



# VOSS Feature Support Matrix

For VOSS Release 8.4.2

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# About this Document

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[Purpose](#) on page 4

[Documentation and Training](#) on page 5

[Help and Support](#) on page 5

[Send Feedback](#) on page 6

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

## Purpose

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

- ExtremeSwitching 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

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Find Extreme Networks product information at the following locations:

[Current Product Documentation](#)

[Release Notes](#)

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

[Extreme Optics Compatibility](#)

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

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

## Help and Support

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

### Extreme Portal

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

### The Hub

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](http://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.

## Send Feedback

The Information Development team at Extreme Networks has made every effort to ensure that this document is accurate, complete, and easy to use. We strive to improve our documentation to help you in your work, 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.
- Broken links or usability issues.

To send feedback, do either of the following:

- Access the feedback form at <https://www.extremenetworks.com/documentation-feedback/>.
- Email us at [documentation@extremenetworks.com](mailto: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 <a href="#">VOSS User Guide</a> .		
Platform specific considerations for ACL and ACE behavior are documented in ACL Filters Behavior Differences, which is in <a href="#">VOSS User Guide</a> .		
QoS Access Control Entries (ACE)	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 6.2
	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 to Routed Packets only	5420 Series	VOSS 8.4
	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 <a href="#">VOSS User Guide</a> .		
Platform specific considerations for ACL and ACE behavior are documented in ACL Filters Behavior Differences, which is in <a href="#">VOSS User Guide</a> .		
Access Control List (ACL)-based filtering, including egress ACLs, ingress ACLs, Layer 2 to Layer 4 filtering, port-based, and VLAN-based	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 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
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**Table 3: Address Resolution Protocol product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Address Resolution Protocol (ARP) including Proxy ARP and Static ARP	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 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 <a href="#">VOSS User Guide</a> .		
Advanced Feature Bandwidth Reservation  <b>Note:</b> If your switch does not have this boot flag, it is because the hardware reserves the	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	VOSS 8.0

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

Feature	Product	Release introduced
bandwidth automatically with no user interaction.	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50 XA1480 only- demonstration feature

**Table 5: Alternative routes product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
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 Monitoring	5420 Series	VOSS 8.4
	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 <a href="#">VOSS User Guide</a> .		
Authentication for Privileged EXEC CLI Command Mode	5420 Series	VOSS 8.4
	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 <a href="#">VOSS User Guide</a> .		
Auto-Negotiation	5420 Series	VOSS 8.4 Switch models: <ul style="list-style-type: none"> <li>5420F-24T-4XE, 5420F-24P-4XE, 5420F-48T-4XE, 5420F-48P-4XE, 5420F-48P-4XL, 5420F-24S-4XE, 5420F-8W-16P-4XE, 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE, 5420M-24W-4YE, 5420M-48W-4YE, 5420M-24T-4YE, 5420M-48T-4YE, 5420M-16MW-32P-4YE</li> </ul> <p><b>Note:</b> SFP-DD ports are only available if you disable Advanced Feature Bandwidth Reservation.</p>
	5520 Series	VOSS 8.2.5 Switch models: <ul style="list-style-type: none"> <li>5520-24T, 5520-24W, 5520-48T, 5520-48W, 5520-12MW-36W</li> </ul>

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

Feature	Product	Release introduced
		<ul style="list-style-type: none"> <li>5520-48SE QSFP28/QSFP+ ports, and all fixed fiber ports, at 1 Gbps only</li> </ul> <p><b>Note:</b> QSFP28 ports are only available if you disable Advanced Feature Bandwidth Reservation.</p> <p>5520-VIM-4XE at 1 Gbps only and 5520-VIM-4YE at 25 Gbps only</p>
	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1 Switch models: <ul style="list-style-type: none"> <li>VSP4900-24S and VSP4900-48P - all fixed ports</li> <li>VSP4900-12MXU-12XE - all fixed ports, with ports 13 to 24 at 1 Gbps only</li> <li>VSP4900-24XE - all fixed ports at 1 Gbps only</li> </ul> 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 <a href="#">VOSS User Guide</a> .		
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 ports can apply Fabric Attach (FA)-specific configuration	5420 Series	VOSS 8.4.2
	5520 Series	VOSS 8.4.2
	VSP 4450 Series	VOSS 8.4.2
	VSP 4900 Series	VOSS 8.4.2
	VSP 7200 Series	VOSS 8.4.2
	VSP 7400 Series	VOSS 8.4.2
	VSP 8200 Series	VOSS 8.4.2
	VSP 8400 Series	VOSS 8.4.2
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

