

## **VOSS Feature Support Matrix**

For VOSS Release 8.4

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## **About this Document**

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Documentation and Training on page 5
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This section discusses the purpose of this document, ways to provide feedback, additional help, and information regarding other Extreme Networks publications.

## **Purpose**

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

- ExtremeSwitching 5420 Series
- ExtremeSwitching 5520 Series
- 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 29 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.

## **Documentation and Training**

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/.

## **Getting Help**

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

A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

### Call GTAC

For immediate support: (800) 998 2408 (toll-free in U.S. and Canada) or 1 (408) 579 2826. For the support phone number in your country, visit: www.extremenetworks.com/support/contact

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

## Subscribe to Product Announcements

You can subscribe to email notifications for product and software release announcements, Field Notices, and Vulnerability Notices.

- 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.

You can modify your product selections or unsubscribe at any time.

## **Providing Feedback**

The Information Development team at Extreme Networks has made every effort to ensure the accuracy and completeness of this document. We are always striving to improve our documentation and help you work better, so we want to hear from you. We welcome all feedback, but we especially want to know about:

- Content errors, or confusing or conflicting information.
- Improvements that would help you find relevant information in the document.
- Broken links or usability issues.

If you would like to provide feedback, you can do so in three ways:

- In a web browser, select the feedback icon and complete the online feedback form.
- Access the feedback form at https://www.extremenetworks.com/documentation-feedback/.
- Email us at documentation@extremenetworks.com.

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
For configuration details, see VOSS User Guide.		
Platform specific considerations f Differences, which is in <i>VOSS Use</i>	or ACL and ACE behavior are docu r <i>Guide</i> .	mented in ACL Filters Behavior
QoS Access Control Entries	5420 Series	VOSS 8.4
(ACE)	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 1: Access Control Entry product support (continued)** 

Feature	Product	Release introduced
Filter enhancement - Apply ACE	5420 Series	VOSS 8.4
to Routed Packets only	5520 Series	VOSS 8.4
	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 2: Access Control List product support** 

Feature	Product	Release introduced
For configuration details, see VOS	S User Guide.	
Platform specific considerations for Differences, which is in <i>VOSS User</i>	or ACL and ACE behavior are docuing <i>Guide</i> .	mented in ACL Filters Behavior
Access Control List (ACL)-based	5420 Series	VOSS 8.4
filtering, including egress ACLs, ingress ACLs, Layer 2 to Layer 4	5520 Series	VOSS 8.2.5
filtering, port-based, and VLAN-based	VSP 4450 Series	VSP 4000 4.0
Dased	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	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 3: Address Resolution Protocol product support** 

Feature	Product	Release introduced

**Table 3: Address Resolution Protocol product support (continued)** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Address Resolution Protocol	5420 Series	VOSS 8.4
(ARP) including Proxy ARP and Static ARP	5520 Series	VOSS 8.2.5
	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 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Gratuitous ARP filtering	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
For configuration details, see VOS	S User Guide.	
Advanced Feature Bandwidth	5420 Series	VOSS 8.4
Reservation	5520 Series	VOSS 8.2.5
Note:  If your switch does not have this boot flag, it is because the hardware reserves the	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.0

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

Feature	Product	Release introduced
bandwidth automatically with no	VSP 8200 Series	Not Supported
user interaction.	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
For configuration details, see <i>VOSS User Guide</i> .		
Alternative routes for IPv4	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
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**Table 6: Application Telemetry product support (continued)** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Application Telemetry	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 7.1
	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	5420 Series	VOSS 8.4
Monitoring	5520 Series	VOSS 8.2.5
	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

Table 7: Authentication for Privileged EXEC Mode product support

Feature   Product   Release introduced
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Table 7: Authentication for Privileged EXEC Mode product support (continued)

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Authentication for Privileged	5420 Series	VOSS 8.4
EXEC CLI Command Mode	5520 Series	VOSS 8.2.5
	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
For configuration details, see <i>VOSS User Guide</i> .		
Auto-Negotiation	5420 Series	VOSS 8.4 Switch models:  • 5420F-24T-4XE, 5420F-24P-4XE, 5420F-48T-4XE, 5420F-48P-4XE, 5420F-24S-4XE, 5420F-8W-16P-4XE, 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE, 5420M-24W-4YE, 5420M-24T-4YE, 5420M-16MW-32P-4YE  Note:  SFP-DD ports are only available if you disable Advanced Feature Bandwidth Reservation.
	5520 Series	VOSS 8.2.5 Switch models: • 5520-24T, 5520-24W, 5520-48T, 5520-48W, 5520-12MW-36W

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

Feature	Product	Release introduced
		5520-48SE QSFP28/QSFP+ ports, and all fixed fiber ports, at 1 Gbps only
		Note:  QSFP28 ports are only available if you disable Advanced Feature Bandwidth Reservation.  5520-VIM-4XE at 1 Gbps only
		and 5520-VIM-4YE at 25 Gbps only
	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1 Switch models:  VSP4900-24S and VSP4900-48P - all fixed ports  VSP4900-12MXU-12XE - all fixed ports, with ports 13 to 24 at 1 Gbps only  VSP4900-24XE - all fixed ports at 1 Gbps only  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
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Table 9: Auto-sense product support (continued)

Feature	Product	Release introduced
For configuration details, see <i>VOSS User Guide</i> .		
Auto-sense	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	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 enhancement -	5420 Series	VOSS 8.4
DHCP port snooping	5520 Series	VOSS 8.4
	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 10: Bidirectional Forwarding Detection (BFD) product support

Feature	Product	Release introduced

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

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
BFD (IPv4)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	Not Supported
	XA1400 Series	Not Supported
BFD (IPv6)	5420 Series	VOSS 8.4 demonstration feature
	5520 Series	VOSS 8.2.5 demonstration feature
	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

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

Feature	Product	Release introduced
BFD over Fabric Extend Tunnels	5420 Series	VOSS 8.4
(IPv4)	5520 Series	VOSS 8.2.5
	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
For configuration details, see <i>VOSS User Guide</i> .		
Border Gateway Protocol for	5420 Series	VOSS 8.4
IPv4 (BGPv4)	5520 Series	VOSS 8.2.5
	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
BGP+ (BGPv4 for IPv6).	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 11: Border Gateway Protocol product support (continued)** 

Feature	Product	Release introduced
BGPv6	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
redistribution	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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

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

Feature	Product	Release introduced		
For configuration details, see VOSS User Guide.				
Bridge Protocol Data Unit	5420 Series	VOSS 8.4		
(BPDU) Guard	5520 Series	VOSS 8.2.5		
	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		
For configuration details, see VOSS User Guide.				
Certificate order priority	5420 Series	VOSS 8.4		
Note:	5520 Series	VOSS 8.2.5		
VOSS Releases 6.0 and 6.0.1 do	VSP 4450 Series	VOSS 5.1.2		
not support this feature.	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	Not Supported		
	XA1400 Series	VOSS 8.0.50		

**Table 14: Channelization product support** 

**Table 14: Channelization product support (continued)** 

Feature	Product	Release introduced		
For configuration details, see <i>VOSS User Guide</i> .				
Channelization of 40 Gbps ports	5420 Series	Not Applicable		
	5520 Series	VOSS 8.2.5		
	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	5420 Series	Not Applicable		
	5520 Series	Not Applicable		
	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
- 1				

Table 15: Client and Server product support (continued)

