentation for further details):

- 8402CQ 100 Gigabit ESM is supported only in the VSP 8404C, not in the VSP 8400
- 40 Gigabit Ethernet QSFP+ ports support Channelization and can therefore be individually subdivided into four 10 Gigabit Ethernet channels
- 10 Gigabit Ethernet SFP+ ports also support a wide range of 1 Gigabit Ethernet SFP Transceivers
- 10 Gigabit Ethernet RJ45 ports also support 100/1000Mbps connectivity
- Gigabit Ethernet SFP ports support a wide range of 1 Gigabit Ethernet SFP Transceivers
- Gigabit Ethernet RJ45 ports support 10/100/1000Mbps connectivity

The innovative design leverages an advanced chip set, featuring 2.56Tbps of switching and 1,428Mpps of frame forwarding performance.

Benefits

Introducing the Compact Form-Factor concept, the VSP 8400 provides a very high-capacity, high-performance connectivity solution for mid-sized campus networks.

The VSP 8400 also natively supports the Extreme Networks Fabric Connect technology, whose benefits include:

- Makes the need to configure network-wide VLANs obsolete
- Replaces multiple legacy protocols with this one single unified technology
- Removes the risk of network loops
- Delivers an Edge-only provisioning model that seamlessly integrates with orchestration and automation
- Fully optimizing all links and all devices enabling businesses to get the most out of infrastructure investments

Traditionally, provisioning new network services requires 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 delivers fundamental change. Rather than the network appearing as a mass of individual devices it becomes a single cloud, so that engineers only need to touch the unique device that is providing service directly to the end-point. Fabric Connect instantly propagates all of the end-point's service attributes to every other node within the cloud.

System Compatibility

From a software perspective, the VSP 8400 Series was introduced with the VOSS 4.2 software release; this is, therefore, the minimum level of software available to operate the switch. VOSS 7.1 and later releases deliver the following major enhancements:

- Application Telemetry: A unique feature of ExtremeAnalytics that enables the ExtremeSwitching infrastructure to participate in the forwarding and analysis of network application flows. By combining packet flow information from the VSP switch along with deep packet inspection abilities of ExtremeAnalytics, it provides actionable insights into network and application performance. This all without the need for expensive sensors or collectors. With this release, an Application Telemetry agent on the VSP can now work in tandem with ExtremeAnalytics to deliver this granular visibility into application performance, users, locations and devices.
- VXLAN VTEP Hardware Configuration and Management using OVSDB.

Features and Capabilities

- Flexible support for up to 96 ports of 10 Gigabit Ethernet,24 ports of 40 Gigabit Ethernet or up to 8 ports of 100 Gigabit Ethernet
- Hot-swappable Ethernet Switch Modules
- 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, Link Aggregation, Spanning Tree technologies
- Supportfor IP Routing techniques including Static, RIP, OSPF, eBGP, BGP+, ECMP, DvR/VRRP, PIM-SM/ SSM, and VRF. Additionally, supports Static, RIPng, OSPFv3, BGPv6 Peering, ECMP, VRRP, and VRF for IPv6 deployments
- IPv6-optimized hardware
- Extreme Networks Switch Cluster technology supports Triangle and Square configurations, with both Layer 2 and Layer 3 functionality
- Extreme Networks Fabric Connect technology supports L2 Virtual Service Networks (VSNs), Layer 3 Virtual Service Networks, Inter-VSN Routing, IP Shortcut Routing, IP Multicast-over-Fabric Connect and Fabric Connect-PIM Gateway, Fabric Attach Server and Client, Fabric Extend, and Zero-Touch Fabric Connect
- MACsec and Enhanced Security Mode options
- High Availability Power and Cooling
    - Up to 2 field-replaceable, hot-swappable AC or DC internal Power Supplies
    - 4 field-replaceable fan modules

Product Specifications

General

Physical Connectivity:
Up to 8 x 100GBASE-QSFP28 Ports
Up to 24 x 40GBASE-QSFP+ Ports
Up to 96 x 10GBASE-SFP+ Ports
Up to 96 x 10GBASE-T Ports
Up to 96 x 1000BASE-SFP Ports
Up to 96 x 1000BASE-T Ports
Channelization of 40 Gigabit ports
Switch Fabric Architecture: 2.56Tbps Full-Duplex
Frame forwarding rate: 1,428Mpps per Switch
Jumbo Frame support: up to 9,600 Bytes (802.1Q Tagged)
MACsec support for 10 Gigabit and Channelized 40 Gigabit ports