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

Feature	Product	Release introduced
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**Table 10: Bidirectional Forwarding Detection (BFD) product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 (IPv4)	5420 Series	VOSS 8.4
	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 <a href="#">VOSS User Guide</a> .		
Border Gateway Protocol for IPv4 (BGPv4)	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
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 redistribution	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 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
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**Table 12: Bridge Protocol Data Unit (BPDU) Guard product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Bridge Protocol Data Unit (BPDU) Guard	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 13: Certificate order priority product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Certificate order priority  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50

**Table 14: Channelization product support**

Feature	Product	Release introduced
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**Table 14: Channelization product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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
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**Table 15: Client and Server product support (continued)**

Feature	Product	Release introduced	Release deprecated
For configuration details, see <a href="#">VOSS User Guide</a> .			
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 (FTP) 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
Hypertext Transfer Protocol (HTTP) and Hypertext Transfer Protocol Secure (HTTPS) (IPv4)	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	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 Protocol (HTTP) and Hypertext Transfer Protocol Secure (HTTPS) (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
Remote Login (Rlogin) server/client (IPv4)	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
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) server/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
Secure Copy (SCP)  <b>Note:</b> The switch does not support the WinSCP client.	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 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 Protocol (SFTP) server (IPv6)	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 6.2	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
Telnet 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

**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 Protocol (TFTP) 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
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 <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
IEEE 802.1ag Connectivity Fault Management (CFM):	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
<ul style="list-style-type: none"> <li>• Layer 2 Ping</li> <li>• TraceRoute</li> </ul>		

**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 <a href="#">VOSS User Guide</a> .		
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
	XA1400 Series	VOSS 8.0.50
		<b>Note:</b> Configurable using CLI only.



# VOSS Features D to F

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

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 configuration flag)	5420 Series	VOSS 8.4
	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 <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
Differentiated Services (DiffServ) including Per-Hop Behavior	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 22: Digital Certificate/PKI product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Digital Certificate/PKI  <b>Note:</b>	5420 Series	VOSS 8.4
	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 <a href="#">VOSS User Guide</a> .		
Distributed Virtual Routing (DvR) Controller  <b>Important:</b>	5420 Series	Not Supported
	5520 Series	VOSS 8.2.5
	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 6.0.1.2 in DvR deployments.		VSP4900-12MXU-12XE, VSP4900-24S, and VSP4900-24XE only
	VSP 7200 Series	VOSS 6.0.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0.1
	VSP 8400 Series	VOSS 6.0.1
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported
Distributed Virtual Routing (DvR) Leaf  <b>Important:</b> Because of a change in VOSS 6.0.1.2, the best practice is to use a minimum software version of 6.0.1.2 in DvR deployments.	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	
Distributed Virtual Routing (DvR) dvr-one-ip	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	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 <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
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
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**Table 26: Dynamic Host Configuration Protocol product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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
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**Table 27: Dynamic Host Configuration Protocol Relay for IPv6 product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
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 (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 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 <a href="#">VOSS User Guide</a> .		
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 behavior with a <i>prefix</i> parameter	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 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 <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
Energy Saver	5420 Series	VOSS 8.4 Switch models: 5420F-24T-4XE, 5420F-24P-4XE, 5420F-48T-4XE, 5420F-48P-4XE, 5420F-48P-4XL, 5420F-8W-16P-4XE, 5420F-16W-32P-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



**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 on VSP4900-12MXU-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 <a href="#">VOSS User Guide</a> .		
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 and non-JITC sub-modes.	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 4.5
	XA1400 Series	Not Supported