Feature	Product	Release introduced	Release deprecated
For configuration details	s, see <i>VOSS User Guide</i> .	,	
File Transfer Protocol (FTP) server and client (IPv4)	5420 Series	VOSS 8.4	Not Applicable
	5520 Series	VOSS 8.2.5	Not Applicable
	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
File Transfer Protocol	5420 Series	VOSS 8.4	Not Applicable
(FTP) server and client (IPv6)	5520 Series	VOSS 8.2.5	Not Applicable
()	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	5420 Series	VOSS 8.4	Not Applicable
Protocol (HTTP) and Hypertext Transfer	5520 Series	VOSS 8.2.5	Not Applicable
Protocol Secure	VSP 4450 Series	VOSS 4.1	Not Applicable
(HTTPS) (IPv4)	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
Hypertext Transfer	5420 Series	VOSS 8.4	Not Applicable
Protocol (HTTP) and Hypertext Transfer	5520 Series	VOSS 8.2.5	Not Applicable
Protocol Secure	VSP 4450 Series	VOSS 4.1	Not Applicable
(HTTPS) (IPv6)	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
Remote Login (Rlogin)	5420 Series	Not Supported	Not Applicable
server/client (IPv4)	5520 Series	Not Supported	Not Applicable
	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)	5420 Series	Not Supported	Not Applicable
	5520 Series	Not Supported	Not Applicable
	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

Table 15: Client and Server product support (continued)

Feature	Product	Release introduced	Release deprecated
Rlogin client (IPv6)	5420 Series	Not Supported	Not Applicable
	5520 Series	Not Supported	Not Applicable
	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)	5420 Series	Not Supported	Not Applicable
server/client	5520 Series	Not Supported	Not Applicable
	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
Secure Copy (SCP)	5420 Series	VOSS 8.4	Not Applicable
Note:	5520 Series	VOSS 8.2.5	Not Applicable
The switch does not	VSP 4450 Series	VSP 4000 4.0	Not Applicable
support the WinSCP client.	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

Table 15: Client and Server product support (continued)

Feature	Product	Release introduced	Release deprecated
Secure File Transfer Protocol (SFTP) server (IPv4)	5420 Series	VOSS 8.4	Not Applicable
	5520 Series	VOSS 8.2.5	Not Applicable
	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	5420 Series	VOSS 8.4	Not Applicable
Protocol (SFTP) server (IPv6)	5520 Series	VOSS 8.2.5	Not Applicable
	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	5420 Series	VOSS 8.4	Not Applicable
(IPv4)	5520 Series	VOSS 8.2.5	Not Applicable
	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)	5420 Series	VOSS 8.4	Not Applicable
	5520 Series	VOSS 8.2.5	Not Applicable
	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	5420 Series	VOSS 8.4	Not Applicable
Protocol (TFTP) server and client (IPv4)	5520 Series	VOSS 8.2.5	Not Applicable
	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)	5420 Series	VOSS 8.4	Not Applicable
	5520 Series	VOSS 8.2.5	Not Applicable
	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)	5420 Series	VOSS 8.4	Not Applicable
	5520 Series	VOSS 8.2.5	Not Applicable
	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	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Command Line Interface (CLI)	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.2.5	
	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
For configuration details, see VOSS User Guide.		
IEEE 802.1ag Connectivity Fault Management (CFM):  • Layer 2 Ping  • TraceRoute	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1

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

Feature	Product	Release introduced
TraceTree	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
CFM configuration on C-VLANs	5420 Series	Not Supported
	5520 Series	Not Supported
	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
For configuration details, see VOS	SS User Guide.	
Custom logon banner	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
		Note: 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
For configuration details, see <i>VOSS User Guide</i> .		
Directed Broadcast	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
configuration flag)	5520 Series	VOSS 8.2.5
	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
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Table 20: DHCPv6 Guard product support (continued)

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
DHCPv6 Guard	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.2.5	
	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	Not Supported	

**Table 21: Differentiated Services product support** 

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Differentiated Services (DiffServ)	5420 Series	VOSS 8.4	
including Per-Hop Behavior	5520 Series	VOSS 8.2.5	
	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
For configuration details, see VOSS User Guide.		
Digital Certificate/PKI	5420 Series	VOSS 8.4
Note:	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1

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

Feature	Product	Release introduced
VOSS Releases 6.0 and 6.0.1 do not support this feature.	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
Subject alternative name	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	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

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

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Distributed Virtual Routing (DvR) Controller	5420 Series	Not Supported
	5520 Series	VOSS 8.2.5
Important:	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1.5

Table 23: Distributed Virtual Routing product support (continued)

Feature	Product	Release introduced
Because of a change in VOSS 6.0.1.2, the best practice is to use a minimum software version of		VSP4900-12MXU-12XE, VSP4900-24S, and VSP4900-24XE only
6.0.1.2 in DvR deployments.	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	VSP 8600 8.0
	XA1400 Series	Not Supported
Distributed Virtual Routing	5420 Series	VOSS 8.4
(DvR) Leaf	5520 Series	VOSS 8.2.5
Important:	VSP 4450 Series	VOSS 6.1
Because of a change in VOSS 6.0.1.2, the best practice is to use	VSP 4900 Series	VOSS 8.1
a minimum software version of 6.0.1.2 in DvR deployments.	VSP 7200 Series	VOSS 6.0.1
0.0.1.2 III DVIX deployments.	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
Distributed Virtual Routing	5420 Series	VOSS 8.4
(DvR) dvr-one-ip	5520 Series	VOSS 8.3
	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	VSP 8600 8.0
	XA1400 Series	Not Supported

Table 23: Distributed Virtual Routing product support (continued)

Feature	Product	Release introduced
Distributed Virtual Routing (DvR) In-band Management	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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: Domain Name Service product support** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Domain Name Service (DNS) client (IPv4)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 24: Domain Name Service product support (continued)** 

Feature	Product	Release introduced
DNS client (IPv6)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 25: Dynamic ARP Inspection (DAI) product support

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Dynamic ARP Inspection (DAI)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 26: Dynamic Host Configuration Protocol product support** 

Feature	Product	Release introduced

**Table 26: Dynamic Host Configuration Protocol product support (continued)** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Dynamic Host Configuration Protocol (DHCP) Relay	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
DHCP Option 82	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 Relay for IPv6 product support

Feature	Product	Release introduced

Table 27: Dynamic Host Configuration Protocol Relay for IPv6 product support (continued)

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
IPv6 DHCP Relay	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 28: Dynamic Host Configuration Protocol Snooping and Neighbor Discovery Inspection product support** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
DHCP Snooping(IPv4)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 28: Dynamic Host Configuration Protocol Snooping and Neighbor Discovery Inspection product support (continued)

Feature	Product	Release introduced
DHCP Snooping (IPv6)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
(IPv6)	5520 Series	VOSS 8.2.5
	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 29: Dynamic Nickname Assignment product support** 

Feature	Product	Release introduced
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Table 29: Dynamic Nickname Assignment product support (continued)

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Dynamic Nickname Assignment	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
Extends the assignment	5420 Series	VOSS 8.4
behavior with a <i>prefix</i> parameter	5520 Series	VOSS 8.3
	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 30: Egress Tunnel Shaping product support** 

	Feature	Product	Release introduced
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**Table 30: Egress Tunnel Shaping product support (continued)** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Egress Tunnel Shaping	5420 Series	Not Supported
	5520 Series	Not Supported
	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