Layer 2

MAC Address: 224,000
Port-based VLANs: 4,059
Private VLANs/E-Tree: Up to 400
MSTP Instances: 12
MLT/LACP Groups: up to 96
MLT Links per Group: 8
LACP Links per Group: 8 Active
Extreme Networks VLACP Interfaces: up to 96
Extreme Networks SLPP VLAN's: 128

Layer 3 IPv4 Routing Services

ARP Entries: 32,000
Static ARP Entries: 2000 per VRF, 10,000 per switch
IP Interfaces: Up to 506
CLIP Interfaces: 64
IP Routes: up to 15,488
IP Static Routes: 1,000 per VRF, 5000 per switch
RIP Interfaces: 200
RIP Routes: up to 15,488
OSPF Interfaces: 500
OSPF Routes: up to 15,488
OSPF Areas: 12 per VRF, 80 per switch
BGP Peers: 12
BGP Routes: up to 15,488
ECMP Groups: 1,000
ECMP Paths per Group: 8
NLB Clusters: 200
VRRP Interfaces: 252
RSMLT Interfaces: 252
IPv4 UDP Forwarding Entries: 512
IPv4 DHCP Relay Forwarding Entries: 1024
IP Route Policies: 500 per VRF, 5,000 per switch
VRF Instances: up to 256

Layer 3 IPv6 Routing Services

Neighbors: 8,000
Static Neighbors: 128 per VRF, 256 per switch
IP Interfaces: Up to 506
CLIP Interfaces: 64
IP Configured Tunnels: 506
IP Routes: up to 7,744
IP Static Routes: 1,000
RIPng Interfaces: 48
RIPng Routes: up to 7,744
OSPFv3 Interfaces: 500
OSPFv3 Routes: up to 7,744
OSPFv3 Areas: 12 per VRF, 80 per switch
BGPv6 Peers: 24
ECMP Groups: 1,000
ECMP Paths per Group: 8
VRRP Interfaces: 252
RSMLT Interfaces: 252
DHCP Relay Forwarding: 512
VRF Instances: up to 256

Multicast

IGMP Interfaces: 4,059
PIM Active Interfaces: 128
MLD Interfaces: 4,059
Static Multicast Routes: 4,000
BCB IP Multicast S,G Streams: 16,000
PIM-SSM Static Channels: 4,000
IP Multicast Streams: 6,000
IP Multicast Streams (Fabric Connect-PIM Gateway Nodes): 3,000
Fabric Connect-PIM Gateway Controllers per Region: 5
Fabric Connect-PIM Gateway Nodes per Region: 64
Fabric Connect-PIM Gateway Interfaces per BEB Node: 64
Fabric Connect-PIM Gateway Source Announcements: 6,000

Fabric Connect

802.1aq/RFC 6329 Shortest Path Bridging with Extreme Networks extensions
MAC Address: 112,000
NNI Interfaces/Adjacencies: Up to 255
BCB/BEB Nodes per Region: 800
Transparent UNI Ports/Switch: 96
BEB Nodes per VSN: 500
L2 Virtual Service Networks: 4,059
L3 Virtual Service Networks: up to 256
IP Shortcut Routes: IPv4 15,488, and IPv6 7,488
DvR Domains per Region: 16
DvR-enabled L2 VSNs: up to 502
DvR Controllers per Domain: 8
DvR Leafs per Domain: 250

DvR Interfaces: up to 502

DvR Routes: up to 32,000

L2 Multicast Virtual Service Networks: Up to 2,000

L3 Multicast Virtual Service Networks: 256

VXLAN Gateway VTEP Destinations per Node: 500

VXLAN Gateway VNI IDs per Node: Up to 4,000

Fabric Attach VLAN/VSN Assignments per Port: 94

QoS and Filtering

IPv4 ACE: Up to 3070 Ingress and 251 Egress

IPv6 ACE: 256 Ingress

L2-L4 Ingress Port Rate Limiters: up to 96

Egress Port Shaper Granularity: 1 Mbps to 40 Gbps per Port

Operations and Management

Mirrored Ports: up to 95

sFlow: up to 3,000 samples per second

Fabric RSPAN: up to 1,000 VSN IDs per Region

Country of Origin

- China (PRC)
- Taiwan (for GSA models)