**Table 35: Enterprise Device Manager product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Enterprise Device Manager (EDM)	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 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 <a href="#">VOSS User Guide</a> .		
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 integration for the following: <ul style="list-style-type: none"> <li>Physical Table</li> <li>Alias Mapping Table</li> <li>Physical Contains Table</li> <li>Last Change Time object</li> </ul>	5420 Series	VOSS 8.4
	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

**Table 36: Entity MIB product support (continued)**

Feature	Product	Release introduced
Entity MIB - Logical Table includes the following logical interface entities: <ul style="list-style-type: none"> <li>• VLANs</li> <li>• MLTs</li> <li>• Circuitless IP (CLIP)</li> <li>• Fabric Extend interfaces (logical layer 2 and layer 3 IS-IS interfaces)</li> </ul>	5420 Series	VOSS 8.4
	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	VOSS 8.4	

**Table 37: Equal Cost Multiple Path for IPv4 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Equal Cost Multiple Path (ECMP) 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	

**Table 38: Equal Cost Multiple Path for IPv6 product support**

Feature	Product	Release introduced
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**Table 38: Equal Cost Multiple Path for IPv6 product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
ECMP Pathlist with Fabric Connect (IS-IS routes)	5420 Series	VOSS 8.4
	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 <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
Extensible Authentication Protocol (EAP) and EAP over LAN (EAPoL)	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	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 MHMV, Fail Open VLAN, Guest VLAN	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
EAP enhancements: EAP on Flex UNI ports, Auto-sense ports, auto-isid-offset	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

**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 authentication	5420 Series	VOSS 8.4
	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 Attributes	5420 Series	VOSS 8.4
	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 <a href="#">VOSS User Guide</a> .		
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 machine	5420 Series	Not Supported
	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 tunnels on Fabric IPsec Gateway virtual machine	5420 Series	Not Supported
	5520 Series	Not Supported
	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3.1
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.3.1
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 43: Extreme Management Center or ExtremeCloud IQ - Site Engine backup configuration ZIP file product support**

Feature	Product	Release introduced
Extreme Management Center or ExtremeCloud IQ - Site Engine backup configuration ZIP file	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5

**Table 43: Extreme Management Center or ExtremeCloud IQ - Site Engine backup configuration ZIP file product support (continued)**

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

**Table 44: Fabric Attach product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Fabric Attach Server	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 <a href="#">VOSS User Guide</a> .		
Fabric Attach Zero Touch Client Attachment	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 6.3
	XA1400 Series	Not Supported

**Table 46: Fabric Extend product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Fabric Extend *Platforms require an Open Networking Adapter (ONA).	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	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 for 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 8.3 through Fabric IPsec Gateway
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.3
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 46: Fabric Extend product support (continued)**

Feature	Product	Release introduced
IPsec compression	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 8.1.8
Ability to adjust the maximum segment size (MSS)	5420 Series	Not Supported
	5520 Series	Not Supported
	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3.1
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.3.1
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1.8
IS-IS hello padding	5420 Series	VOSS 8.4.2
	5520 Series	VOSS 8.2.7
	VSP 4450 Series	VOSS 8.2.7
	VSP 4900 Series	VOSS 8.2.7
	VSP 7200 Series	VOSS 8.2.7
	VSP 7400 Series	VOSS 8.2.7
	VSP 8200 Series	VOSS 8.2.7
	VSP 8400 Series	VOSS 8.2.7
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.2.7

**Table 46: Fabric Extend product support (continued)**

Feature	Product	Release introduced
IPsec fragmentation before encryption	5420 Series	Not Supported
	5520 Series	Not Supported
	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.3.1 using Fabric IPsec Gateway
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.3.1 using Fabric IPsec Gateway
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.2.7
Ability to configure a specific IPsec source IP per tunnel	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 8.3.1

**Table 47: Fabric Mode product support**

Feature	Product	Release introduced
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**Table 47: Fabric Mode product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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
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 <a href="#">VOSS User Guide</a> .		
Fabric RSPAN (Mirror to I-SID)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 6.0



