



# VOSS Feature Support Matrix

For VOSS Release 8.8

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September 2022



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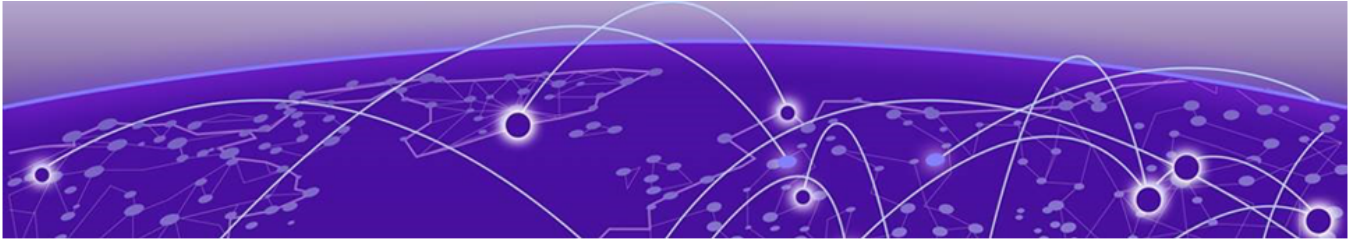
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# About this Document

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[Purpose](#) on page 4

[Documentation and Training](#) on page 5

[Help and Support](#) on page 5

[Send Feedback](#) on page 6

This section discusses the purpose of this document, ways to provide feedback, additional help, and information regarding other Extreme Networks publications.

## Purpose

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This document provides information on features in VSP Operating System Software (VOSS). VOSS runs on the following product families:

- ExtremeSwitching VSP 4450 Series
- ExtremeSwitching VSP 4900 Series
- ExtremeSwitching VSP 7200 Series
- ExtremeSwitching VSP 7400 Series
- ExtremeSwitching VSP 8200 Series
- ExtremeSwitching VSP 8400 Series
- ExtremeSwitching VSP 8600 Series
- ExtremeSwitching XA1400 Series



### Note

VOSS is licensed on the XA1400 Series as a Fabric Connect VPN (FCVPN) application, which includes a subset of VOSS features. FCVPN transparently extends Fabric Connect services over third-party provider networks.

This document identifies the release that first introduced feature support on a hardware product. Each new release includes all the features from previous releases unless specifically stated otherwise. Use this document to determine if features are supported on your product.

**Note**

Release 4.1 was the first VOSS release. Release numbers earlier than 4.1 are releases specific to the particular product, for example, VSP 4000 4.0.

Releases that are not part of the main VOSS release cycle begin with the product name, for example, VSP 8600 6.3.

Different models within a product family can be introduced in different software releases. The tables in this document include the earliest release number. To understand which release is the minimum software release for each model, see [VOSS Release Notes](#).

This document arranges the features alphabetically, based on how those features are included in the [VOSS User Guide](#). For example, [Table 19](#) on page 26 includes both Directed Broadcast and High Secure Mode.

The tables in this document also appear in the conceptual feature content of the [VOSS User Guide](#).

This document distinguishes between hardware that is not capable of supporting a feature (Not Applicable) and hardware that is capable of supporting a feature but does not (Not Supported).

**Note**

Prior to Fabric Engine 8.6, 5520 Series and 5420 Series platforms ran VOSS. VOSS support ends for these platforms with VOSS 8.5.x.

For information about feature support on Fabric Engine products, see [Fabric Engine Feature Support Matrix](#).

## Documentation and Training

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Find Extreme Networks product information at the following locations:

[Current Product Documentation](#)

[Release Notes](#)

[Hardware and software compatibility](#) for Extreme Networks products

[Extreme Optics Compatibility](#)

[Other resources](#) such as white papers, data sheets, and case studies

Extreme Networks offers product training courses, both online and in person, as well as specialized certifications. For details, visit [www.extremenetworks.com/education/](http://www.extremenetworks.com/education/).

## Help and Support

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If you require assistance, contact Extreme Networks using one of the following methods:

[Extreme Portal](#)

Search the GTAC (Global Technical Assistance Center) knowledge base; manage support cases and service contracts; download software; and obtain product licensing, training, and certifications.

### The Hub

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Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number, or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

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1. Go to [The Hub](#).
2. In the list of categories, expand the **Product Announcements** list.
3. Select a product for which you would like to receive notifications.
4. Select **Subscribe**.
5. To select additional products, return to the **Product Announcements** list and repeat steps 3 and 4.

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## Send Feedback

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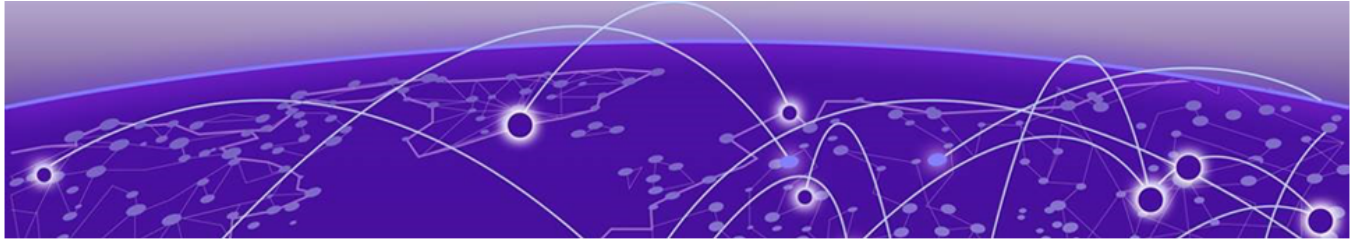
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Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.



# VOSS Features A to C

**Table 1: Access Control Entry product support**

Feature	Product	Release introduced
Platform specific considerations for ACL and ACE behavior are documented in ACL Filters Behavior Differences, which is in <a href="#">VOSS User Guide</a> .		
QoS Access Control Entries (ACE)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	VOSS 8.0.50
Security ACEs	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Filter enhancement - Apply ACE to Routed Packets only	VSP 4450 Series	VOSS 8.4
	VSP 4900 Series	VOSS 8.4
	VSP 7200 Series	VOSS 8.4
	VSP 7400 Series	VOSS 8.4
	VSP 8200 Series	VOSS 8.4
	VSP 8400 Series	VOSS 8.4
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported



**Table 1: Access Control Entry product support (continued)**

Feature	Product	Release introduced
Policy Based Routing (redirect-next-hop)	VSP 4450 Series	VSP 4450 3.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Policy Based Routing (redirect-next-hop) with VRF support	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	Not Supported

**Table 2: Access Control List product support**

Feature	Product	Release introduced
Platform specific considerations for ACL and ACE behavior are documented in ACL Filters Behavior Differences, which is in <a href="#">VOSS User Guide</a> .		
Access Control List (ACL)-based filtering, including egress ACLs, ingress ACLs, Layer 2 to Layer 4 filtering, port-based, and VLAN-based	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 2: Access Control List product support (continued)**

Feature	Product	Release introduced
InVSN Filter	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
IPv6 ingress filters	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
IPv6 egress filters	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 2: Access Control List product support (continued)**

Feature	Product	Release introduced
IPv6 ACL DSCP Remarking	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.5
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.5
	VSP 8200 Series	Not Supported
	VSP 8400 Series	VOSS 8.5 Switch model: VSP 8404C
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 3: Address Resolution Protocol product support**

Feature	Product	Release introduced
Address Resolution Protocol (ARP) including Proxy ARP and Static ARP	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Gratuitous ARP filtering	VSP 4450 Series	VOSS 4.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 4: Advanced Feature Bandwidth Reservation product support**

Feature	Product	Release introduced
Advanced Feature Bandwidth Reservation	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
<b>Note:</b>	VSP 7200 Series	Not Supported

**Table 4: Advanced Feature Bandwidth Reservation product support (continued)**

Feature	Product	Release introduced
If your switch does not have this boot flag, it is because the hardware reserves the bandwidth automatically with no user interaction.	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50 XA1480 only- demonstration feature

**Table 5: Alternative routes product support**

Feature	Product	Release introduced
Alternative routes for IPv4	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Alternative routes for IPv6	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 6: Application Telemetry product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 7.1

**Table 6: Application Telemetry product support (continued)**

Feature	Product	Release introduced
Application Telemetry	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.1
	VSP 8400 Series	VOSS 7.1
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
Application Telemetry Host Monitoring	VSP 4450 Series	VOSS 8.0.5
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 8.0.5
	VSP 7400 Series	VOSS 8.0.5
	VSP 8200 Series	VOSS 8.0.5
	VSP 8400 Series	VOSS 8.0.5
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported
Application Telemetry— using Segmented Management Instance VLAN interface as source IP	VSP 4450 Series	VOSS 8.8
	VSP 4900 Series	VOSS 8.8
	VSP 7200 Series	VOSS 8.8
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	VOSS 8.8
	VSP 8400 Series	VOSS 8.8
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 6: Application Telemetry product support (continued)**

Feature	Product	Release introduced
Application Telemetry— using Segmented Management Instance CLIP interface (GRT and VRF) as source IP	VSP 4450 Series	VOSS 8.8
	VSP 4900 Series	VOSS 8.8
	VSP 7200 Series	VOSS 8.8
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	VOSS 8.8
	VSP 8400 Series	VOSS 8.8
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 7: Authentication for Privileged EXEC Mode product support**

Feature	Product	Release introduced
Authentication for Privileged EXEC CLI Command Mode	VSP 4450 Series	VOSS 8.2
	VSP 4900 Series	VOSS 8.2
	VSP 7200 Series	VOSS 8.2
	VSP 7400 Series	VOSS 8.2
	VSP 8200 Series	VOSS 8.2
	VSP 8400 Series	VOSS 8.2
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	VOSS 8.2

**Table 8: Auto-Negotiation product support**

Feature	Product	Release introduced
Auto-Negotiation	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1 Switch models: <ul style="list-style-type: none"> <li>• VSP4900-24S and VSP4900-48P - all fixed ports</li> <li>• VSP4900-12MXU-12XE - all fixed ports, with ports 13 to 24 at 1 Gbps only</li> <li>• VSP4900-24XE - all fixed ports at 1 Gbps only</li> </ul>

**Table 8: Auto-Negotiation product support (continued)**

Feature	Product	Release introduced
		VIM5-4XE at 1 Gbps only and VIM5-4YE at 25 Gbps only
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 9: Auto-sense product support**