Supported Transceivers

100 Gigabit Ethernet

100GBASE-QSFP28 Passive Copper Direct Attach Cable – 1m, 3m, 5m

100GBASE-SR4 QSFP28, up to 100m over MMF

100GBASE-CWDM QSFP28, up to 2km over SMF

100GBASE-LR4 QSFP28, up to 10km over SMF

40 Gigabit Ethernet

40GBASE-QSFP+ Passive Copper Direct Attach Cables – 0.5m, 1m, 3m, 5m

40GBASE-QSFP+ Passive Copper Break-Out Cables – 1m, 3m, 5m

40GBASE-QSFP+ Active Optical Break-Out Cable – 7m, 10m, 15m

40GBASE-QSFP+ Active Optical Direct Attach Cable – 10m

40GBASE-LM4 QSFP+, up to 80m over MMF

40GBASE-SR Bi-Directional QSFP+, up to 125m over MMF

40GBASE-SR4/4x10GBASE-SR QSFP+ up to 150m over MMF

40GBASE-LR4 QSFP+, up to 10km over SMF

40GBASE-LR4 Parallel Single-Mode QSFP+, up to 10km over SMF

40GBASE-ER4 QSFP+, up to 40km over SMF

10 Gigabit Ethernet

10GBASE-T, up to 100m over Cat 6a UTP/STP

10GBASE-CX, up to 10m over Twinax

10GBASE-LRM SFP+, up to 220m over MMF

10GBASE-SR/SW SFP+, up to 400m over MMF

10GBASE-LR/LW SFP+, up to 10km over SMF

10GBASE-BX10 SFP+, up to 10km over SMF

10GBASE-BX40 SFP+ Bi-Directional, up to 40km over SMF (must be used in pairs)

10GBASE-ER/EW SFP+, up to 40km over SMF

10GBASE-ER CDWM SFP+, up to 40km over SMF

10GBASE-ZR/ZW SFP+, up to 70km over SMF

10GBASE-ZR CDWM SFP+, up to 70km over SMF

Note: SFP+ sockets are also capable of supporting a wide range of 1 Gigabit Ethernet transceivers; additionally, 10 Gigabit Ethernet RJ45 ports also support 100/1000 Mbps connectivity. Extreme Networks also supports third party CDWM and DWDM Transceivers in “Forgiving Mode.” Refer to the product documentation for full details and a complete listing of all specifications and compliance.

Standards Compliance

IEEE 802.1 Bridging (Networking) and Network Management

802.1D MAC Bridges (a.k.a. Spanning Tree Protocol)

802.1p Traffic Class Expediting and Dynamic Multicast Filtering

802.1t 802.1D Maintenance

802.1w Rapid Reconfiguration of Spanning Tree (RSTP)

802.1Q Virtual Local Area Networking (VLAN)

802.1Qbp Equal-Cost Multi-Path (Shortest Path Bridging)

802.1Qcj Automatic Attachment to Provider Backbone Bridging (PBB) Services (Partial Support)

802.1s Multiple Spanning Trees (MSTP)

802.1v VLAN Classification by Protocol & Port

802.1ag Connectivity Fault Management

802.1ah Provider Backbone Bridges

802.1aq Shortest Path Bridging (SPB) MAC-in-MAC

802.1X Port-based Network Access Control

802.1AB-2005 Station & Media Access Control Connectivity Discovery; aka LLDP (partial support)

802.1AE Media Access Control Security

802.1AX Link Aggregation

IEEE 802.3 Ethernet

802.3-1983 CSMA/CD Ethernet(ISO/IEC 8802-3)