**Table 31: Endpoint Tracking product support** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Endpoint Tracking	5420 Series	Not supported
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	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 32: Energy Efficient Ethernet product support** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Energy Efficient Ethernet (EEE)	5420 Series	VOSS 8.4 All fixed ports on 5420F-24T-4XE, 5420F-24P-4XE, 5420F-48T-4XE, 5420F-48P-4XE, 5420F-48P-4XL,

Table 32: Energy Efficient Ethernet product support (continued)

Feature	Product	Release introduced
		5420F-8W-16P-4XE, 5420F-16MW-32P-4XE, 5420M-24W-4YE, 5420M-48W-4YE, 5420M-24T-4YE, 5420M-48T-4YE, 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5 All fixed ports on 5520-24T, 5520-24W, 5520-48T, 5520-48W, and 5520-12MW-36W
	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
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 33: Energy Saver product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Energy Saver	5420 Series	VOSS 8.4 Switch models: 5420F-24T-4XE, 5420F-24P-4XE, 5420F-48T-4XE, 5420F-48P-4XE, 5420F-8W-16P-4XE, 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE, 5420M-24W-4YE, 5420M-24T-4YE, 5420M-24T-4YE, 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5

**Table 33: Energy Saver product support (continued)** 

Feature	Product	Release introduced
		All fixed ports on 5520-24T, 5520-24W, 5520-48T, 5520-48W, and 5520-12MW-36W
	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1 VSP4900-48P and ports 1/1 to 1/12 onVSP4900-12MXU-12XE only
	VSP 7200 Series	VOSS 7.0 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 34: Enhanced Secure Mode product support** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Enhanced Secure mode	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 34: Enhanced Secure Mode product support (continued)** 

Feature	Product	Release introduced
Enhanced Secure mode for JITC	5420 Series	VOSS 8.4
and non-JITC sub-modes.	5520 Series	VOSS 8.2.5
	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: Enterprise Device Manager product support** 

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Enterprise Device Manager	5420 Series	VOSS 8.4	
(EDM)	5520 Series	VOSS 8.2.5	
	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 35: Enterprise Device Manager product support (continued)** 

Feature	Product	Release introduced
Read-Only user for EDM	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 36: Entity MIB product support** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Entity MIB - Physical Table	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
Entity MIB enhancements and	5420 Series	VOSS 8.4
<ul><li>integration for the following:</li><li>Physical Table</li></ul>	5520 Series	VOSS 8.2.5
Alias Mapping Table	VSP 4450 Series	VOSS 6.1.2
Physical Contains Table	VSP 4900 Series	VOSS 8.1
Last Change Time object	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 36: Entity MIB product support (continued)

Feature	Product	Release introduced
Entity MIB - Logical Table and includes integration for the following:	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.4
• VLANs	VSP 4450 Series	VOSS 8.4
<ul><li>MLTs</li><li>Circuitless IP (CLIP)</li></ul>	VSP 4900 Series	VOSS 8.4
Fabric Extend interfaces	VSP 7200 Series	VOSS 8.4
(logical layer 2 and layer 3 IS-IS interfaces)	VSP 7400 Series	VOSS 8.4
is interfaces)	VSP 8200 Series	VOSS 8.4
	VSP 8400 Series	VOSS 8.4
	VSP 8600 Series	Not supported
	XA1400 Series	VOSS 8.4

Table 37: Equal Cost Multiple Path for IPv4 product support

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Equal Cost Multiple Path (ECMP)	5420 Series	VOSS 8.4	
for IPv4	5520 Series	VOSS 8.2.5	
	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 38: Equal Cost Multiple Path for IPv6 product support

Feature	Product	Release introduced

Table 38: Equal Cost Multiple Path for IPv6 product support (continued)

Feature	Product	Release introduced
For configuration details, see VOS	S User Guide.	
ECMP for IPv6	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 39: ECMP Pathlist with Fabric Connect product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
ECMP Pathlist with Fabric	5420 Series	VOSS 8.4
Connect (IS-IS routes)	5520 Series	VOSS 8.2.5
	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 40: E-Tree and Private VLANs product support**

Feature	Product	Release introduced	
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Table 40: E-Tree and Private VLANs product support (continued)

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
E-Tree and Private VLANs	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	Not Supported
	XA1400 Series	Not Supported

Table 41: Extensible Authentication Protocol over LAN product support

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Extensible Authentication	5420 Series	VOSS 8.4
Protocol (EAP) and EAP over LAN (EAPoL)	5520 Series	VOSS 8.2.5
	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

Table 41: Extensible Authentication Protocol over LAN product support (continued)

Feature	Product	Release introduced
EAPoL MHMA-MV	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
EAPoL enhancements: Enhanced	5420 Series	VOSS 8.4
MHMV, Fail Open VLAN, Guest VLAN	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
UNI ports, Auto-sense ports, auto-isid-offset	5520 Series	VOSS 8.3
	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

Table 41: Extensible Authentication Protocol over LAN product support (continued)

Feature	Product	Release introduced
EAP enhancements: Wake on LAN, Guest I-SID, Fail-Open-I-SID	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	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	5420 Series	VOSS 8.4
authentication	5520 Series	VOSS 8.2.5
	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
QoS Priority Assignment	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 41: Extensible Authentication Protocol over LAN product support (continued)

Feature	Product	Release introduced
RADIUS Dynamic User-Based Policies	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	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	5420 Series	VOSS 8.4
Attributes	5520 Series	VOSS 8.4
	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: Extreme Integrated Application Hosting product support

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Extreme Integrated Application Hosting	5420 Series	Not Supported
	5520 Series	Not Supported
	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1.5

Table 42: Extreme Integrated Application Hosting product support (continued)

Feature	Product	Release introduced
		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	5420 Series	Not Supported
machine	5520 Series	Not Supported
	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3
	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
Egress Shaper for Fabric Extend	5420 Series	Not Supported
tunnels on Fabric IPsec Gateway virtual machine	5520 Series	Not Supported
	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.4
	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 43: Extreme Management Center backup configuration ZIP file product support

Feature	Product	Release introduced
Extreme Management Center backup configuration ZIP file	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 6.1.2

Table 43: Extreme Management Center backup configuration ZIP file product support (continued)

Feature	Product	Release introduced
For more information, see	VSP 4900 Series	VOSS 8.1
Extreme Management Center documentation.	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 44: Fabric Attach product support** 

Feature	Product	Release introduced
For configuration details, see VOS	S User Guide.	
Fabric Attach	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 45: Fabric Attach Zero Touch Client Attachment product support** 

Feature	Product	Release introduced
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Table 45: Fabric Attach Zero Touch Client Attachment product support (continued)

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Fabric Attach Zero Touch Client	5420 Series	VOSS 8.4	
Attachment	5520 Series	VOSS 8.2.5	
	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 46: Fabric Extend product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Fabric Extend	5420 Series	VOSS 8.4
*Platforms require an Open Networking Adapter (ONA).	5520 Series	VOSS 8.2.5
	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 46: Fabric Extend product support (continued)

Feature	Product	Release introduced
Fabric Extend over IPsec	5420 Series	Not Supported
	5520 Series	Not Supported
	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3 through Fabric IPsec Gateway
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.2 through 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	5420 Series	Not Supported
for Fabric Extend over IPsec	5520 Series	Not Supported
	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3 through Fabric IPsec Gateway
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.3 through Fabric IPsec Gateway
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.3

Table 46: Fabric Extend product support (continued)

Feature	Product	Release introduced
ECMP support for Fabric Extend	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 Mode product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Fabric BCB mode	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 47: Fabric Mode product support (continued)** 