Feature	Product	Release introduced
Auto-sense	VSP 4450 Series	VOSS 8.3
	VSP 4900 Series	VOSS 8.3
	VSP 7200 Series	VOSS 8.3
	VSP 7400 Series	VOSS 8.3
	VSP 8200 Series	VOSS 8.3
	VSP 8400 Series	VOSS 8.3
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
Auto-sense ports can apply Fabric Attach (FA)-specific configuration	VSP 4450 Series	VOSS 8.4.2
	VSP 4900 Series	VOSS 8.4.2
	VSP 7200 Series	VOSS 8.4.2
	VSP 7400 Series	VOSS 8.4.2
	VSP 8200 Series	VOSS 8.4.2
	VSP 8400 Series	VOSS 8.4.2
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 10: Bidirectional Forwarding Detection (BFD) product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 8.1

**Table 10: Bidirectional Forwarding Detection (BFD) product support (continued)**

Feature	Product	Release introduced
BFD (IPv4)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 8.1
	VSP 7400 Series	VOSS 8.1
	VSP 8200 Series	VOSS 8.1
	VSP 8400 Series	VOSS 8.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
BFD (IPv6)	VSP 4450 Series	VOSS 8.1 demonstration feature
	VSP 4900 Series	VOSS 8.1 demonstration feature
	VSP 7200 Series	VOSS 8.1 demonstration feature
	VSP 7400 Series	VOSS 8.1 demonstration feature
	VSP 8200 Series	VOSS 8.1 demonstration feature
	VSP 8400 Series	VOSS 8.1 demonstration feature
	VSP 8600 Series	Not Supported
XA1400 Series	Not Supported	
BFD over Fabric Extend Tunnels (IPv4)	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.2
	VSP 7200 Series	VOSS 8.2
	VSP 7400 Series	VOSS 8.2
	VSP 8200 Series	VOSS 8.2
	VSP 8400 Series	VOSS 8.2
	VSP 8600 Series	Not supported
XA1400 Series	VOSS 8.2	

**Table 11: Border Gateway Protocol product support**

Feature	Product	Release introduced
Border Gateway Protocol for IPv4 (BGPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50



**Table 11: Border Gateway Protocol product support (continued)**

Feature	Product	Release introduced
BGP+ (BGPv4 for IPv6).	VSP 4450 Series	VOSS 5.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
BGPv6	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported
External BGP (eBGP)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Internal BPG (iBGP)	VSP 4450 Series	VOSS 4.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 11: Border Gateway Protocol product support (continued)**

Feature	Product	Release introduced
Route metric for BGP route redistribution	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	VOSS 8.0.50
iBGP over user-created VRFs	VSP 4450 Series	VOSS 8.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 8.1
	VSP 7400 Series	VOSS 8.1
	VSP 8200 Series	VOSS 8.1
	VSP 8400 Series	VOSS 8.1
	VSP 8600 Series	VSP 8600 8.0 - demonstration feature
	XA1400 Series	Not Supported

**Table 12: Bridge Protocol Data Unit (BPDU) Guard product support**

Feature	Product	Release introduced
Bridge Protocol Data Unit (BPDU) Guard	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 13: Certificate order priority product support**

Feature	Product	Release introduced
Certificate order priority <b>Note:</b>	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2

**Table 13: Certificate order priority product support (continued)**

Feature	Product	Release introduced
VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50

**Table 14: Channelization product support**

Feature	Product	Release introduced
Channelization of 40 Gbps ports	VSP 4450 Series	Not Applicable
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0 VSP 7432CQ only
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	Not Applicable
Channelization of 100 Gbps ports	VSP 4450 Series	Not Applicable
	VSP 4900 Series	Not Applicable
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	VOSS 8.0 VSP 7432CQ only
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Supported
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Applicable

**Table 15: Client and Server product support**

Feature	Product	Release introduced	Release deprecated
	VSP 4450 Series	VSP 4000 4.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable

**Table 15: Client and Server product support (continued)**

Feature	Product	Release introduced	Release deprecated
File Transfer Protocol (FTP) server and client (IPv4)	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VSP 8200 4.0	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 4.5	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable
File Transfer Protocol (FTP) server and client (IPv6)	VSP 4450 Series	VOSS 4.1	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 4.1	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
Hypertext Transfer Protocol (HTTP) and Hypertext Transfer Protocol Secure (HTTPS) (IPv4)	VSP 4450 Series	VOSS 4.1	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VSP 8200 4.0	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 4.5	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable
Hypertext Transfer Protocol (HTTP) and Hypertext Transfer Protocol Secure (HTTPS) (IPv6)	VSP 4450 Series	VOSS 4.1	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 4.1	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Supported	Not Applicable

**Table 15: Client and Server product support (continued)**

Feature	Product	Release introduced	Release deprecated
Remote Login (Rlogin) server/client (IPv4)	VSP 4450 Series	VSP 4000 4.0	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 4.2.1	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VSP 8200 4.0	VOSS 8.2
	VSP 8400 Series	VOSS 4.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 4.5	Not Applicable
	XA1400 Series	VOSS 8.0.50	VOSS 8.2
Rlogin server (IPv6)	VSP 4450 Series	VOSS 4.1	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 4.2.1	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 4.1	VOSS 8.2
	VSP 8400 Series	VOSS 4.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Supported	VOSS 8.2
Rlogin client (IPv6)	VSP 4450 Series	VOSS 7.0	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 7.0	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 7.0	VOSS 8.2
	VSP 8400 Series	VOSS 7.0	VOSS 8.2
	VSP 8600 Series	VSP 8600 8.0	Not Applicable
	XA1400 Series	Not Supported	VOSS 8.2
Remote Shell (RSH) server/client	VSP 4450 Series	VSP 4000 4.0	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 4.2.1	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VSP 8200 4.0	VOSS 8.2
	VSP 8400 Series	VOSS 4.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 4.5	Not Applicable
	XA1400 Series	VOSS 8.0.50	VOSS 8.2

**Table 15: Client and Server product support (continued)**

Feature	Product	Release introduced	Release deprecated
Secure Copy (SCP)  <b>Note:</b> The switch does not support the WinSCP client.	VSP 4450 Series	VSP 4000 4.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 5.0	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VSP 8200 4.0	Not Applicable
	VSP 8400 Series	VOSS 5.0	Not Applicable
	VSP 8600 Series	VSP 8600 4.5	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable
Secure File Transfer Protocol (SFTP) server (IPv4)	VSP 4450 Series	VOSS 4.2	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 4.2	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 4.5	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable
Secure File Transfer Protocol (SFTP) server (IPv6)	VSP 4450 Series	VOSS 4.2	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 4.2	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
Telnet server and client (IPv4)	VSP 4450 Series	VSP 4000 4.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VSP 8200 4.0	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 4.5	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable

**Table 15: Client and Server product support (continued)**

Feature	Product	Release introduced	Release deprecated
Telnet server and client (IPv6)	VSP 4450 Series	VOSS 4.1	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 4.1	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
Trivial File Transfer Protocol (TFTP) server and client (IPv4)	VSP 4450 Series	VSP 4000 4.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VSP 8200 4.0	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 4.5	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable
TFTP server (IPv6)	VSP 4450 Series	VOSS 4.1	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 4.1	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Supported	Not Applicable

**Table 15: Client and Server product support (continued)**

Feature	Product	Release introduced	Release deprecated
TFTP client (IPv6)	VSP 4450 Series	VOSS 7.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 7.0	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 7.0	Not Applicable
	VSP 8400 Series	VOSS 7.0	Not Applicable
	VSP 8600 Series	VSP 8600 8.0	Not Applicable
	XA1400 Series	Not Supported	Not Applicable

**Table 16: Command Line Interface product support**

Feature	Product	Release introduced
Command Line Interface (CLI)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 4200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 17: Connectivity Fault Management product support**

Feature	Product	Release introduced
IEEE 802.1ag Connectivity Fault Management (CFM): <ul style="list-style-type: none"> <li>• Layer 2 Ping</li> <li>• TraceRoute</li> <li>• TraceTree</li> </ul>	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50 Layer 2 Ping only

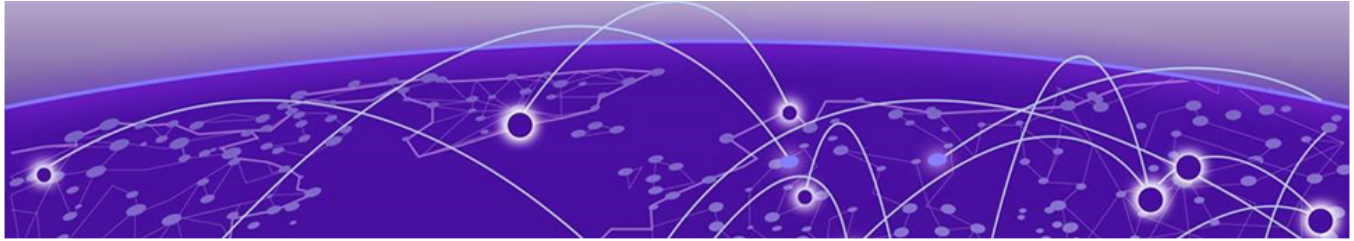


**Table 17: Connectivity Fault Management product support (continued)**

Feature	Product	Release introduced
CFM configuration on C-VLANs	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 18: Custom Logon Banner product support**

Feature	Product	Release introduced
Custom logon banner	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5 <b>Note:</b> Configurable using CLI only.
	XA1400 Series	VOSS 8.0.50



## VOSS Features D to F

**Table 19: Denial-of-service attack prevention product support**

Feature	Product	Release introduced
Directed Broadcast	VSP 4450 Series	VOSS 5.1.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.1
	VSP 8400 Series	VOSS 5.1.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
High Secure mode (hsecure boot configuration flag)	VSP 4450 Series	VSP 4450 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 20: DHCPv6 Guard product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 5.0

**Table 20: DHCPv6 Guard product support (continued)**

Feature	Product	Release introduced
DHCPv6 Guard	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 21: Differentiated Services product support**

Feature	Product	Release introduced
Differentiated Services (DiffServ) including Per-Hop Behavior	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 22: Digital Certificate/PKI product support**