802.3i-1990 10Mb/s Operation, 10BASE-T Copper

802.3u-1995 100Mb/s Operation, 100BASE-T Copper, with Auto-Negotiation

802.3x-1997 Full Duplex Operation

802.3z-1998 1000Mb/s Operation, implemented as 1000BASE-X

802.3ab-1999 1000Mb/s Operation, 1000BASE-T Copper

802.3ae-2002 10Gb/s Operation, implemented as 10GBASE-SFP+

802.3an-2006 10Gb/s Operation, 10GBASE-T Copper

802.3ba-2010 40Gb/s and 100Gb/s Operation

RFC

768 UDP

783 TFTP

791 IP

792 ICMP
793 TCP
826 ARP
854 Telnet
894 Transmission of IP Datagrams over Ethernet Networks
896 Congestion Control in IP/TCP internetworks
906 Bootstrap Loading using TFTP
950 Internet Standard Subnetting Procedure
951 BOOTP: Relay Agent-only
959 FTP
1027 Using ARP to Implement Transparent Subnet Gateways
1058 RIP
1112 Host Extensions for IP Multicasting
1122 Requirements for Internet Hosts - Communication Layers
1155 Structure and Identification of Management Information for TCP/IP-based Internets
1156 MIB for Network Management of TCP/IP
1157 SNMP
1212 Concise MIB Definitions
1213 MIB for Network Management of TCP/IP-based Internets: MIB-II
1215 Convention for Defining Traps for use with the SNMP
1256 ICMP Router Discovery
1258 BSD Rlogin
1271 Remote Network Monitoring MIB
1305 NTPv3
1321 MD5 Message-Digest Algorithm
1340 Assigned Numbers
1350 TFTPv2
1398 Ethernet MIB
1442 SMIv2 of SNMPv2
1450 SNMPv2 MIB
1519 CIDR
1541 DHCP
1542 Clarifications and Extensions for BOOTP
1573 Evolution of the Interfaces Group of MIB-II
1587 OSPF NSSA Option
1591 DNS Client
1650 Definitions of Managed Objects for the Ethernet-like Interface Types
1657 Definitions of Managed Objects for BGP-4 using SMIv2
1723 RIPv2 Carrying Additional Information
1812 Router Requirements
1850 OSPFv2 MIB
1866 HTMLv2
1907 SNMPv2 MIB
1930 Guidelines for creation, selection, and registration of an AS
1981 Path MTU Discovery for IPv6
2021 Remote Network Monitoring MIBv2 using SMIv2
2068 HTTP
2080 RIPng for IPv6
2131 DHCP
2138 RADIUS Authentication
2139 RADIUS Accounting
2236 IGMPv2 Snooping
2284 PPP Extensible Authentication Protocol
2328 OSPFv2
2404 HMAC-SHA-1-96 within ESP and AH6
2407 Internet IP Security Domain of Interpretation for ISAKMP6
2408 Internet Security Association and Key Management Protocol
2428 FTP Extensions for IPv6 and NAT
2452 TCP IPv6 MIB
2453 RIPv2
2454 UDP IPv6 MIB
2460 IPv6 Basic Specification
2463 ICMPv6
2464 Transmission of IPv6 Packets over Ethernet Networks
2466 MIB for IPv6: ICMPv6 Group
2474 Differentiated Services Field Definitions in IPv4 and IPv6 Header
2475 Architecture for Differentiated Service
2541 DNS Security Operational Considerations
2545 BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing
2548 Microsoft Vendor-specific RADIUS Attributes
2572 Message Processing and Dispatching for SNMP
2573 SNMP Applications
2574 USM for SNMPv3
2575 VACM for SNMP
2576 Coexistence between v1/v2/v3 of the Internet-standard Network Management Framework
2578 SMIv2
2579 Textual Conventions for SMIv2
2580 Conformance Statements for SMIv2
2597 Assured Forwarding PHB Group
2598 Expedited Forwarding PHB
2616 HTTPv1.1
2710 MLD for IPv6
2716 PPP EAP TLS Authentication Protocol
2787 Definitions of Managed Objects for VRRP
2818 HTTP over TLS
2819 Remote Network Monitoring MIB
2863 Interfaces Group MIB
2865 RADIUS
2869 RADIUS Extensions (partial support)
2874 DNS Extensions for IPv6
2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations
2933 IGMP MIB
2934 PIM MIB for IPv4
2992 ECMP Algorithm
3046 DHCP Relay Agent Information Option 82
3162 RADIUS and IPv6
3246 Expedited Forwarding PHB
3315 DHCPv6
3339 Date and Time on The Internet: Timestamps