Feature	Product	Release introduced
Fabric BEB mode	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 48: Fabric RSPAN product support** 

Feature	Product	Release introduced
For configuration details, see VO	SS User Guide.	
Fabric RSPAN (Mirror to I-SID)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 49: FDB Protected by Port product support** 

Feature	Product	Release introduced
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Table 49: FDB Protected by Port product support (continued)

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
FDB protected by port (MAC	5420 Series	VOSS 8.4
security limit-learning)	5520 Series	VOSS 8.3
	VSP 4450 Series	VSP 4000 4.0
	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 50: Flight Recorder product support** 

Feature	Product	Release introduced
For configuration details, see VOS	S User Guide.	
Flight Recorder for system health	5420 Series	VOSS 8.4
monitoring	5520 Series	VOSS 8.2.5
	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 51: Forward Error Correction product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Forward Error Correction (FEC) (configurable)	5420 Series	VOSS 8.4 5420M-24T-4YE, 5420M-24W-4YE, 5420M-16MW-32P-4YE, 5420M-48T-4YE, and 5420M-48W-4YE
	5520 Series	VOSS 8.2.5

**Table 51: Forward Error Correction product support (continued)** 

Feature	Product	Release introduced
		5520-VIM-4YE only
	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 52: High-Availability product support** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
High Availability-CPU (HA-CPU)	5420 Series	Not Applicable
for a standalone switch	5520 Series	Not Applicable
	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)	5420 Series	Not Applicable
for Layer 2 with Simplified vIST	5520 Series	Not Applicable
	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 52: High-Availability product support (continued)

Feature	Product	Release introduced
High Availability-CPU (HA-CPU)	5420 Series	Not Applicable
for Layer 3 with Simplified vIST	5520 Series	Not Applicable
	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: IEEE 802.3X Pause Frame Transmit product support

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
IEEE 802.3X Pause frame	5420 Series	VOSS 8.4
transmit	5520 Series	VOSS 8.2.5
	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 54: Internet Control Message Protocol product support**

Feature	Product	Release introduced

**Table 54: Internet Control Message Protocol product support (continued)** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Internet Control Message	5420 Series	VOSS 8.4
Protocol (ICMP)	5520 Series	VOSS 8.2.5
	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
ICMP broadcast and multicast	5420 Series	VOSS 8.4
enable or disable	5520 Series	VOSS 8.2.5
	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 55: Internet Group Management Protocol product support** 

Feature	Product	Release introduced

**Table 55: Internet Group Management Protocol product support (continued)** 

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Internet Group Management	5420 Series	VOSS 8.4	
Protocol (IGMP), including virtualization	5520 Series	VOSS 8.2.5	
	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 4.0.1	
	VSP 8400 Series	VOSS 4.2	
	VSP 8600 Series	VSP 8600 4.5	
	XA1400 Series	Not Supported	

**Table 56: Internet Key Exchange product support** 

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Internet Key Exchange (IKE) v2	5420 Series	VOSS 8.4	
Note:	5520 Series	VOSS 8.2.5	
VOSS Releases 6.0 and 6.0.1 do	VSP 4450 Series	VOSS 5.1.2	
not support this feature.	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 57: Internet Protocol Flow Information eXport (IPFIX) product support

ature	Product Release introduc	ed
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Table 57: Internet Protocol Flow Information eXport (IPFIX) product support (continued)

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Internet Protocol Flow	5420 Series	VOSS 8.4	
Information eXport (IPFIX)	5520 Series	VOSS 8.2.5	
	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: Inter-VSN Routing product support** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Inter-VSN routing (IPv4)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 58: Inter-VSN Routing product support (continued)** 

Feature	Product	Release introduced
Inter-VSN routing (IPv6)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 59: IOC Module Preconfiguration**

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
IOC Module Preconfiguration	5420 Series	Not Applicable
	5520 Series	Not Applicable
	VSP 4450 Series	Not Applicable
	VSP 4900 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 60: IP Phone product support**

Feature	Product	Release introduced

**Table 60: IP Phone product support (continued)** 

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
IP Phone Support	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.3	
	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 61: IP Multicast over Fabric Connect product support** 

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
IP Multicast over Fabric Connect	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.2.5	
	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 6.2	
	XA1400 Series	Not Supported	

Table 61: IP Multicast over Fabric Connect product support (continued)

Feature	Product	Release introduced
Universal Plug and Play (uPnP)	5420 Series	VOSS 8.4
Filtering	5520 Series	VOSS 8.3
	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 Route Policies product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
IP route policies	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 63: IP Shortcuts product support**

Feature	Product	Release introduced

**Table 63: IP Shortcuts product support (continued)** 

Feature	Product	Release introduced		
For configuration details, see <i>VOSS User Guide</i> .				
IP Shortcut routing including ECMP	5420 Series	VOSS 8.4		
	5520 Series	VOSS 8.2.5		
	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		
IPv6 Shortcut routing	5420 Series	VOSS 8.4		
	5520 Series	VOSS 8.2.5		
	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	5420 Series	VOSS 8.4		
	5520 Series	VOSS 8.2.5		
	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		

**Table 63: IP Shortcuts product support (continued)** 

Feature	Product	Release introduced
IPv6 IS-IS accept policies	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 64: IP Source Guard product support** 

Feature	Product	Release introduced		
For configuration details, see VOS	For configuration details, see VOSS User Guide.			
IP Source Guard (IPv4)	5420 Series	VOSS 8.4		
	5520 Series	VOSS 8.2.5		
	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 64: IP Source Guard product support (continued)

Feature	Product	Release introduced
IP Source Guard (IPv6)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 65: IP Source Routing product support**

Feature	Product	Release introduced		
For configuration details, see VOS	For configuration details, see VOSS User Guide.			
IP Source Routing enable or	5420 Series	VOSS 8.4		
disable	5520 Series	VOSS 8.2.5		
	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 66: IPsec product support**

Feature	Product	Release introduced	Release deprecated

**Table 66: IPsec product support (continued)** 

Feature	Product	Release introduced	Release deprecated	
For configuration details, see <i>VOSS User Guide</i> .				
IPsec NAT-T	5420 Series	Not Supported	Not Applicable	
	5520 Series	Not Supported	Not Applicable	
	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 8.1.50	Not Applicable	
IPsec transport mode	5420 Series	VOSS 8.4	Not Applicable	
	5520 Series	VOSS 8.2.5	Not Applicable	
	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	5420 Series	Not Supported	Not Applicable	
	5520 Series	Not Supported	Not Applicable	
	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	

**Table 66: IPsec product support (continued)** 

Feature	Product	Release introduced	Release deprecated
IPsec for the Out-of-	5420 Series	Not Supported	Not applicable
band management port (IPv4)	5520 Series	Not Supported	Not Applicable
	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
IPsec for the Out-of-	5420 Series	Not Supported	Not applicable
band management port (IPv6)	5520 Series	Not Supported	Not Applicable
	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

**Table 66: IPsec product support (continued)** 

Feature	Product	Release introduced	Release deprecated
Digital Certificates for	5420 Series	Not Supported	Not Applicable
IPsec Authentication	5520 Series	Not Supported	Not Applicable
	VSP 4450 Series	Not Supported	Not Applicable
	VSP 4900 Series	VOSS 8.3 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 67: IPv6-in-IPv4 tunnels product support