Feature	Product	Release introduced
Digital Certificate/PKI  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 6.1
XA1400 Series	VOSS 8.0.50	

**Table 22: Digital Certificate/PKI product support (continued)**

Feature	Product	Release introduced
Subject alternative name	VSP 4450 Series	VOSS 7.1.3
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.1.3
	VSP 7400 Series	VOSS 8.0.6
	VSP 8200 Series	VOSS 7.1.3
	VSP 8400 Series	VOSS 7.1.3
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1
Certificate fingerprint validation	VSP 4450 Series	VOSS 8.3
	VSP 4900 Series	VOSS 8.3
	VSP 7200 Series	VOSS 8.3
	VSP 7400 Series	VOSS 8.3
	VSP 8200 Series	VOSS 8.3
	VSP 8400 Series	VOSS 8.3
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.3
Multiple CA Trustpoints and multiple Certificate Identities	VSP 4450 Series	VOSS 8.5
	VSP 4900 Series	VOSS 8.5
	VSP 7200 Series	VOSS 8.5
	VSP 7400 Series	VOSS 8.5
	VSP 8200 Series	VOSS 8.5
	VSP 8400 Series	VOSS 8.5
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.5

**Table 23: Distributed Virtual Routing Controller product support**

Feature	Product	Release introduced
DvR Controller	VSP 4450 Series	Not Supported
<b>Important:</b> Because of a change in VOSS 6.0.1.2, the best practice is to use	VSP 4900 Series	VOSS 8.1.5 VSP4900-12MXU-12XE, VSP4900-24S, and VSP4900-24XE only
	VSP 7200 Series	VOSS 6.0.1

**Table 23: Distributed Virtual Routing Controller product support (continued)**

Feature	Product	Release introduced
a minimum software version of 6.0.1.2 in DvR deployments.	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0.1
	VSP 8400 Series	VOSS 6.0.1
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported
DvR Isolated Domains	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.8 VSP4900-12MXU-12XE, VSP4900-24S, and VSP4900-24XE only
	VSP 7200 Series	VOSS 8.8
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	VOSS 8.8
	VSP 8400 Series	VOSS 8.8
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
dvr-one-ip	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3 VSP4900-12MXU-12XE, VSP4900-24S, and VSP4900-24XE only
	VSP 7200 Series	VOSS 8.3
	VSP 7400 Series	VOSS 8.3
	VSP 8200 Series	VOSS 8.3
	VSP 8400 Series	VOSS 8.3
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported

**Table 23: Distributed Virtual Routing Controller product support (continued)**

Feature	Product	Release introduced
DvR In-band Management	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1 VSP4900-12MXU-12XE, VSP4900-24S, and VSP4900-24XE only
	VSP 7200 Series	VOSS 6.0.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0.1
	VSP 8400 Series	VOSS 6.0.1
	VSP 8600 Series	Not supported
	XA1400 Series	Not Supported
DvR-VRRP Coexistence  <b>Important:</b> To use this functionality, you must upgrade the software on all DvR BEBs, including Leaf nodes, to at least the minimum software version to support this functionality.	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.8 VSP4900-12MXU-12XE, VSP4900-24S, and VSP4900-24XE only
	VSP 7200 Series	VOSS 8.8
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	VOSS 8.8
	VSP 8400 Series	VOSS 8.8
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 24: Distributed Virtual Routing Leaf product support**

Feature	Product	Release introduced
DvR Leaf  <b>Important:</b> Because of a change in VOSS 6.0.1.2, the best practice is to use a minimum software version of 6.0.1.2 in DvR deployments.	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0.1
	VSP 8400 Series	VOSS 6.0.1
	VSP 8600 Series	Not supported
	XA1400 Series	Not Supported

**Table 24: Distributed Virtual Routing Leaf product support (continued)**

Feature	Product	Release introduced
DvR In-band Management	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0.1
	VSP 8400 Series	VOSS 6.0.1
	VSP 8600 Series	Not supported
	XA1400 Series	Not Supported
Management I-SID Assignment to DvR Leaf	VSP 4450 Series	VOSS 8.5
	VSP 4900 Series	VOSS 8.5
	VSP 7200 Series	VOSS 8.5
	VSP 7400 Series	VOSS 8.5
	VSP 8200 Series	VOSS 8.5
	VSP 8400 Series	VOSS 8.5
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 25: Domain Name Service product support**

Feature	Product	Release introduced
Domain Name Service (DNS) client (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 25: Domain Name Service product support (continued)**

Feature	Product	Release introduced
DNS client (IPv6)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 26: Dynamic ARP Inspection (DAI) product support**

Feature	Product	Release introduced
Dynamic ARP Inspection (DAI)	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 27: Dynamic Host Configuration Protocol product support**

Feature	Product	Release introduced
Dynamic Host Configuration Protocol (DHCP) Relay	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50



**Table 27: Dynamic Host Configuration Protocol product support (continued)**

Feature	Product	Release introduced
DHCP Option 82	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 28: Dynamic Host Configuration Protocol Relay for IPv6 product support**

Feature	Product	Release introduced
IPv6 DHCP Relay	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 29: Dynamic Host Configuration Protocol Snooping and Neighbor Discovery Inspection product support**

Feature	Product	Release introduced
DHCP Snooping(IPv4)	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50

**Table 29: Dynamic Host Configuration Protocol Snooping and Neighbor Discovery Inspection product support (continued)**

Feature	Product	Release introduced
DHCP Snooping (IPv6)	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
Neighbor Discovery Inspection (IPv6)	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 30: Dynamic Nickname Assignment product support**

Feature	Product	Release introduced
Dynamic Nickname Assignment	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0.5
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 30: Dynamic Nickname Assignment product support (continued)**

Feature	Product	Release introduced
Extends the assignment behavior with a <i>prefix</i> parameter	VSP 4450 Series	VOSS 8.3
	VSP 4900 Series	VOSS 8.3
	VSP 7200 Series	VOSS 8.3
	VSP 7400 Series	VOSS 8.3
	VSP 8200 Series	VOSS 8.3
	VSP 8400 Series	VOSS 8.3
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 31: Egress Tunnel Shaping product support**

Feature	Product	Release introduced
Egress Tunnel Shaping	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1
Egress Shaper for Fabric Extend tunnels on Fabric IPsec Gateway virtual machine	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3.1 VSP4900-12MXU-12XE and VSP4900-24XE only
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.3.1
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 32: Endpoint Tracking product support**

Feature	Product	Release introduced
	VSP 4450 Series	Not Supported

**Table 32: Endpoint Tracking product support (continued)**

Feature	Product	Release introduced
Endpoint Tracking	VSP 4900 Series	VOSS 8.7
	VSP 7200 Series	VOSS 8.1.1
	VSP 7400 Series	VOSS 8.1.1
	VSP 8200 Series	VOSS 8.1.1
	VSP 8400 Series	VOSS 8.1.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 33: Energy Efficient Ethernet product support**

Feature	Product	Release introduced
Energy Efficient Ethernet (EEE)	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1 All fixed ports on VSP4900-48P and ports 1/1-1/12 on VSP4900-12MXU-12XE
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	VOSS 8.1 8424GT ESM only
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 34: Energy Saver product support**

Feature	Product	Release introduced
Energy Saver	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1 VSP4900-48P and ports 1/1 to 1/12 on VSP4900-12MXU-12XE only
	VSP 7200 Series	VOSS 7.0

**Table 34: Energy Saver product support (continued)**

Feature	Product	Release introduced
		VSP 7254XTQ only
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 35: Enhanced Secure Mode product support**

Feature	Product	Release introduced
Enhanced Secure mode	VSP 4450 Series	VOSS 4.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Enhanced Secure mode for JITC and non-JITC sub-modes.	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 35: Enhanced Secure Mode product support (continued)**

Feature	Product	Release introduced
Enhanced Secure mode - sensitive file protection	VSP 4450 Series	VOSS 8.5
	VSP 4900 Series	VOSS 8.5
	VSP 7200 Series	VOSS 8.5
	VSP 7400 Series	VOSS 8.5
	VSP 8200 Series	VOSS 8.5
	VSP 8400 Series	VOSS 8.5
	VSP 8600 Series	Not supported
	XA1400 Series	VOSS 8.5

**Table 36: Enterprise Device Manager product support**

Feature	Product	Release introduced
Enterprise Device Manager (EDM)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Read-Only user for EDM	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0 demo feature
	XA1400 Series	VOSS 8.0.50

**Table 37: Entity MIB product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 6.0

**Table 37: Entity MIB product support (continued)**

Feature	Product	Release introduced
Entity MIB - Physical Table	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
Entity MIB enhancements and integration for the following: <ul style="list-style-type: none"> <li>Physical Table</li> <li>Alias Mapping Table</li> <li>Physical Contains Table</li> <li>Last Change Time object</li> </ul>	VSP 4450 Series	VOSS 6.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1.2
	VSP 8400 Series	VOSS 6.1.2
	VSP 8600 Series	VSP 8600 6.1
XA1400 Series	VOSS 8.0.50	
Entity MIB - Logical Table includes the following logical interface entities: <ul style="list-style-type: none"> <li>VLANs</li> <li>MLTs</li> <li>Circuitless IP (CLIP)</li> <li>Fabric Extend interfaces (logical layer 2 and layer 3 IS-IS interfaces)</li> </ul>	VSP 4450 Series	VOSS 8.4
	VSP 4900 Series	VOSS 8.4
	VSP 7200 Series	VOSS 8.4
	VSP 7400 Series	VOSS 8.4
	VSP 8200 Series	VOSS 8.4
	VSP 8400 Series	VOSS 8.4
	VSP 8600 Series	Not supported
XA1400 Series	VOSS 8.4	

**Table 38: Equal Cost Multiple Path for IPv4 product support**

Feature	Product	Release introduced
	VSP 4450 Series	VSP 4000 4.0

**Table 38: Equal Cost Multiple Path for IPv4 product support (continued)**

Feature	Product	Release introduced
Equal Cost Multiple Path (ECMP) for IPv4	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 39: Equal Cost Multiple Path for IPv6 product support**

Feature	Product	Release introduced
ECMP for IPv6	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 40: ECMP Pathlist with Fabric Connect product support**