3376 IGMPv3
3411 Architecture for Describing SNMP Management Frameworks
3412 Message Processing and Dispatching for SNMP
3413 SNMP Applications
3414 USM for SNMPv3
3415 VACM for SNMP
3416 Protocol Operations v2 for SNMP
3417 Transport Mappings for SNMP
3418 MIB for SNMP
3484 Default Address Selection for IPv6
3513 IPv6 Addressing Architecture
3569 Overview of SSM
3579 RADIUS Support for EAP
3587 IPv6 Global Unicast Address Format
3596 DNS Extensions to support IPv6
3748 Extensible Authentication Protocol
3810 MLDv2 for IPv6
3879 Deprecating Site Local Addresses
4007 IPv6 Scoped Address Architecture
4022 TCP MIB
4087 IP Tunnel MIB
4113 UDP MIB
4133 Entity MIB Version 3 (partial support)
4193 Unique Local IPv6 Unicast Addresses
4213 Basic Transition Mechanisms for IPv6 Hosts and Routers
4250 SSH Assigned Numbers
4251 SSH Protocol Architecture
4252 SSH Authentication Protocol
4253 SSH Transport Layer Protocol
4254 SSH Connection Protocol
4255 DNS to Securely Publish SSH Key Fingerprints
4256 Generic Message Exchange Authentication for SSH
4291 IPv6 Addressing Architecture
4292 IP Forwarding Table MIB
4293 IP MIB
4301 Security Architecture for IP[1]
4302 IP Authentication Header[1]
4303 IP Encapsulating Security Payload[1]
4308 Cryptographic Suites for IPsec
4363 Definitions of Managed Objects for Bridges with Traffic Classes, Multicast Filtering and VLAN Extensions (partial support)
4429 Optimistic DAD for IPv6 (partial support)
4443 ICMP for IPv6
4541 Considerations for IGMP and MLD Snooping Switches
4552 Authentication/Confidentiality for OSPFv3
4601 PIM-SM: Revised Protocol Specification
4607 Source-Specific Multicast for IP
4675 RADIUS Attributes for Virtual LAN and Priority Support (partial support)
4835 Cryptographic Algorithm Implementation Requirements for ESP and AH
4861 Neighbor Discovery for IPv6
4862 IPv6 Stateless Address Auto-Configuration
5095 Deprecation of Type 0 Routing Headers in IPv6
5176 Dynamic Authorization Extensions to RADIUS
5187 OSPFv3 Graceful Restart (Helper-mode)
5308 Routing IPv6 with IS-IS
5340 OSPF for IPv6
5424 The Syslog Protocol
5798 VRRPv3 for IPv4 and IPv6
5905 NTPv4: Protocol and Algorithms Specification
5997 Use of Status-Server Packets in RADIUS
6105 IPv6 Router Advertisement Guard
6329 IS-IS Extensions supporting IEEE 802.1aq SPB
6933 Entity MIBv4 (partial support)
7358 VXLAN: A Framework for Overlaying Virtualized L2 Networks over L3 Networks (partial support)
7610 DHCPv6 Shield: Protecting against Rogue DHCPv6 Servers
Internet-Draft IP/IPVPN services with IEEE 802.1aq SPB networks (draft-unbehagen-spb-ip-ipvpn-00)
Internet-Draft SPB Deployment Considerations (draft-lapuh-spb-deployment-03)

[1] Implemented to deliver IPsec capability for Control Plane traffic only.

Ordering Information (Standard Models)

Part Code	Description
EC8400A02-E6	Virtual Services Platform 8404C 4-slot Ethernet Switch, 100G-capable, supporting up to 4 VSP 8400 Series Ethernet Switch Modules. Includes single 800W 100-240V AC Power Supply (no Power Cord), four Fan Modules, and Base Software License. Slide Rack Mount Kit sold separately.
EC8400002-E6	Virtual Services Platform 8404C 4-slot Ethernet Switch, 100G-capable, supporting up to 4 VSP 8400 Series Ethernet Switch Modules. Includes single 800W DC Power Supply, four Fan Modules, and Base Software License. Slide Rack Mount Kit sold separately.
EC8404009-E6	8402CQ 2-port 100GBASE-QSFP28 Ethernet Switch Module for the VSP 8400 Series. (Note: 8402CQ is supported only in the VSP 8404C Chassis, not in the VSP 8400.)
EC8404003-E6	8408QQ 8-port 40GBASE-QSFP+ Ethernet Switch Module for VSP 8400. (Note: Ports 7 and 8 are reserved for future use.)
EC8404005-E6	8418XSQ 16-port 10GBASE-SFP+ and 2-port 40GBASE-QSFP+ Combo Ethernet Switch Module for VSP 8400 Series
EC8404006-E6	8418XTQ 16-port 10GBASE-T and 2-port 40GBASE-QSFP+ Combo Ethernet Switch Module for VSP 8400 Series
EC8404001-E6	8424XS 24-port 10GBASE-SFP+ Ethernet Switch Module for VSP 8400
EC8404002-E6	8424XT 24-port 10GBASE-T Ethernet Switch Module for VSP 8400
EC8404007-E6	8424GS 24-port 1000BASE-SFP Ethernet Switch Module for VSP 8400
EC8404008-E6	8424GT 24-port 1000BASE-T Ethernet Switch Module for VSP 8400
EC8005A01-E6	800W 100-240V AC Power Supply, for use with the VSP 8000 Series
EC8005001-E6	800W DC Power Supply, for use with the VSP 7200/8000 Series
380176	VSP8000 Series Premier Software License: enables L3 VSN
380177	VSP8000 Series Premier Software License: enables L3 VSN and MACsec
EC8011002-E6	VSP8000 Slide Rack Mount Kit (300-900mm)
EC8011003-E6	VSP8000 Chassis Power Supply Filler Panel
EC8011005-E6	VSP8400 Chassis Spare Fan Module
AL2011020-E6	Extreme Networks DB-9 Female to RJ-45 Console Connector (RED)
AL2011021-E6	Extreme Networks DB-9 Male to RJ-45 Console Connector (BLUE)
AL2011022-E6	Extreme Networks RJ-45/DB-9 Integrate Console Cable