Feature	Product	Release introduced			
For configuration details, see VOSS User Guide.					
IPv6-in-IPv4 tunnels	5420 Series	VOSS 8.4			
	5520 Series	VOSS 8.2.5			
	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 68: IPv6 Router Advertisement (RA) Guard product support

Featur	e	Product	Release introduced	
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Table 68: IPv6 Router Advertisement (RA) Guard product support (continued)

Feature	Product	Release introduced			
For configuration details, see VOSS User Guide.					
IPv6 Router Advertisement (RA) Guard	5420 Series	VOSS 8.4			
	5520 Series	VOSS 8.2.5			
	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	Not Supported			

Table 69: IQ Agent product support

Feature	Product	Release introduced		
For configuration details, see <i>VOSS User Guide</i> .				
ExtremeCloud IQ Agent	5420 Series	VOSS 8.4		
	5520 Series	VOSS 8.2.5		
	VSP 4450 Series	Not supported		
	VSP 4900 Series	VOSS 8.2  • VSP4900-48P  VIMs: VIM5-4YE, VIM5-4X, VIM5-4XE, and VIM5-2Y  VOSS 8.2.5  • VSP4900-24P  • VSP4900-24S  • VSP4900-24XE  • IDD  VSP4900-12MXU-12XE		

Table 69: IQ Agent product support (continued)

Feature	Product	Release introduced
		VIMs: VIM5-4Y
	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: IS-IS product support** 

Feature	Product	Release introduced
For configuration details, see VO.	SS User Guide.	
IS-IS authentication with	5420 Series	VOSS 8.4
SHA-256	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
detection	5520 Series	VOSS 8.2.5
	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 70: IS-IS product support (continued)

Feature	Product	Release introduced
Multiple IS-IS parallel adjacencies	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 71: Key Health Indicator product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Key Health Indicator (KHI)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 72: Layer 2 Video Surveillance install script product support

Feature	Product	Release introduced
For configuration details, see VOS	S User Guide.	
Layer 2 Video Surveillance install	5420 Series	Not Supported
script	5520 Series	linux Not Supported
	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1

Table 72: Layer 2 Video Surveillance install script product support (continued)

Feature	Product	Release introduced
		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 73: Layer 2 VSN product support

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Equal Cost Trees (ECT)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 Virtual Service Network	5420 Series	VOSS 8.4
(VSN)	5520 Series	VOSS 8.2.5
	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 VSN product support (continued)

Feature	Product	Release introduced
Switched UNI	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
Transparent Port UNI (T-UNI)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 74: Layer 3 Video Surveillance install script product support

Feature	Product	Release introduced
For configuration details, see VOS	S User Guide.	
Layer 3 Video Surveillance install	5420 Series	Not supported
script (formerly known as the run vms endura script)	5520 Series	Not supported
	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1

Table 74: Layer 3 Video Surveillance install script product support (continued)

Feature	Product	Release introduced
		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 75: Layer 3 VSN product support

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Layer 3 VSN	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 6.1
	XA1400 Series	VOSS 8.0.50

**Table 76: Licensing product support** 

Feature	Product	Release introduced

**Table 76: Licensing product support (continued)** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Universal Hardware licenses	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
License files signed using	5420 Series	VOSS 8.4
Extreme Networks signature.	5520 Series	VOSS 8.2.5
	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	5420 Series	Not Supported
	5520 Series	Not Supported
	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 76: Licensing product support (continued)** 

Feature	Product	Release introduced
Ability to extend the Factory	5420 Series	VOSS 8.4
Default Premier Trial License	5520 Series	VOSS 8.4
	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 77: Link Layer Discovery Protocol product support** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Industry Standard Discovery	5420 Series	VOSS 8.4
Protocol (ISDP) (CDP compatible)	5520 Series	VOSS 8.2.5
	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
Link Layer Discovery Protocol	5420 Series	VOSS 8.4
(LLDP)	5520 Series	VOSS 8.2.5
	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 77: Link Layer Discovery Protocol product support (continued)** 

Feature	Product	Release introduced
Link Layer Discovery Protocol-	5420 Series	VOSS 8.4
Media Endpoint Discovery (LLDP-MED)	5520 Series	VOSS 8.2.5
	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 78: Link-state tracking (LST) product support

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Link-state tracking (LST)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 79: Linux kernel version product support

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Linux kernel version	5420 Series	4.14 as of VOSS 8.4
Important: For VSP 4450 Series, VSP 7200 Series, VSP 8200, and VSP 8400 Series, kernel version 4.9 has	5520 Series	4.14 as of VOSS 8.2.5
	VSP 4450 Series	4.9 as of VOSS 7.0
	VSP 4900 Series	4.14 as of VOSS 8.1
special upgrade considerations	VSP 7200 Series	4.9 as of VOSS 7.0

Table 79: Linux kernel version product support (continued)

Feature	Product	Release introduced
the first time you upgrade to a release that supports it. You must first upgrade to a steppingstone release, 6.1.x, before you upgrade to the release with the new kernel.	VSP 7400 Series	4.14 as of VOSS 8.0
	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	4.14 as of VOSS 8.1

Table 80: Logs and traps product support

Feature	Product	Release introduced	
For configuration details, see VOSS User Guide.			
Logging to a file and syslog	5420 Series	VOSS 8.4	
(IPv4)	5520 Series	VOSS 8.2.5	
	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)	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.2.5	
	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 80: Logs and traps product support (continued)

Feature	Product	Release introduced
Simple Mail Transfer Protocol (SMTP) for log notification	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
System Logging compliance with	5420 Series	VOSS 8.4
RFC 5424 and RFC 3339	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
Note:	5520 Series	VOSS 8.2.5
VOSS Releases 6.0 and 6.0.1 do	VSP 4450 Series	VOSS 5.1.2
not support this feature.	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 81: MACsec product support** 

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
MACsec 2AN mode	5420 Series	Not Supported	
Note:	5520 Series	Not Supported	
VOSS 5.0 officially removed the	VSP 4450 Series	VSP 4000 4.0	
replay protection commands. Do not use replay protection in	VSP 4900 Series	Not Supported	
earlier releases.	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	

Table 81: MACsec product support (continued)

Feature	Product	Release introduced
MACsec 4AN mode	5420 Series	Not Supported
	5520 Series	VOSS 8.2.5 • 5520-24T and 5520-24W - all fixed ports except 1/25 and 1/26 • 5520-12MW-36W, 5520-48SE, 5520-48T, and 5520-48W - all fixed ports except 1/49 and 1/50 • VIMs: 5520-VIM-4XE and 5520-VIM-4YE only
	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 81: MACsec product support (continued)

Feature	Product	Release introduced
MACsec encryption cipher suites	5420 Series	Not Supported
	5520 Series	<ul> <li>VOSS 8.2.5</li> <li>5520-24T and 5520-24W - all fixed ports except 1/25 and 1/26</li> <li>5520-12MW-36W, 5520-48SE, 5520-48T, and 5520-48W - all fixed ports except 1/49 and 1/50</li> <li>VIMs: 5520-VIM-4XE and 5520-VIM-4YE only</li> </ul>
	VSP 4450 Series	VOSS 8.1 128 bits only
	VSP 4900 Series	<ul> <li>VOSS 8.1</li> <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

**Table 81: MACsec product support (continued)** 

Feature	Product	Release introduced
MACsec Key Agreement (MKA)	5420 Series	Not Supported
	5520 Series	Not Supported
	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	VOSS 8.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 82: Mroute statistics product support** 