Feature	Product	Release introduced
ECMP Pathlist with Fabric Connect (IS-IS routes)	VSP 4450 Series	VOSS 8.1.5
	VSP 4900 Series	VOSS 8.1.5
	VSP 7200 Series	VOSS 8.1.5
	VSP 7400 Series	VOSS 8.1.5
	VSP 8200 Series	VOSS 8.1.5
	VSP 8400 Series	VOSS 8.1.5
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1.5

**Table 41: E-Tree and Private VLANs product support**

Feature	Product	Release introduced
	VSP 4450 Series	VSP 4000 4.0



**Table 41: E-Tree and Private VLANs product support (continued)**

Feature	Product	Release introduced
E-Tree and private VLANs	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
Routing on Private VLANs	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.5
	VSP 7200 Series	VOSS 8.5
	VSP 7400 Series	VOSS 8.5
	VSP 8200 Series	VOSS 8.5
	VSP 8400 Series	VOSS 8.5
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 42: Extensible Authentication Protocol over LAN product support**

Feature	Product	Release introduced
Extensible Authentication Protocol (EAP) and EAP over LAN (EAPoL)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
EAPoL MHMA-MV	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 42: Extensible Authentication Protocol over LAN product support (continued)**

Feature	Product	Release introduced
EAPoL enhancements: Enhanced MHMV, Fail Open VLAN, Guest VLAN	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
EAP enhancements: EAP on Flex UNI ports, Auto-sense ports, auto-isid-offset	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3
	VSP 7200 Series	VOSS 8.3
	VSP 7400 Series	VOSS 8.3
	VSP 8200 Series	VOSS 8.3
	VSP 8400 Series	VOSS 8.3
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
EAP enhancements: Wake on LAN, Guest I-SID, Fail Open I-SID	VSP 4450 Series	VOSS 8.3
	VSP 4900 Series	VOSS 8.3
	VSP 7200 Series	VOSS 8.3
	VSP 7400 Series	VOSS 8.3
	VSP 8200 Series	VOSS 8.3
	VSP 8400 Series	VOSS 8.3
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
Non EAPoL MAC RADIUS authentication	VSP 4450 Series	VOSS 4.2.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2.1
	VSP 8400 Series	VOSS 4.2.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 42: Extensible Authentication Protocol over LAN product support (continued)**

Feature	Product	Release introduced
QoS Priority Assignment	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
RADIUS Dynamic User-Based Policies	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3
	VSP 7200 Series	VOSS 8.3
	VSP 7400 Series	VOSS 8.3
	VSP 8200 Series	VOSS 8.3
	VSP 8400 Series	VOSS 8.3
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
RADIUS Port and VLAN based Attributes	VSP 4450 Series	VOSS 8.4
	VSP 4900 Series	VOSS 8.4
	VSP 7200 Series	VOSS 8.4
	VSP 7400 Series	VOSS 8.4
	VSP 8200 Series	VOSS 8.4
	VSP 8400 Series	VOSS 8.4
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 42: Extensible Authentication Protocol over LAN product support (continued)**

Feature	Product	Release introduced
Continuity Mode for Fail Open VLAN and Fail Open I-SID	VSP 4450 Series	VOSS 8.6
	VSP 4900 Series	VOSS 8.6
	VSP 7200 Series	VOSS 8.6
	VSP 7400 Series	VOSS 8.6
	VSP 8200 Series	VOSS 8.6
	VSP 8400 Series	VOSS 8.6
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 43: Extreme Integrated Application Hosting product support**

Feature	Product	Release introduced
Extreme Integrated Application Hosting	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1.5 VSP4900-12MXU-12XE and VSP4900-24XE only
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
Fabric IPsec Gateway virtual machine	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3 VSP4900-12MXU-12XE and VSP4900-24XE only
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.2
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 43: Extreme Integrated Application Hosting product support (continued)**

Feature	Product	Release introduced
Egress Shaper for Fabric Extend tunnels on Fabric IPsec Gateway virtual machine	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3.1 VSP4900-12MXU-12XE and VSP4900-24XE only
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.3.1
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 44: ExtremeCloud IQ - Site Engine backup configuration ZIP file product support**

Feature	Product	Release introduced
ExtremeCloud IQ - Site Engine backup configuration ZIP file For more information, see ExtremeCloud IQ - Site Engine documentation.	VSP 4450 Series	VOSS 6.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1.2
	VSP 8400 Series	VOSS 6.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 45: Fabric Attach product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 5.0

**Table 45: Fabric Attach product support (continued)**

Feature	Product	Release introduced
Fabric Attach Server	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	VSP 8600 6.3
	XA1400 Series	Not Supported

**Table 46: Fabric Attach Zero Touch Client Attachment product support**

Feature	Product	Release introduced
Fabric Attach Zero Touch Client Attachment	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.3
	XA1400 Series	Not Supported

**Table 47: Fabric Extend product support**

Feature	Product	Release introduced
Fabric Extend *Platforms require an Open Networking Adapter (ONA).  <b>Note:</b> XA1400 Series does not support FE-VID.	VSP 4450 Series	VOSS 5.0*
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50

**Table 47: Fabric Extend product support (continued)**

Feature	Product	Release introduced
Fabric Extend over IPsec	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3 VSP4900-12MXU-12XE and VSP4900-24XE using Fabric IPsec Gateway
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.2 using Fabric IPsec Gateway
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50
Digital Certificate Authentication for Fabric Extend over IPsec	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3 VSP4900-12MXU-12XE and VSP4900-24XE using Fabric IPsec Gateway
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.3 using Fabric IPsec Gateway
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.3
ECMP support for Fabric Extend	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50

**Table 47: Fabric Extend product support (continued)**

Feature	Product	Release introduced
IPsec compression	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.7 VSP4900-12MXU-12XE and VSP4900-24XE using Fabric IPsec Gateway
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.7 using Fabric IPsec Gateway
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1.8
Ability to adjust the maximum segment size (MSS)	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3.1
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.3.1
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1.8
IS-IS hello padding (ability to disable)	VSP 4450 Series	VOSS 8.2.7
	VSP 4900 Series	VOSS 8.2.7
	VSP 7200 Series	VOSS 8.2.7
	VSP 7400 Series	VOSS 8.2.7
	VSP 8200 Series	VOSS 8.2.7
	VSP 8400 Series	VOSS 8.2.7
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.2.7



**Table 47: Fabric Extend product support (continued)**

Feature	Product	Release introduced
IPsec fragmentation before encryption	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3.1 VSP4900-12MXU-12XE and VSP4900-24XE using Fabric IPsec Gateway
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.3.1 using Fabric IPsec Gateway
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.2.7
Ability to configure a specific IPsec source IP per tunnel	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.3.1
Parallel Tunnel Support for Fabric Extend	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.8
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 48: Fabric Mode product support**

Feature	Product	Release introduced
	VSP 4450 Series	VSP 4000 4.0

**Table 48: Fabric Mode product support (continued)**

Feature	Product	Release introduced
Fabric BCB mode	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Fabric BEB mode	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 49: Fabric RSPAN product support**

Feature	Product	Release introduced
Fabric RSPAN (Mirror to I-SID)	VSP 4450 Series	VOSS 6.0 Flow-based mirroring into single I-SID only
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 50: FDB Protected by Port product support**

Feature	Product	Release introduced
	VSP 4450 Series	VSP 4000 4.0

**Table 50: FDB Protected by Port product support (continued)**

Feature	Product	Release introduced
FDB protected by port (MAC security limit-learning)	VSP 4900 Series	VOSS 8.3
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 51: Flight Recorder product support**

Feature	Product	Release introduced
Flight Recorder for system health monitoring	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 52: Forward Error Correction product support**

Feature	Product	Release introduced
Forward Error Correction (FEC) (configurable)	VSP 4450 Series	Not Applicable
	VSP 4900 Series	VOSS 8.1 VIM5-4YE at 25 Gbps
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	Not Supported
	VSP 8400 Series	VOSS 8.0
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Applicable



## VOSS Features G to I

**Table 53: High-Availability product support**

Feature	Product	Release introduced
High Availability-CPU (HA-CPU) for a standalone switch	VSP 4450 Series	Not Applicable
	VSP 4900 Series	Not Applicable
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Applicable
High Availability-CPU (HA-CPU) for Layer 2 with Simplified vIST	VSP 4450 Series	Not Applicable
	VSP 4900 Series	Not Applicable
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	VSP 8600 6.3
	XA1400 Series	Not Applicable

**Table 53: High-Availability product support (continued)**

Feature	Product	Release introduced
High Availability-CPU (HA-CPU) for Layer 3 with Simplified vIST	VSP 4450 Series	Not Applicable
	VSP 4900 Series	Not Applicable
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	VSP 8600 6.3
	XA1400 Series	Not Applicable

**Table 54: IEEE 802.3X Pause Frame Transmit product support**

Feature	Product	Release introduced
IEEE 802.3X Pause frame transmit	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1.50

**Table 55: Internet Control Message Protocol product support**

Feature	Product	Release introduced
Internet Control Message Protocol (ICMP)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 55: Internet Control Message Protocol product support (continued)**

Feature	Product	Release introduced
ICMP broadcast and multicast enable or disable	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported
Fragmented ICMP Packet Filtering for IPv4	VSP 4450 Series	VOSS 8.5
	VSP 4900 Series	VOSS 8.5
	VSP 7200 Series	VOSS 8.5
	VSP 7400 Series	VOSS 8.5
	VSP 8200 Series	VOSS 8.5
	VSP 8400 Series	VOSS 8.5
	VSP 8600 Series	Not supported
	XA1400 Series	VOSS 8.5
Fragmented ICMP Packet Filtering for IPv6	VSP 4450 Series	VOSS 8.5
	VSP 4900 Series	VOSS 8.5
	VSP 7200 Series	VOSS 8.5
	VSP 7400 Series	VOSS 8.5
	VSP 8200 Series	VOSS 8.5
	VSP 8400 Series	VOSS 8.5
	VSP 8600 Series	Not supported
	XA1400 Series	Not supported

**Table 56: Internet Group Management Protocol product support**

Feature	Product	Release introduced
	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1

**Table 56: Internet Group Management Protocol product support (continued)**

Feature	Product	Release introduced
Internet Group Management Protocol (IGMP), including virtualization	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 57: Internet Key Exchange product support**

Feature	Product	Release introduced
Internet Key Exchange (IKE) v2  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	VOSS 8.0.50