Ordering Information (GSA Models)

Part Code	Description
EC8400A02-E6GS	Virtual Services Platform 8404C, GSA Version. Includes single 800W 100-240V AC Power Supply (no Power Cord), four Fan Modules, and Base Software License. Slide Rack Mount Kit sold separately
EC8404001-E6GS	8424XS 24-port 10GBASE-SFP+ Ethernet Switch Module for VSP 8400, GSA Version
EC8404002-E6GS	8424XT 24-port 10GBASE-T Ethernet Switch Module for VSP 8400, GSA Version
EC8404003-E6GS	8408QQ 8-port 40GBASE-QSFP+ Ethernet Switch Module for VSP 8400, GSA Version

Part Code	Description
EC8404005-E6GS	8418XSQ 16-port 10GBASE-SFP and 2-port 40GBASE-QSFP+ Combo Ethernet Switch Module for VSP 8400, GSA Version
EC8404006-E6GS	8418XTQ 16-port 10GBASE-T and 2-port 40GBASE-QSFP+ Combo Ethernet Switch Module for VSP 8400, GSA Version
EC8404007-E6GS	8424GS 24-Port 1000BASE-SFP Ethernet Switch Module for VSP 8400, GSA Version
EC8404008-E6GS	8424GT 24-port 1000BASE-T Ethernet Switch Module for VSP 8400, GSA Version
EC8404009-E6GS	8402CQ 2-port 100GBASE-QSFP28 Ethernet Switch Module for VSP 8400, GSA Version (Note: 8402CQ is supported only in the 8404C Chassis, not in the VSP 8400)

*All GSA order codes have Taiwan as the Country of Origin.

Notes of product ordering and hardware installation considerations:

- Customers must separately order power cords corresponding to their regional (or country-specific) requirements. For a list of available power cords, refer to *Lifecycle Notification on VSP Power Cord Models* at: http://bit.ly/2q1YBgo
- Extreme Networks recommends that Customers purchase a second power supply unit, in order to provide highly available power.
- Extreme Networks recommends that Customers order a Slide Rack Mount Kit with every unit; the 300-900mm kit is designed to fit within most 4-post rack mount systems. Rack mounting with just two post ears would likely cause warping of the rack due to the weight of the unit and is therefore not recommended. Customers are advised to use mounting ears only in conjunction with a supporting shelf.
- A Console Cable is not shipped with the unit and, if required, must be ordered separately.

Warranty

- 12-month hardware
- A complete range of support options are also available, either directly from Extreme Networks or indirectly from our Authorized Business Partner network

Software Licensing

- Base Software License, included with hardware purchase, enables most features with the exception of those specifically noted an enabled by the Premier Software License
- Premier Software License, an optional accessory, enables the following features: Layer 3 Virtual Service Networks, DvR, VXLAN Gateway, >24 VRFs, and—where local regulations permit—MACsec

Additional Information

For further information about the Extreme Networks Virtual Services Platform 8000 Series and for the complete Extreme Networks portfolio, visit www.extremenetworks.com.