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Multicast route (mroute)	5420 Series	VOSS 8.4	
statistics for IPv4 and IPv6	5520 Series	VOSS 8.2.5	
	VSP 4450 Series	Not Supported	
	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 83: MSTP-Fabric Connect Multi Homing product support

Feature	Product	Release introduced

Table 83: MSTP-Fabric Connect Multi Homing product support (continued)

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
MSTP-Fabric Connect Multi	5420 Series	VOSS 8.4
Homing	5520 Series	VOSS 8.2.5
	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 84: Multi-area SPB

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Multi-area SPB Boundary Node	5420 Series	Not Supported
	5520 Series	Not Supported
	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 85: Multicast Listener Discovery product support** 

eature	Product	Release introduced
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**Table 85: Multicast Listener Discovery product support (continued)** 

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Multicast Listener Discovery	5420 Series	VOSS 8.4	
(MLD)	5520 Series	VOSS 8.2.5	
	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 86: MultiLink Trunking product support**

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
MultiLink Trunking (MLT) / Link	5420 Series	VOSS 8.4
Aggregation Group (LAG)	5520 Series	VOSS 8.2.5
	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 87: Multiple CLI Users product support**

Table 87: Multiple CLI Users product support (continued)

Feature	Product	Release introduced
For configuration details, see VO.	SS User Guide.	
Multiple CLI users per role	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 88: Network Load Balancing product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Network Load Balancing (NLB) -	5420 Series	Not Supported
multicast operation	5520 Series	VOSS 8.2.5
	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 88: Network Load Balancing product support (continued)

Feature	Product	Release introduced
Network Load Balancing (NLB) -	5420 Series	Not Supported
unicast operation	5520 Series	VOSS 8.2.5
	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 89: Network operating system personality product support

Feature	Product	Release introduced	
For configuration details, see VOSS User Guide.			
Dual-boot personalities	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.2.5	
	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 90: Network Time Protocol product support**

Fe	eature	Product	Release introduced	Release deprecated

Table 90: Network Time Protocol product support (continued)

Feature	Product	Release introduced	Release deprecated	
For configuration details, see <i>VOSS User Guide</i> .				
NTPv3 client	5420 Series	Not Supported	Not Applicable	
	5520 Series	Not Supported	Not Applicable	
	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	
NTPv3 with SHA	5420 Series	Not Supported	Not Applicable	
authentication	5520 Series	Not Supported	Not Applicable	
	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	5420 Series	VOSS 8.4	Not Applicable	
	5520 Series	VOSS 8.2.5	Not Applicable	
	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 90: Network Time Protocol product support (continued)** 

Feature	Product	Release introduced	Release deprecated
NTPv4 client for IPv6	5420 Series	VOSS 8.4	Not Applicable
	5520 Series	VOSS 8.2.5	Not Applicable
	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	5420 Series	VOSS 8.4	Not Applicable
restrict	5520 Series	VOSS 8.2.5	Not Applicable
	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 91: nni-mstp boot flag product support

Feature	Product	Release introduced

Table 91: nni-mstp boot flag product support (continued)

Feature	Product	Release introduced	
For configuration details, see VOSS User Guide.			
nni-mstp boot flag ( <b>boot</b>	5420 Series	VOSS 8.4	
config flags nni-mstp)	5520 Series	VOSS 8.2.5	
	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 92: OSPF product support** 

Feature	Product	Release introduced
For configuration details, see VOS	S User Guide.	
Open Shortest Path First (OSPF)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 92: OSPF product support (continued)** 

Feature	Product	Release introduced
Secure hash algorithm 1 (SHA-1)	5420 Series	VOSS 8.4
and SHA-2	5520 Series	VOSS 8.2.5
	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 93: OSPFv3 product support

Feature	Product	Release introduced	
For configuration details, see VOSS User Guide.			
OSPFv3	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.2.5	
	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	



# **VOSS Features P to R**

Table 94: PIM over IPv6 product support

Feature	Product	Release introduced		
For configuration details, see VOS	For configuration details, see VOSS User Guide.			
PIM over IPv6	5420 Series	VOSS 8.4		
	5520 Series	VOSS 8.2.5		
	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 95: Port Mirroring product support** 

Feature	Product	Release introduced		
For configuration details, see VOS	For configuration details, see VOSS User Guide.			
Ingress mirroring (port and flow-	5420 Series	VOSS 8.4		
based)	5520 Series	VOSS 8.2.5		
	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 95: Port Mirroring product support (continued)** 

Feature	Product	Release introduced
Egress mirroring (port-based)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 96: Power Manager product support** 

Feature	Product Release introduced	
For configuration details, see VOS	SS User Guide.	
Power Management	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 97: Power over Ethernet product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Power over Ethernet (PoE)	5420 Series	VOSS 8.4 5420F-24P-4XE, 5420F-48P-4XE, 5420F-48P-4XL, 5420F-8W-16P-4XE, 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE, 5420M-24W-4YE,

Table 97: Power over Ethernet product support (continued)

Feature	Product	Release introduced
		5420M-48W-4YE, and 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5 5520-12MW-36W, 5520-24W and 5520-48W only
	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	5420 Series	VOSS 8.4 5420F-24P-4XE, 5420F-48P-4XE 5420F-8W-16P-4XE,, 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE, 5420F-48P-4XL, 5420M-24W-4YE, 5420M-48W-4YE, and 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5 5520-12MW-36W, 5520-24W and 5520-48W only
	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 97: Power over Ethernet product support (continued)

Feature	Product	Release introduced
Fast PoE	5420 Series	VOSS 8.4 5420F-24P-4XE, 5420F-48P-4XE 5420F-8W-16P-4XE,, 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE, 5420F-48P-4XL, 5420M-24W-4YE, 5420M-24W-4YE, 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5 5520-12MW-36W, 5520-24W and 5520-48W only
	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 97: Power over Ethernet product support (continued)

Feature	Product	Release introduced
Perpetual PoE	5420 Series	VOSS 8.4 5420F-24P-4XE, 5420F-48P-4XE 5420F-8W-16P-4XE,, 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE, 5420F-48P-4XL, 5420M-24W-4YE, 5420M-24W-4YE, and 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5 5520-12MW-36W, 5520-24W and 5520-48W only
	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 98: Protocol Independent Multicast-Source Specific Mode product support

Feature		Product	Release introduced
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Table 98: Protocol Independent Multicast-Source Specific Mode product support (continued)

Feature	Product Release introduced	
For configuration details, see VOS	SS User Guide.	
PIM-Source Specific Mode (PIM-	5420 Series	VOSS 8.4
SSM) for IPv4	5520 Series	VOSS 8.2.5
	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 99: Protocol Independent Multicast - Sparse Mode product support

Feature	Product Release introduced	
For configuration details, see VOS	SS User Guide.	
Protocol Independent Multicast-	5420 Series	VOSS 8.4
Sparse Mode (PIM-SM) for IPv4	5520 Series	VOSS 8.2.5
	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 100: QoS and VoIP product support

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Platform specific considerations for QoS behavior are documented in QoS Behavior Differences, which is in <i>VOSS User Guide</i> .		