**Table 58: Internet Protocol Flow Information eXport (IPFIX) product support**

Feature	Product	Release introduced
Internet Protocol Flow Information eXport (IPFIX)	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 58: Internet Protocol Flow Information eXport (IPFIX) product support (continued)**

Feature	Product	Release introduced
IPFIX — using Segmented Management Instance VLAN as source IP	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
IPFIX — using Segmented Management Instance CLIP (GRT and VRF) as source IP	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 59: Inter-VSN Routing product support**

Feature	Product	Release introduced
Inter-VSN routing (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50



**Table 59: Inter-VSN Routing product support (continued)**

Feature	Product	Release introduced
Inter-VSN routing (IPv6)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported

**Table 60: IOC Module Preconfiguration**

Feature	Product	Release introduced
IOC Module Preconfiguration	VSP 4450 Series	Not Applicable
	VSP 4900 Series	Not Applicable
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Applicable

**Table 61: IP Phone product support**

Feature	Product	Release introduced
IP Phone Support	VSP 4450 Series	VOSS 8.3
	VSP 4900 Series	VOSS 8.3
	VSP 7200 Series	VOSS 8.3
	VSP 7400 Series	VOSS 8.3
	VSP 8200 Series	VOSS 8.3
	VSP 8400 Series	VOSS 8.3
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 62: IP Multicast over Fabric Connect product support**

Feature	Product	Release introduced
	VSP 4450 Series	VSP 4000 4.0

**Table 62: IP Multicast over Fabric Connect product support (continued)**

Feature	Product	Release introduced
IP Multicast over Fabric Connect	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
IP Multicast config-lite for Fabric Connect	VSP 4450 Series	VOSS 8.8
	VSP 4900 Series	VOSS 8.8
	VSP 7200 Series	VOSS 8.8
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	VOSS 8.8
	VSP 8400 Series	VOSS 8.8
	VSP 8600 Series	Not supported
	XA1400 Series	Not Supported
IP SPB Multicast Policy	VSP 4450 Series	VOSS 8.8
	VSP 4900 Series	VOSS 8.8
	VSP 7200 Series	VOSS 8.8
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	VOSS 8.8
	VSP 8400 Series	VOSS 8.8
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 62: IP Multicast over Fabric Connect product support (continued)**

Feature	Product	Release introduced
Universal Plug and Play (uPnP) Filtering	VSP 4450 Series	VOSS 8.3
	VSP 4900 Series	VOSS 8.3
	VSP 7200 Series	VOSS 8.3
	VSP 7400 Series	VOSS 8.3
	VSP 8200 Series	VOSS 8.3
	VSP 8400 Series	VOSS 8.3
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 63: IP Route Policies product support**

Feature	Product	Release introduced
IP route policies	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 64: IP Shortcuts product support**

Feature	Product	Release introduced
IP Shortcut routing including ECMP	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 64: IP Shortcuts product support (continued)**

Feature	Product	Release introduced
IPv6 Shortcut routing	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported
IPv4 IS-IS accept policies	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
IPv6 IS-IS accept policies	VSP 4450 Series	VOSS 8.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 8.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 8.0
	VSP 8400 Series	VOSS 8.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported

**Table 65: IP Source Guard product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 6.1

**Table 65: IP Source Guard product support (continued)**

Feature	Product	Release introduced
IP Source Guard (IPv4)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50
IP Source Guard (IPv6)	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 66: IP Source Routing product support**

Feature	Product	Release introduced
IP Source Routing enable or disable	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 67: IPsec product support**

Feature	Product	Release introduced	Release deprecated
	VSP 4450 Series	Not Supported	Not Applicable

**Table 67: IPsec product support (continued)**

Feature	Product	Release introduced	Release deprecated
IPsec NAT-T	VSP 4900 Series	Not Supported	Not Applicable
	VSP 7200 Series	Not Supported	Not Applicable
	VSP 7400 Series	Not Supported	Not Applicable
	VSP 8200 Series	Not Supported	Not Applicable
	VSP 8400 Series	Not Supported	Not Applicable
	VSP 8600 Series	Not Supported	Not Applicable
	XA1400 Series	VOSS 8.1.50	Not Applicable
IPsec transport mode	VSP 4450 Series	VOSS 4.2	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 4.2	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	Not Supported	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
IPsec tunnel mode	VSP 4450 Series	Not Supported	Not Applicable
	VSP 4900 Series	Not Supported	Not Applicable
	VSP 7200 Series	Not Supported	Not Applicable
	VSP 7400 Series	Not Supported	Not Applicable
	VSP 8200 Series	Not Supported	Not Applicable
	VSP 8400 Series	Not Supported	Not Applicable
	VSP 8600 Series	Not Supported	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable
IPsec for the Out-of-band management port (IPv4)	VSP 4450 Series	VOSS 4.2	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 4.2.1	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 4.2	VOSS 8.2
	VSP 8400 Series	VOSS 4.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Applicable	Not Applicable

**Table 67: IPsec product support (continued)**

Feature	Product	Release introduced	Release deprecated
IPsec for the Out-of-band management port (IPv6)	VSP 4450 Series	VOSS 6.0	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 6.0	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 6.0	VOSS 8.2
	VSP 8400 Series	VOSS 6.0	VOSS 8.2
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Applicable	Not Applicable
Digital Certificates for IPsec Authentication	VSP 4450 Series	Not Supported	Not Applicable
	VSP 4900 Series	VOSS 8.3 VSP4900-12MXU-12XE and VSP4900-24XE for Fabric Extend over IPsec	Not Applicable
	VSP 7200 Series	Not Supported	Not Applicable
	VSP 7400 Series	VOSS 8.3 for Fabric Extend over IPsec	Not Applicable
	VSP 8200 Series	Not Supported	Not Applicable
	VSP 8400 Series	Not Supported	Not Applicable
	VSP 8600 Series	Not Supported	Not Applicable
	XA1400 Series	VOSS 8.3 for Fabric Extend over IPsec	Not Applicable

**Table 68: IPv6-in-IPv4 tunnels product support**

Feature	Product	Release introduced
IPv6-in-IPv4 tunnels	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 69: IPv6 Router Advertisement (RA) Guard product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 5.0

**Table 69: IPv6 Router Advertisement (RA) Guard product support (continued)**

Feature	Product	Release introduced
IPv6 Router Advertisement (RA) Guard	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 70: IQ Agent product support**

Feature	Product	Release introduced
ExtremeCloud IQ Agent	VSP 4450 Series	Not supported
	VSP 4900 Series	VOSS 8.2 <ul style="list-style-type: none"> <li>VSP4900-48P</li> <li>VIMs: VIM5-4YE, VIM5-4X, VIM5-4XE, and VIM5-2Y</li> </ul> VOSS 8.2.5 <ul style="list-style-type: none"> <li>VSP4900-24S</li> <li>VSP4900-24XE</li> <li>VSP4900-12MXU-12XE</li> <li>VIMs: VIM5-4Y</li> </ul>
	VSP 7200 Series	Not supported
	VSP 7400 Series	VOSS 8.2
	VSP 8200 Series	Not supported
	VSP 8400 Series	Not supported
	VSP 8600 Series	Not supported
	XA1400 Series	VOSS 8.2



**Table 70: IQ Agent product support (continued)**

Feature	Product	Release introduced
Unified Metrics and Events Reporting	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 71: IS-IS product support**

Feature	Product	Release introduced
IS-IS authentication with SHA-256	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
Suspend duplicate system ID detection	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 71: IS-IS product support (continued)**

Feature	Product	Release introduced
Multiple IS-IS parallel adjacencies	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported



## VOSS Features J to L

**Table 72: Key Health Indicator product support**

Feature	Product	Release introduced
Key Health Indicator (KHI)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 73: Layer 2 Video Surveillance install script product support**

Feature	Product	Release introduced
Layer 2 Video Surveillance install script	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1 To support this feature, VIM installation is mandatory in VSP4900-48P.
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 74: Layer 2 VSN product support**

Feature	Product	Release introduced
	VSP 4450 Series	VSP 4000 4.0

**Table 74: Layer 2 VSN product support (continued)**

Feature	Product	Release introduced
Equal Cost Trees (ECT)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Layer 2 Virtual Service Network (VSN)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
Switched UNI	XA1400 Series	VOSS 8.0.50
	VSP 4450 Series	VOSS 5.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	VSP 8600 6.3
XA1400 Series	Not Supported	

**Table 74: Layer 2 VSN product support (continued)**

Feature	Product	Release introduced
Transparent Port UNI (T-UNI)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2.1
	VSP 8400 Series	VOSS 4.2.1
	VSP 8600 Series	VSP 8600 6.3
	XA1400 Series	Not Supported

**Table 75: Layer 3 Video Surveillance install script product support**

Feature	Product	Release introduced
Layer 3 Video Surveillance install script (formerly known as the run vms endura script)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1 To support this feature, VIM installation is mandatory in VSP4900-48P.
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 76: Layer 3 VSN product support**

Feature	Product	Release introduced
	VSP 4450 Series	VSP 4000 4.0

**Table 76: Layer 3 VSN product support (continued)**

Feature	Product	Release introduced
Layer 3 VSN	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 77: Licensing product support**

Feature	Product	Release introduced
License files signed using Extreme Networks signature.	VSP 4450 Series	VOSS 6.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1.2
	VSP 8400 Series	VOSS 6.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
Subscription-based licenses	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50

**Table 77: Licensing product support (continued)**

Feature	Product	Release introduced
Ability to extend the Factory Default Premier Trial License	VSP 4450 Series	VOSS 8.4
	VSP 4900 Series	VOSS 8.4
	VSP 7200 Series	VOSS 8.4
	VSP 7400 Series	VOSS 8.4
	VSP 8200 Series	VOSS 8.4
	VSP 8400 Series	VOSS 8.4
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 78: Link Debounce for WAN Links**

Feature	Product	Release introduced
Link Debounce	VSP 4450 Series	VOSS 8.4.2
	VSP 4900 Series	VOSS 8.4.2
	VSP 7200 Series	VOSS 8.5
	VSP 7400 Series	VOSS 8.4.2
	VSP 8200 Series	VOSS 8.5
	VSP 8400 Series	VOSS 8.5
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 79: Link Layer Discovery Protocol product support**