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

Feature	Product	Release introduced
		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
For configuration details, see <a href="#">VOSS User Guide</a> .		
FDB protected by port (MAC security limit-learning)	5420 Series	VOSS 8.4
	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
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**Table 50: Flight Recorder product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Flight Recorder for system health monitoring	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 51: Forward Error Correction product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 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 <a href="#">VOSS User Guide</a> .		
High Availability-CPU (HA-CPU) for a standalone switch	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	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Applicable
High Availability-CPU (HA-CPU) for Layer 2 with Simplified vIST	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	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) for Layer 3 with Simplified vIST	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	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 <a href="#">VOSS User Guide</a> .		
IEEE 802.3X Pause frame transmit	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	VOSS 8.1.50

**Table 54: Internet Control Message Protocol product support**

Feature	Product	Release introduced
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**Table 54: Internet Control Message Protocol product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Internet Control Message Protocol (ICMP)	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
ICMP broadcast and multicast enable or disable	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 4.5
	XA1400 Series	Not Supported

**Table 55: Internet Group Management Protocol product support**

Feature	Product	Release introduced
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**Table 55: Internet Group Management Protocol product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Internet Group Management Protocol (IGMP), including virtualization	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 4.0.1
	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 <a href="#">VOSS User Guide</a> .		
Internet Key Exchange (IKE) v2  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	VOSS 8.0.50

**Table 57: Internet Protocol Flow Information eXport (IPFIX) product support**

Feature	Product	Release introduced
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**Table 57: Internet Protocol Flow Information eXport (IPFIX) product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Internet Protocol Flow Information eXport (IPFIX)	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	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 <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
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
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**Table 60: IP Phone product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
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) Filtering	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 62: IP Route Policies product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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
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**Table 63: IP Shortcuts product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
IP Source Routing enable or disable	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 4.5
	XA1400 Series	Not Supported

**Table 66: IPsec product support**

Feature	Product	Release introduced	Release deprecated
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**Table 66: IPsec product support (continued)**

Feature	Product	Release introduced	Release deprecated
For configuration details, see <a href="#">VOSS User Guide</a> .			
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-band management port (IPv4)	5420 Series	Not Supported	Not applicable
	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-band management port (IPv6)	5420 Series	Not Supported	Not applicable
	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 IPsec Authentication	5420 Series	Not Supported	Not Applicable
	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 <a href="#">VOSS User Guide</a> .		
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**

Feature	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 <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
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 <ul style="list-style-type: none"> <li>• VSP4900-48P</li> <li>• VIMs: VIM5-4YE, VIM5-4X, VIM5-4XE, and VIM5-2Y</li> </ul> VOSS 8.2.5 <ul style="list-style-type: none"> <li>• VSP4900-24S</li> <li>• VSP4900-24XE</li> </ul>

**Table 69: IQ Agent product support (continued)**

Feature	Product	Release introduced
		<ul style="list-style-type: none"> <li>VSP4900-12MXU-12XE</li> <li>VIMs: VIM5-4Y</li> </ul>
	VSP 7200 Series	Not supported
	VSP 7400 Series	VOSS 8.2
	VSP 8200 Series	Not supported
	VSP 8400 Series	Not supported
	VSP 8600 Series	Not supported
	XA1400 Series	VOSS 8.2

**Table 70: IS-IS product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
IS-IS authentication with SHA-256	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 6.1
	XA1400 Series	VOSS 8.0.50
Suspend duplicate system ID detection	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 6.1
	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 <a href="#">VOSS User Guide</a> .		
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 <a href="#">VOSS User Guide</a> .		
Layer 2 Video Surveillance install script	5420 Series	Not Supported
	5520 Series	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 <a href="#">VOSS User Guide</a> .		
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 (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	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 <a href="#">VOSS User Guide</a> .		
Layer 3 Video Surveillance install script (formerly known as the run vms endura script)	5420 Series	Not supported
	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 <a href="#">VOSS User Guide</a> .		
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
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**Table 76: Licensing product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 Extreme Networks signature.	5420 Series	VOSS 8.4
	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 Default Premier Trial License	5420 Series	VOSS 8.4
	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 Debounce for WAN Links**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Link Debounce	5420 Series	Not Supported
	5520 Series	Not Supported
	VSP 4450 Series	VOSS 8.4.2
	VSP 4900 Series	VOSS 8.4.2
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.4.2
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 78: Link Layer Discovery Protocol product support**