Table 100: QoS and VoIP product support (continued)

Feature	Product	Release introduced	
Automatic QoS	5420 Series	Not Supported Use Auto-sense with IP Phone support instead	
	5520 Series	Not Supported Use Auto-sense with IP Phone support instead	
	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 101: Queue Profiles product support**

Feature	Product Release introduced	
For configuration details, see VOS	SS User Guide.	
QoS per queue rate limiting	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 5.1
	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

## **Table 102: RADIUS product support**

Feature F	Product	Release introduced	Release deprecated
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**Table 102: RADIUS product support (continued)** 

Feature	Product	Release introduced	Release deprecated
For configuration detail	s, see <i>VOSS User Guide</i> .		
RADIUS (IPv6)	5420 Series	VOSS 8.4	Not Applicable
	5520 Series	VOSS 8.2.5	Not Applicable
	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 attributes:	5420 Series	VOSS 8.4	
Acct-Terminate- Cause	5520 Series	VOSS 8.2.5	Not Applicable
Event-Timestamp	VSP 4450 Series	VOSS 7.0	Not Applicable
Service Type	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
RADIUS, community-	5420 Series	VOSS 8.4	Not Applicable
based users (IPv4)	5520 Series	VOSS 8.2.5	Not Applicable
	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 102: RADIUS product support (continued)** 

Feature	Product	Release introduced	Release deprecated
RADIUS secure communication using IPSec for IPv4	5420 Series	Not supported	Not Applicable
	5520 Series	Not Supported	Not Applicable
Note:	VSP 4450 Series	VOSS 5.1.2	VOSS 8.2
VOSS Releases 6.0 and	VSP 4900 Series	VOSS 8.1	VOSS 8.2
6.0.1 do not support this feature.	VSP 7200 Series	VOSS 5.1.2	VOSS 8.2
reacure.	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	5420 Series	Not Supported	Not Applicable
communication using IPSec for IPv6	5520 Series	Not Supported	Not Applicable
Note:	VSP 4450 Series	VOSS 5.1.2	VOSS 8.2
VOSS Releases 6.0 and	VSP 4900 Series	VOSS 8.1	VOSS 8.2
6.0.1 do not support this feature.	VSP 7200 Series	VOSS 5.1.2	VOSS 8.2
reacure.	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	5420 Series	VOSS 8.4	Not Applicable
(RADSec)	5520 Series	VOSS 8.2.5	Not Applicable
	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

**Table 102: RADIUS product support (continued)** 

Feature	Product	Release introduced	Release deprecated
RFC 5176 - Dynamic	5420 Series	VOSS 8.4	Not Applicable
Authorization Extensions to RADIUS	5520 Series	VOSS 8.2.5	Not Applicable
	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
RFC 5997 - RADIUS	5420 Series	VOSS 8.4	Not Applicable
Reachability Server Status	5520 Series	VOSS 8.2.5	Not Applicable
	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 103: Rate Limiting, Policing, and Shaping product support

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Platform specific considerations for QoS behavior are documented in QoS Behavior Differences, which is in VOSS User Guide.		

Table 103: Rate Limiting, Policing, and Shaping product support (continued)

Feature	Product	Release introduced
Egress port shaper	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	5420 Series	Not Supported
	5520 Series	Not Supported
	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
QoS ingress port rate limiter	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 104: Remote Monitoring product support** 

Feature	Product	Release introduced

**Table 104: Remote Monitoring product support (continued)** 

Feature	Product	Release introduced		
For configuration details, see VOSS User Guide.				
Remote Monitoring 1 (RMON1)	5420 Series	VOSS 8.4		
for Layer 1 and Layer 2	5520 Series	VOSS 8.2.5		
Note:	VSP 4450 Series	VSP 4000 4.0		
VOSS Release 5.0 and 5.1 do not support RMON1.	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)	5420 Series	VOSS 8.4		
for network and application layer protocols	5520 Series	VOSS 8.2.5		
	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 105: Representational State Transfer Configuration Protocol (RESTCONF)** product support

Feature	Product	Release introduced
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**Table 105: Representational State Transfer Configuration Protocol (RESTCONF)** product support (continued)

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Representational State Transfer	5420 Series	VOSS 8.4
Configuration Protocol (RESTCONF)	5520 Series	VOSS 8.2.5
	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	Not Supported
	XA1400 Series	Not Supported

# Table 106: RIPng product support

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
RIPng	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 107: Routing Information Protocol product support**

Featur	e	Product	Release introduced
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**Table 107: Routing Information Protocol product support (continued)** 

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Routing Information Protocol	5420 Series	VOSS 8.4	
(RIP)	5520 Series	VOSS 8.2.5	
	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 108: RSMLT for IPv4 product support

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
IPv4 RSMLT	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 4.5
	XA1400 Series	Not Supported

#### Table 109: RSMLT for IPv6 product support

Table 109: RSMLT for IPv6 product support (continued)

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
IPv6 RSMLT	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.2.5	
	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 110: run spbm installation script product support

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
run spbm installation script	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.2.5	
	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 111: Secure Shell product support** 

Feature	Product	Release introduced
For configuration details, see <i>VOSS User Guide</i> .		
Secure Shell (SSH) server (IPv4)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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: Secure Shell product support (continued)** 

Feature	Product	Release introduced
Secure Sockets Layer (SSL) certificate management	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
SSH server (IPv6)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 111: Secure Shell product support (continued)** 

Feature	Product	Release introduced
SSH client disable	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
1024	5520 Series	VOSS 8.2.5
Note:	VSP 4450 Series	VOSS 5.1.2
VOSS Releases 6.0 and 6.0.1 do not support this change.	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
SSH rekey	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
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**Table 112: Segmented Management Instance product support** 

**Table 112: Segmented Management Instance product support (continued)** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Segmented Management Instance - Management Interface CLIP	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
		Note: VOSS 8.1.50 does not support this feature.
Segmented Management	5420 Series	VOSS 8.4
Instance - Management Interface OOB	5520 Series	VOSS 8.2.5
	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 112: Segmented Management Instance product support (continued)** 

Feature	Product	Release introduced
Segmented Management Instance - Management Interface VLAN	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
		Note: VOSS 8.1.50 does not support this feature.
Segmented Management	5420 Series	Not Applicable
Instance — ability to migrate VLAN or loopback IP address	5520 Series	Not Applicable
	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
	XA1400 Series	VOSS 8.2

**Table 112: Segmented Management Instance product support (continued)** 

Feature	Product	Release introduced
Segmented Management	5420 Series	VOSS 8.4
Instance — DHCP Client for Management Interface OOB or	5520 Series	VOSS 8.2.5
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 113: sFlow product support

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
sFlow	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 113: sFlow product support (continued)

Feature	Product	Release introduced
sFlow collector reachability on	5420 Series	Not Supported
user-created VRFs	5520 Series	Not Supported
	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 114: Simple Loop Prevention Protocol product support** 

Feature	Product	Release introduced
For configuration details, see VOS	S User Guide.	
Simple Loop Prevention Protocol	5420 Series	VOSS 8.4
(SLPP)	5520 Series	VOSS 8.2.5
	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 115: Simple Network Management Protocol product support**

Feature	Product	Release introduced

**Table 115: Simple Network Management Protocol product support (continued)** 

Feature	Product	Release introduced	
For configuration details, see <i>VOSS User Guide</i> .			
Simple Network Management	5420 Series	VOSS 8.4	
Protocol (SNMP) v1/2/3 (IPv4)	5520 Series	VOSS 8.2.5	
	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)	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.2.5	
	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 116: SLA Mon product support** 

Feature	Product	Release introduced

**Table 116: SLA Mon product support (continued)** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
SLA Mon	5420 Series	Not supported
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 4.1
	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 117: SLPP Guard product support**

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
SLPP Guard	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 118: SONMP product support**

Feature	Product	Release introduced	
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Table 118: SONMP product support (continued)