Feature	Product	Release introduced
Industry Standard Discovery Protocol (ISDP) (CDP compatible)	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 79: Link Layer Discovery Protocol product support (continued)**

Feature	Product	Release introduced
Link Layer Discovery Protocol (LLDP)	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
Link Layer Discovery Protocol-Media Endpoint Discovery (LLDP-MED)	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	VOSS 8.0.50

**Table 80: Link-state tracking (LST) product support**

Feature	Product	Release introduced
Link-state tracking (LST)	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	Not Supported

**Table 81: Linux kernel version product support**

Feature	Product	Release introduced
Linux kernel version	VSP 4450 Series	4.9 as of VOSS 7.0
Important:	VSP 4900 Series	5.4 as of VOSS 8.6
	VSP 7200 Series	4.9 as of VOSS 7.0



**Table 81: Linux kernel version product support (continued)**

Feature	Product	Release introduced
For VSP 4450 Series, VSP 7200 Series, VSP 8200, and VSP 8400 Series, kernel version 4.9 has special upgrade considerations the first time you upgrade to a release that supports it. You must first upgrade to a stepping-stone release, 6.1.x , before you upgrade to the release with the new kernel.	VSP 7400 Series	5.4 as of VOSS 8.6
	VSP 8200 Series	4.9 as of VOSS 7.0
	VSP 8400 Series	4.9 as of VOSS 7.0
	VSP 8600 Series	4.9 as of VSP 8600 8.0
	XA1400 Series	5.4 as of VOSS 8.6

**Table 82: Logs and traps product support**

Feature	Product	Release introduced
Logging to a file and syslog (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Logging to a file and syslog (IPv6)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
Simple Mail Transfer Protocol (SMTP) for log notification	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 82: Logs and traps product support (continued)**

Feature	Product	Release introduced
System Logging compliance with RFC 5424 and RFC 3339	VSP 4450 Series	VOSS 6.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1.2
	VSP 8400 Series	VOSS 6.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
TLS client for secure syslog  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 8.0 demo feature
	XA1400 Series	VOSS 8.0.50



## VOSS Features M to O

**Table 83: MACsec product support**

Feature	Product	Release introduced
MACsec 2AN mode (static)  <b>Note:</b> VOSS 5.0 officially removed the replay protection commands. Do not use replay protection in earlier releases.	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.5
	VSP 7200 Series	VOSS 4.2.1 VSP 7254XTQ only
	VSP 7400 Series	Not Supported
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
MACsec 4AN mode (static)	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0 VSP 7254XTQ only
	VSP 7400 Series	Not Supported
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 83: MACsec product support (continued)**

Feature	Product	Release introduced
MACsec encryption cipher suites	VSP 4450 Series	VOSS 8.1 128 bits only
	VSP 4900 Series	VOSS 8.1 <ul style="list-style-type: none"> <li>VSP4900-48P supports 128-bit on all fixed ports.</li> <li>VSP4900-24XE supports 128-bit and 256-bit on all fixed ports.</li> <li>VSP4900-12MXU-12XE supports 128-bit and 256-bit on the SFP+ ports.</li> <li>VIM5-4XE and VIM5-4YE supports 128-bit and 256-bit cipher suite.</li> </ul>
	VSP 7200 Series	VOSS 8.1 128 bits only
	VSP 7400 Series	Not Supported
	VSP 8200 Series	VOSS 8.1 128 bits only
	VSP 8400 Series	VOSS 8.1 128 bits only
	VSP 8600 Series	VSP 8600 6.2 8624XS supports 128 bits only. 8606CQ supports 128 bits and 256 bits.
	XA1400 Series	Not Supported
MACsec Key Agreement (MKA)	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.5
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	VOSS 8.1
	VSP 8600 Series	VSP 8600 8.1
	XA1400 Series	Not Supported

**Table 84: Mroute statistics product support**

Feature	Product	Release introduced
	VSP 4450 Series	Not Supported

**Table 84: Mroute statistics product support (continued)**

Feature	Product	Release introduced
Multicast route (mroute) statistics for IPv4 and IPv6	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 85: MSTP-Fabric Connect Multi Homing product support**

Feature	Product	Release introduced
MSTP-Fabric Connect Multi Homing	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 86: Multi-area SPB**

Feature	Product	Release introduced
Multi-area SPB Boundary Node	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.4
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 86: Multi-area SPB (continued)**

Feature	Product	Release introduced
Static data I-SID redistribution for Multi-area SPB Boundary Node	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 87: Multicast Listener Discovery product support**

Feature	Product	Release introduced
Multicast Listener Discovery (MLD)	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 88: MultiLink Trunking product support**

Feature	Product	Release introduced
	VSP 4450 Series	VSP 4000 4.0

**Table 88: MultiLink Trunking product support (continued)**

Feature	Product	Release introduced
MultiLink Trunking (MLT) / Link Aggregation Group (LAG)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 89: Multiple CLI Users product support**

Feature	Product	Release introduced
Multiple CLI users per role	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	VOSS 8.0.50

**Table 90: Network Load Balancing product support**

Feature	Product	Release introduced
Network Load Balancing (NLB) - multicast operation	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 90: Network Load Balancing product support (continued)**

Feature	Product	Release introduced
Network Load Balancing (NLB) - unicast operation	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 91: Network operating system personality product support**

Feature	Product	Release introduced
Dual-boot personalities	VSP 4450 Series	Not Applicable
	VSP 4900 Series	Not Applicable
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	Not Applicable
	XA1400 Series	Not Applicable

**Table 92: Network Time Protocol product support**

Feature	Product	Release introduced	Release deprecated
NTPv3 client	VSP 4450 Series	VSP 4000 4.0	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 4.2.1	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VSP 8200 4.0	VOSS 8.2
	VSP 8400 Series	VOSS 4.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 4.5	Not Applicable
	XA1400 Series	VOSS 8.0.50	VOSS 8.2



**Table 92: Network Time Protocol product support (continued)**

Feature	Product	Release introduced	Release deprecated
NTPv3 with SHA authentication	VSP 4450 Series	VOSS 5.1	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 5.1	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 5.1	VOSS 8.2
	VSP 8400 Series	VOSS 5.1	VOSS 8.2
	VSP 8600 Series	VSP 8600 4.5	Not Applicable
	XA1400 Series	VOSS 8.0.50	VOSS 8.2
NTPv4 client for IPv4	VSP 4450 Series	VOSS 7.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 7.0	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 7.0	Not Applicable
	VSP 8400 Series	VOSS 7.0	Not Applicable
	VSP 8600 Series	VSP 8600 8.0	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
NTPv4 client for IPv6	VSP 4450 Series	VOSS 7.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 7.0	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 7.0	Not Applicable
	VSP 8400 Series	VOSS 7.0	Not Applicable
	VSP 8600 Series	VSP 8600 8.0	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
NTPv4 master and restrict	VSP 4450 Series	VOSS 8.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 8.0	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 8.0	Not Applicable
	VSP 8400 Series	VOSS 8.0	Not Applicable
	VSP 8600 Series	VSP 8600 8.0 demonstration feature	Not Applicable
	XA1400 Series	Not Supported	Not Applicable

**Table 92: Network Time Protocol product support (continued)**

Feature	Product	Release introduced	Release deprecated
NTP Authentication Key Obfuscation	VSP 4450 Series	VOSS 8.8	Not Applicable
	VSP 4900 Series	VOSS 8.8	Not Applicable
	VSP 7200 Series	VOSS 8.8	Not Applicable
	VSP 7400 Series	VOSS 8.8	Not Applicable
	VSP 8200 Series	VOSS 8.8	Not Applicable
	VSP 8400 Series	VOSS 8.8	Not Applicable
	VSP 8600 Series	VSP 8600 8.1	Not Applicable
	XA1400 Series	VOSS 8.8	Not Applicable

**Table 93: nni-mstp boot flag product support**

Feature	Product	Release introduced
nni-mstp boot flag ( <b>boot config flags nni-mstp</b> )	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 94: OSPF product support**

Feature	Product	Release introduced
Open Shortest Path First (OSPF)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 94: OSPF product support (continued)**

Feature	Product	Release introduced
Secure hash algorithm 1 (SHA-1) and SHA-2	VSP 4450 Series	VOSS 4.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 95: OSPFv3 product support**

Feature	Product	Release introduced
OSPFv3	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
OSPFv3 support for CLIP interfaces	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	VSP 8600 8.1
	XA1400 Series	Not Supported



## VOSS Features P to R

**Table 96: Password Hash**

Feature	Product	Release introduced
<b>Note:</b> Upgrading results in SHA1 password hashes and custom users being retained, until a factory default reset or until the password hash level is changed. During a factory default reset, SHA2 512-bit becomes the default password hash, all custom users are deleted, and SHA1 passwords are removed.	VSP 4450 Series	VOSS 8.8
	VSP 4900 Series	VOSS 8.8
	VSP 7200 Series	VOSS 8.8
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	VOSS 8.8
	VSP 8400 Series	VOSS 8.8
	VSP 8600 Series	VSP 8600 8.1
	XA1400 Series	VOSS 8.8

**Table 97: PIM over IPv6 product support**

Feature	Product	Release introduced
PIM over IPv6	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 98: Port-Based Rate Limiting, Policing, and Shaping product support**

Feature	Product	Release introduced
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**Table 98: Port-Based Rate Limiting, Policing, and Shaping product support (continued)**

Feature	Product	Release introduced
Platform specific considerations for QoS behavior are documented in QoS Behavior Differences, which is in <a href="#">VOSS User Guide</a> .		
Egress port shaper	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported
Ingress dual rate port policers	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported
Ingress policer and port rate limiter	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.5
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.5
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 98: Port-Based Rate Limiting, Policing, and Shaping product support (continued)**

Feature	Product	Release introduced
QoS ingress port rate limiter	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	Not Supported
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1.50

**Table 99: Port Mirroring product support**

Feature	Product	Release introduced
Ingress mirroring (port and flow-based)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Egress mirroring (port-based)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 100: Power Manager product support**

Feature	Product	Release introduced
	VSP 4450 Series	Not Supported

**Table 100: Power Manager product support (continued)**

Feature	Product	Release introduced
Power Management	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 101: Power over Ethernet product support**

Feature	Product	Release introduced
Power over Ethernet (PoE)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1 VSP4900-48P and first 12 ports of VSP4900-12MXU-12XE only
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	Not Applicable
	XA1400 Series	Not Supported
PoE/PoE+ allocation using LLDP	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1 VSP4900-48P and first 12 ports of VSP4900-12MXU-12XE only
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	Not Applicable
	XA1400 Series	Not Supported

**Table 101: Power over Ethernet product support (continued)**

Feature	Product	Release introduced
Fast PoE	VSP 4450 Series	Not Applicable
	VSP 4900 Series	VOSS 8.1 VSP4900-48P and first 12 ports of VSP4900-12MXU-12XE only
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	Not Applicable
	XA1400 Series	Not Supported
Perpetual PoE	VSP 4450 Series	Not Applicable
	VSP 4900 Series	VOSS 8.1 VSP4900-48P and first 12 ports of VSP4900-12MXU-12XE only.
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	Not Applicable
	XA1400 Series	Not Supported

**Table 102: Protocol Independent Multicast-Source Specific Mode product support**

Feature	Product	Release introduced
PIM-Source Specific Mode (PIM-SSM) for IPv4	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.0.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 103: Protocol Independent Multicast - Sparse Mode product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 4.1



**Table 103: Protocol Independent Multicast - Sparse Mode product support (continued)**

Feature	Product	Release introduced
Protocol Independent Multicast-Sparse Mode (PIM-SM) for IPv4	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.0.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported
PIM Infinite Threshold for IPv4 and IPv6	VSP 4450 Series	VOSS 8.5
	VSP 4900 Series	VOSS 8.5
	VSP 7200 Series	VOSS 8.5
	VSP 7400 Series	VOSS 8.5
	VSP 8200 Series	VOSS 8.5
	VSP 8400 Series	VOSS 8.5
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 104: QoS and VoIP product support**

Feature	Product	Release introduced
Platform specific considerations for QoS behavior are documented in QoS Behavior Differences, which is in <a href="#">VOSS User Guide</a> .		
Automatic QoS	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 105: Queue Profiles product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 5.1

**Table 105: Queue Profiles product support (continued)**

Feature	Product	Release introduced
QoS per queue rate limiting	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.1
	VSP 8400 Series	VOSS 5.1.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 106: RADIUS product support**

Feature	Product	Release introduced	Release deprecated
RADIUS (IPv6)	VSP 4450 Series	VOSS 4.1	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 4.1	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
RADIUS, community-based users (IPv4)	VSP 4450 Series	VSP 4000 4.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VSP 8200 4.0	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 4.5	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable

**Table 106: RADIUS product support (continued)**

Feature	Product	Release introduced	Release deprecated
RADIUS secure communication using IPSec for IPv4  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8400 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature	Not Applicable
	XA1400 Series	VOSS 8.0.50	VOSS 8.2
RADIUS secure communication using IPSec for IPv6  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8400 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
RADIUS Security (RADSec)	VSP 4450 Series	VOSS 8.2	Not Applicable
	VSP 4900 Series	VOSS 8.2	Not Applicable
	VSP 7200 Series	VOSS 8.2	Not Applicable
	VSP 7400 Series	VOSS 8.2	Not Applicable
	VSP 8200 Series	VOSS 8.2	Not Applicable
	VSP 8400 Series	VOSS 8.2	Not Applicable
	VSP 8600 Series	Not Supported	Not Applicable
	XA1400 Series	VOSS 8.2	Not Applicable
RFC 5176 – Dynamic Authorization Extensions to RADIUS	VSP 4450 Series	VOSS 7.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 7.0	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 7.0	Not Applicable
	VSP 8400 Series	VOSS 7.0	Not Applicable
	VSP 8600 Series	Not supported	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable

**Table 106: RADIUS product support (continued)**

Feature	Product	Release introduced	Release deprecated
RFC 5997 - RADIUS Reachability Server Status	VSP 4450 Series	VOSS 7.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 7.0	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 7.0	Not Applicable
	VSP 8400 Series	VOSS 7.0	Not Applicable
	VSP 8600 Series	Not supported	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable

**Table 107: Remote Monitoring product support**

Feature	Product	Release introduced
Remote Monitoring 1 (RMON1) for Layer 1 and Layer 2  <b>Note:</b> VOSS Release 5.0 and 5.1 do not support RMON1.	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported
Remote Monitoring 2 (RMON2) for network and application layer protocols	VSP 4450 Series	VOSS 4.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.2

**Table 108: Representational State Transfer Configuration Protocol (RESTCONF) product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 8.0
	VSP 4900 Series	VOSS 8.1

**Table 108: Representational State Transfer Configuration Protocol (RESTCONF) product support (continued)**

Feature	Product	Release introduced
Representational State Transfer Configuration Protocol (RESTCONF)	VSP 7200 Series	VOSS 8.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 8.0
	VSP 8400 Series	VOSS 8.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 109: RIPng product support**

Feature	Product	Release introduced
RIPng	VSP 4450 Series	VOSS 5.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 110: Routing Information Protocol product support**

Feature	Product	Release introduced
Routing Information Protocol (RIP)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 111: RSMLT for IPv4 product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 4.1

**Table 111: RSMLT for IPv4 product support (continued)**

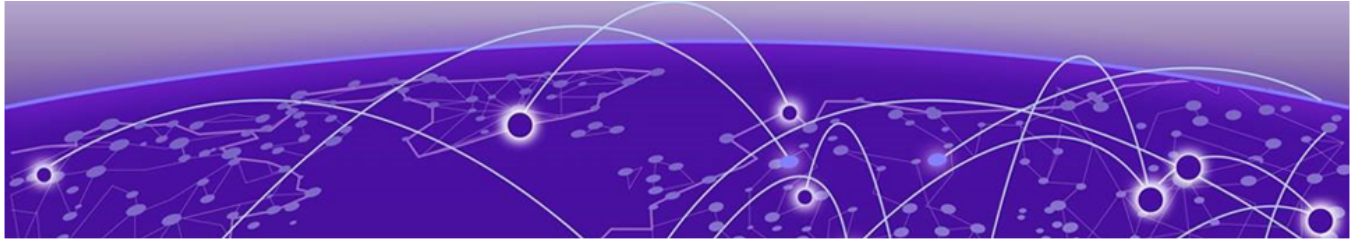
Feature	Product	Release introduced
IPv4 RSMLT	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 112: RSMLT for IPv6 product support**

Feature	Product	Release introduced
IPv6 RSMLT	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 113: run spbm installation script product support**

Feature	Product	Release introduced
run spbm installation script	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported



## VOSS Features S to U

**Table 114: Secure Shell product support**

Feature	Product	Release introduced
Secure Shell (SSH) server (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Secure Shell (SSH) client (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Secure Sockets Layer (SSL) certificate management	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 114: Secure Shell product support (continued)**

Feature	Product	Release introduced
SSH server (IPv6)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
SSH client (IPv6)	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported
SSH client disable	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
SSH key sizes in multiples of 1024  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this change.	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50



**Table 114: Secure Shell product support (continued)**

Feature	Product	Release introduced
SSH rekey	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.1

**Table 115: Segmented Management Instance product support**

Feature	Product	Release introduced
Segmented Management Instance - Management Interface CLIP	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	VOSS 8.1.1 - IPv4 only  <b>Note:</b> VOSS 8.1.50 does not support this feature.
Segmented Management Instance - Management Interface OOB interface	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.2
	VSP 7200 Series	VOSS 8.2
	VSP 7400 Series	VOSS 8.2
	VSP 8400 Series	VOSS 8.2
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 115: Segmented Management Instance product support (continued)**

Feature	Product	Release introduced
Segmented Management Instance - Management Interface VLAN	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1.1 - IPv4 only VOSS 8.2 added IPv6  <b>Note:</b> VOSS 8.1.50 does not support this feature.
Segmented Management Instance — ability to migrate VLAN or loopback IP address	VSP 4450 Series	VOSS 8.2
	VSP 4900 Series	VOSS 8.2
	VSP 7200 Series	VOSS 8.2
	VSP 7400 Series	VOSS 8.2
	VSP 8200 Series	VOSS 8.2
	VSP 8400 Series	VOSS 8.2
	VSP 8600 Series	Not Supported
Segmented Management Instance — DHCP Client for Management Interface OOB or Management Interface VLAN	VSP 4450 Series	VOSS 8.2 OOB not supported
	VSP 4900 Series	VOSS 8.2
	VSP 7200 Series	VOSS 8.2
	VSP 7400 Series	VOSS 8.2
	VSP 8200 Series	VOSS 8.2
	VSP 8400 Series	VOSS 8.2
	VSP 8600 Series	Not Supported
XA1400 Series	VOSS 8.2 OOB not supported	

**Table 115: Segmented Management Instance product support (continued)**

Feature	Product	Release introduced
Segmented Management Instance - sFlow, Application Telemetry, and IPFIX	VSP 4450 Series	VOSS 8.8
	VSP 4900 Series	VOSS 8.8
	VSP 7200 Series	VOSS 8.8
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	VOSS 8.8
	VSP 8400 Series	VOSS 8.8
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 116: sFlow product support**

Feature	Product	Release introduced
sFlow	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
sFlow collector reachability on user-created VRFs	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 116: sFlow product support (continued)**

Feature	Product	Release introduced
sFlow — using Segmented Management Instance OOB interface as source IP	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.8
	VSP 7200 Series	VOSS 8.8
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	VOSS 8.8
	VSP 8400 Series	VOSS 8.8
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
sFlow — using Segmented Management Instance VLAN interface as source IP	VSP 4450 Series	VOSS 8.8
	VSP 4900 Series	VOSS 8.8
	VSP 7200 Series	VOSS 8.8
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	VOSS 8.8
	VSP 8400 Series	VOSS 8.8
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
sFlow — using Segmented Management Instance CLIP (GRT and VRFs) interface as source IP	VSP 4450 Series	VOSS 8.8
	VSP 4900 Series	VOSS 8.8
	VSP 7200 Series	VOSS 8.8
	VSP 7400 Series	VOSS 8.8
	VSP 8200 Series	VOSS 8.8
	VSP 8400 Series	VOSS 8.8
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 117: Simple Loop Prevention Protocol product support**

Feature	Product	Release introduced
	VSP 4450 Series	VSP 4000 4.0

**Table 117: Simple Loop Prevention Protocol product support (continued)**

Feature	Product	Release introduced
Simple Loop Prevention Protocol (SLPP)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 118: Simple Network Management Protocol product support**