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
SONMP	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 119: Spanning Tree Protocol product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Spanning Tree Protocol (STP):	5420 Series	VOSS 8.4
<ul><li>Multiple STP (MSTP)</li><li>Rapid STP (RSTP)</li></ul>	5520 Series	VOSS 8.2.5
Rapid STF (NSTF)	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 120: spbm-config-mode product support

eature	Product	Release introduced
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Table 120: spbm-config-mode product support (continued)

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
spbm-config-mode (boot	5420 Series	VOSS 8.4
<pre>config flags spbm- config-mode)</pre>	5520 Series	VOSS 8.2.5
	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 121: SPB-PIM Gateway product support** 

Feature	Product	Release introduced
For configuration details, see VO.	SS User Guide.	
SPB-PIM Gateway controller	5420 Series	Not Supported
node	5520 Series	VOSS 8.2.5
	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 121: SPB-PIM Gateway product support (continued)** 

Feature	Product	Release introduced
SPB-PIM Gateway interface	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 122: Static routing product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Static routing	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 123: TACACS+ product support** 

Feature	Product	Release introduced

Table 123: TACACS+ product support (continued)

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
TACACS+	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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
TACACS+ secure communication	5420 Series	VOSS 8.4
using IPSec for IPv4	5520 Series	VOSS 8.2.5
Note:	VSP 4450 Series	VOSS 5.1.2
VOSS Releases 6.0 and 6.0.1 do not support this feature.	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 124: TLS server for secure HTTPS product support

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
TLS server for secure HTTPS	5420 Series	VOSS 8.4
Note:	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1

Table 124: TLS server for secure HTTPS product support (continued)

Feature	Product	Release introduced
VOSS Releases 6.0 and 6.0.1 do	VSP 7200 Series	VOSS 5.1.2
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	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 125: Two-Factor Authentication for SSH product support** 

Feature	Product	Release introduced
For configuration details, see VOS	SS User Guide.	
Two-Factor Authentication for	5420 Series	VOSS 8.4
SSH	5520 Series	VOSS 8.2.5
	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 demo feature
	XA1400 Series	VOSS 8.0.50

Table 126: Unicast Reverse Path Forwarding product support

Feature	Product	Release introduced
For configuration details, see VOS	S User Guide.	
Unicast Reverse Path Forwarding	5420 Series	VOSS 8.4
(URPF) checking (IPv4)	5520 Series	VOSS 8.2.5
	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

**Table 126: Unicast Reverse Path Forwarding product support (continued)** 

Feature	Product	Release introduced
Unicast Reverse Path Forwarding	5420 Series	VOSS 8.4
(URPF) checking (IPv6)	5520 Series	VOSS 8.2.5
	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 127: Virtual Inter-Switch Trunk product support** 

Feature	Product	Release introduced
For configuration details, see VOS	S User Guide.	
Switch cluster (multi-chassis	5420 Series	VOSS 8.4
LAG) -Virtual Inter-Switch Trunk (vIST)	5520 Series	VOSS 8.2.5
	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 128: Virtual Link Aggregation Control Protocol (VLACP) product support

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see <i>VOSS User Guide</i> .		
Virtual Link Aggregation Control	5420 Series	VOSS 8.4	
Protocol (VLACP)	5520 Series	VOSS 8.2.5	
	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 128: Virtual Link Aggregation Control Protocol (VLACP) product support (continued)

Feature	Product	Release introduced
VLACP Flap Detect and Damping	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 129: Virtual Router Redundancy Protocol product support** 

Feature	Product	Release introduced	
For configuration details, see VOS	For configuration details, see VOSS User Guide.		
Virtual Router Redundancy	5420 Series	VOSS 8.4	
Protocol (VRRP)	5520 Series	VOSS 8.2.5	
	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 129: Virtual Router Redundancy Protocol product support (continued)** 

Feature	Product	Release introduced
VRRPv3 for IPv4	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 130: Virtual Router Redundancy Protocol for IPv6 product support

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
IPv6 VRRP	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 130: Virtual Router Redundancy Protocol for IPv6 product support (continued)

Feature	Product	Release introduced
VRRPv3 for IPv6	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 131: Virtual Routing and Forwarding product support** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Virtualization with IPv4 Virtual	5420 Series	VOSS 8.4
Routing and Forwarding (VRF)  • ARP	5520 Series	VOSS 8.2.5
DHCP Relay	VSP 4450 Series	VSP 4000 4.0
• Inter-VRF Routing (static, dynamic, and policy)	VSP 4900 Series	VOSS 8.1
Local routing	VSP 7200 Series	VOSS 4.2.1
OSPFv2	VSP 7400 Series	VOSS 8.0
<ul><li>RIPv1 and v2</li><li>Route policies</li></ul>	VSP 8200 Series	VSP 8200 4.0
Static routing	VSP 8400 Series	VOSS 4.2
• VRRP	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Increased VRF and Layer 3 VSN	5420 Series	VOSS 8.4
scaling	5520 Series	VOSS 8.2.5
	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

Table 131: Virtual Routing and Forwarding product support (continued)

Feature	Product	Release introduced
IBGP over user-created VRFs	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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	5420 Series	VOSS 8.4
following features and functions:  • IPv6 Interfaces and IPv6	5520 Series	VOSS 8.2.5
Static Routes in VRFs and	VSP 4450 Series	VOSS 7.0
Layer 3 VSNs • ECMP and Alternative route	VSP 4900 Series	VOSS 8.1
Route redistribution for static	VSP 7200 Series	VOSS 7.0
<ul><li>and direct routes</li><li>VRRPv3 for IPv6</li></ul>	VSP 7400 Series	VOSS 8.0
DHCP Relay	VSP 8200 Series	VOSS 7.0
IPv6 Reverse Path	VSP 8400 Series	VOSS 7.0
Forwarding  ICMP Ping and Traceroute	VSP 8600 Series	VSP 8600 8.0
Torin Ting and maceroace	XA1400 Series	Not Supported
IPv6 Virtualization for the	5420 Series	VOSS 8.4
following features and functions: <ul><li>Open Shortest Path First for</li></ul>	5520 Series	VOSS 8.2.5
IPv6 (OSPFv3)	VSP 4450 Series	VOSS 8.0
IPv6 Border Gateway     Protocol (IPv6 BGP)	VSP 4900 Series	VOSS 8.1
IPv6 route redistribution enhancements	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 132: VXLAN Gateway product support** 

eature	Product	Release introduced
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Table 132: VXLAN Gateway product support (continued)

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
VXLAN Gateway	5420 Series	Not Supported
	5520 Series	Not Supported
	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	5420 Series	Not Supported
VXLAN Gateway	5520 Series	Not Supported
	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
ECMP support for VXLAN	5420 Series	Not Supported
Gateway	5520 Series	Not Supported
	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 133: Zero Touch Deployment product support** 

Feature	Product	Release introduced
For configuration details, see VOSS User Guide.		
Zero Touch Deployment	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 134: Zero Touch Fabric Configuration product support** 

**Table 134: Zero Touch Fabric Configuration product support (continued)** 

Feature	Product	Release introduced	
For configuration details, see VOSS User Guide.			
Zero Touch Fabric Configuration	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.2.5	
	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 135: Zero Touch Provisioning Plus product support** 

Feature	Product	Release introduced	
For configuration details, see VOSS User Guide.			
Zero Touch Provisioning Plus	5420 Series	VOSS 8.4	
	5520 Series	VOSS 8.2.5	
	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	