Feature	Product	Release introduced
Simple Network Management Protocol (SNMP) v1/2/3 (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
SNMP (IPv6)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 119: SLA Mon product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 4.1

**Table 119: SLA Mon product support (continued)**

Feature	Product	Release introduced
SLA Mon	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 120: SLPP Guard product support**

Feature	Product	Release introduced
SLPP Guard	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	VOSS 8.0.50

**Table 121: SONMP product support**

Feature	Product	Release introduced
SONMP	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 122: Spanning Tree Protocol product support**

Feature	Product	Release introduced
	VSP 4450 Series	VSP 4000 4.0

**Table 122: Spanning Tree Protocol product support (continued)**

Feature	Product	Release introduced
Spanning Tree Protocol (STP): <ul style="list-style-type: none"> <li>• Multiple STP (MSTP)</li> <li>• Rapid STP (RSTP)</li> </ul>	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 123: spbm-config-mode product support**

Feature	Product	Release introduced
spbm-config-mode ( <b>boot config flags spbm-config-mode</b> )	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 124: SPB-PIM Gateway product support**

Feature	Product	Release introduced
SPB-PIM Gateway controller node	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1.5 VSP4900-12MXU-12XE, VSP4900-24S, and VSP4900-24XE only
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 124: SPB-PIM Gateway product support (continued)**

Feature	Product	Release introduced
SPB-PIM Gateway interface	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 125: Static routing product support**

Feature	Product	Release introduced
Static routing	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 126: TACACS+ product support**

Feature	Product	Release introduced
TACACS+	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50



**Table 126: TACACS+ product support (continued)**

Feature	Product	Release introduced
TACACS+ secure communication using IPSec for IPv4  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	VOSS 8.0.50

**Table 127: TLS server for secure HTTPS product support**

Feature	Product	Release introduced
TLS server for secure HTTPS  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 128: Two-Factor Authentication for SSH product support**

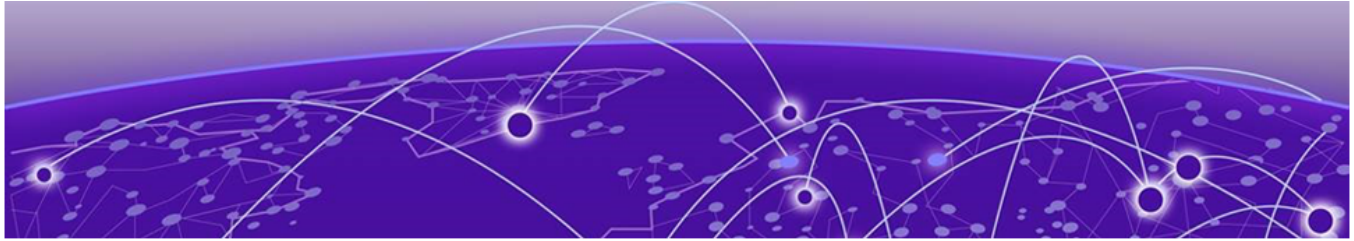
Feature	Product	Release introduced
	VSP 4450 Series	VOSS 8.0

**Table 128: Two-Factor Authentication for SSH product support (continued)**

Feature	Product	Release introduced
Two-Factor Authentication for SSH	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 8.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 8.0
	VSP 8400 Series	VOSS 8.0
	VSP 8600 Series	VSP 8600 8.0 demo feature
	XA1400 Series	VOSS 8.0.50

**Table 129: Unicast Reverse Path Forwarding product support**

Feature	Product	Release introduced
Unicast Reverse Path Forwarding (URPF) checking (IPv4)	VSP 4450 Series	VOSS 5.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported
Unicast Reverse Path Forwarding (URPF) checking (IPv6)	VSP 4450 Series	VOSS 5.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported



## VOSS Features V to X

**Table 130: Virtual Inter-Switch Trunk product support**

Feature	Product	Release introduced
Switch cluster (multi-chassis LAG) -Virtual Inter-Switch Trunk (vIST)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	Not Supported

**Table 131: Virtual Link Aggregation Control Protocol (VLACP) product support**

Feature	Product	Release introduced
Virtual Link Aggregation Control Protocol (VLACP)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 131: Virtual Link Aggregation Control Protocol (VLACP) product support (continued)**

Feature	Product	Release introduced
VLACP Flap Detect and Damping	VSP 4450 Series	VOSS 7.1.5
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 8.1
	VSP 7400 Series	VOSS 8.1
	VSP 8200 Series	VOSS 8.1
	VSP 8400 Series	VOSS 8.1
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	VOSS 8.1

**Table 132: Virtual Router Redundancy Protocol product support**

Feature	Product	Release introduced
Virtual Router Redundancy Protocol (VRRP)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
VRRPv3 for IPv4	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 133: Virtual Router Redundancy Protocol for IPv6 product support**

Feature	Product	Release introduced
	VSP 4450 Series	VOSS 4.1

**Table 133: Virtual Router Redundancy Protocol for IPv6 product support (continued)**

Feature	Product	Release introduced
IPv6 VRRP	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
VRRPv3 for IPv6	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 134: Virtual Routing and Forwarding product support**

Feature	Product	Release introduced
Virtualization with IPv4 Virtual Routing and Forwarding (VRF) <ul style="list-style-type: none"> <li>• ARP</li> <li>• DHCP Relay</li> <li>• Inter-VRF Routing (static, dynamic, and policy)</li> <li>• Local routing</li> <li>• OSPFv2</li> <li>• RIPv1 and v2</li> <li>• Route policies</li> <li>• Static routing</li> <li>• VRRP</li> </ul>	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 134: Virtual Routing and Forwarding product support (continued)**

Feature	Product	Release introduced
Increased VRF and Layer 3 VSN scaling	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported
IBGP over user-created VRFs	VSP 4450 Series	VOSS 8.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 8.1
	VSP 7400 Series	VOSS 8.1
	VSP 8200 Series	VOSS 8.1
	VSP 8400 Series	VOSS 8.1
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	Not Supported
IPv6 Virtualization for the following features and functions: <ul style="list-style-type: none"> <li>• IPv6 Interfaces and IPv6 Static Routes in VRFs and Layer 3 VSNs</li> <li>• ECMP and Alternative route</li> <li>• Route redistribution for static and direct routes</li> <li>• VRRPv3 for IPv6</li> <li>• DHCP Relay</li> <li>• IPv6 Reverse Path Forwarding</li> <li>• ICMP Ping and Traceroute</li> </ul>	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported

**Table 134: Virtual Routing and Forwarding product support (continued)**

Feature	Product	Release introduced
IPv6 Virtualization for the following features and functions: <ul style="list-style-type: none"> <li>• Open Shortest Path First for IPv6 (OSPFv3)</li> <li>• IPv6 Border Gateway Protocol (IPv6 BGP)</li> <li>• IPv6 route redistribution enhancements</li> </ul>	VSP 4450 Series	VOSS 8.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 8.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 8.0
	VSP 8400 Series	VOSS 8.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported

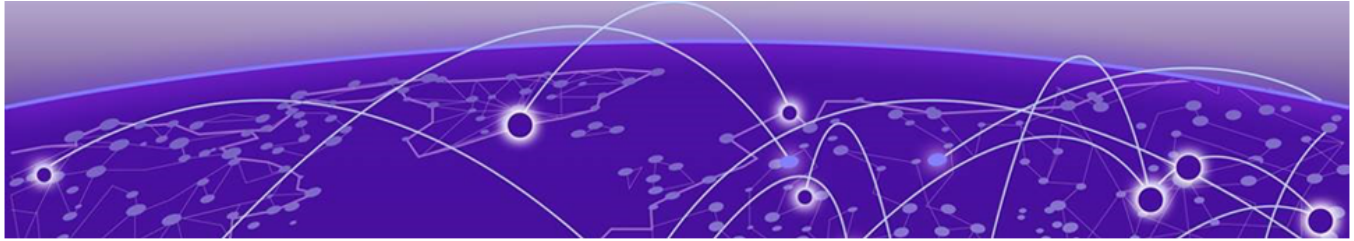
**Table 135: VXLAN Gateway product support**

Feature	Product	Release introduced
VXLAN Gateway	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
OVSDB protocol support for VXLAN Gateway	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	VOSS 7.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.1
	VSP 8400 Series	VOSS 7.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 135: VXLAN Gateway product support (continued)**

Feature	Product	Release introduced
ECMP support for VXLAN Gateway	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported





## VOSS Features Y and Z

**Table 136: Zero Touch Deployment product support**

Feature	Product	Release introduced
Zero Touch Deployment	VSP 4450 Series	VOSS 8.2
	VSP 4900 Series	VOSS 8.2 VIMs: VIM5-4YE, VIM5-4X, VIM5-4XE, and VIM5-2Y only
	VSP 7200 Series	VOSS 8.2
	VSP 7400 Series	VOSS 8.2
	VSP 8200 Series	VOSS 8.2
	VSP 8400 Series	VOSS 8.2
	VSP 8600 Series	Not supported
	XA1400 Series	VOSS 8.2

**Table 137: Zero Touch Fabric Configuration product support**

Feature	Product	Release introduced
Zero Touch Fabric Configuration	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0.5
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 137: Zero Touch Fabric Configuration product support (continued)**

Feature	Product	Release introduced
LLDP Fabric Connect TLV	VSP 4450 Series	VOSS 8.3
	VSP 4900 Series	VOSS 8.3
	VSP 7200 Series	VOSS 8.3
	VSP 7400 Series	VOSS 8.3
	VSP 8200 Series	VOSS 8.3
	VSP 8400 Series	VOSS 8.3
	VSP 8600 Series	VSP 8600 8.1
	XA1400 Series	Not Supported

**Table 138: Zero Touch Provisioning Plus product support**

Feature	Product	Release introduced
Zero Touch Provisioning Plus	VSP 4450 Series	VOSS 8.2.5
	VSP 4900 Series	VOSS 8.2.5
	VSP 7200 Series	VOSS 8.2.5
	VSP 7400 Series	VOSS 8.2.5
	VSP 8200 Series	VOSS 8.2.5
	VSP 8400 Series	VOSS 8.2.5
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.2.5