Feature	Product	Release introduced
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**Table 78: Link Layer Discovery Protocol product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Industry Standard Discovery Protocol (ISDP) (CDP compatible)	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
Link Layer Discovery Protocol (LLDP)	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
Link Layer Discovery Protocol-Media Endpoint Discovery (LLDP-MED)	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 8.0.50

**Table 79: Link-state tracking (LST) product support**

Feature	Product	Release introduced
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**Table 79: Link-state tracking (LST) product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 80: Linux kernel version product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Linux kernel version  <b>Important:</b> For VSP 4450 Series, VSP 7200 Series, VSP 8200, and VSP 8400 Series, kernel version 4.9 has special upgrade considerations the first time you upgrade to a release that supports it. You must first upgrade to a stepping-stone release, 6.1.x , before you upgrade to the release with the new kernel.	5420 Series	4.14 as of VOSS 8.4
	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
	VSP 7200 Series	4.9 as of VOSS 7.0
	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 81: Logs and traps product support**

Feature	Product	Release introduced
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**Table 81: Logs and traps product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Logging to a file and syslog (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
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
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

**Table 81: Logs and traps product support (continued)**

Feature	Product	Release introduced
System Logging compliance with RFC 5424 and RFC 3339	5420 Series	VOSS 8.4
	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  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 8.0 demo feature
	XA1400 Series	VOSS 8.0.50



## VOSS Features M to O

**Table 82: MACsec product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
MACsec 2AN mode  <b>Note:</b> VOSS 5.0 officially removed the replay protection commands. Do not use replay protection in earlier releases.	5420 Series	Not Supported
	5520 Series	Not Supported
	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	Not Supported
	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 82: MACsec product support (continued)**

Feature	Product	Release introduced
MACsec 4AN mode	5420 Series	Not Supported
	5520 Series	VOSS 8.2.5 <ul style="list-style-type: none"> <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 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 82: MACsec product support (continued)**

Feature	Product	Release introduced
MACsec encryption cipher suites	5420 Series	Not Supported
	5520 Series	VOSS 8.2.5 <ul style="list-style-type: none"> <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	VOSS 8.1 <ul style="list-style-type: none"> <li>VSP4900-48P supports 128-bit on all fixed ports.</li> <li>VSP4900-24XE supports 128-bit and 256-bit on all fixed ports.</li> <li>VSP4900-12MXU-12XE supports 128-bit and 256-bit on the SFP+ ports.</li> <li>VIM5-4XE and VIM5-4YE supports 128-bit and 256-bit cipher suite.</li> </ul>
	VSP 7200 Series	VOSS 8.1 128 bits only
	VSP 7400 Series	Not Supported
	VSP 8200 Series	VOSS 8.1 128 bits only
	VSP 8400 Series	VOSS 8.1 128 bits only
	VSP 8600 Series	VSP 8600 6.2 8624XS supports 128 bits only. 8606CQ supports 128 bits and 256 bits.
	XA1400 Series	Not Supported



**Table 82: 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 83: Mroute statistics product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Multicast route (mroute) statistics for IPv4 and IPv6	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 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 84: MSTP-Fabric Connect Multi Homing product support**

Feature	Product	Release introduced
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**Table 84: MSTP-Fabric Connect Multi Homing product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
MSTP-Fabric Connect Multi Homing	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 85: Multi-area SPB**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 86: Multicast Listener Discovery product support**

Feature	Product	Release introduced
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**Table 86: Multicast Listener Discovery product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Multicast Listener Discovery (MLD)	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 87: MultiLink Trunking product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
MultiLink Trunking (MLT) / Link Aggregation Group (LAG)	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 88: Multiple CLI Users product support**

Feature	Product	Release introduced
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**Table 88: Multiple CLI Users product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 89: Network Load Balancing product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Network Load Balancing (NLB) - multicast operation	5420 Series	Not Supported
	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 89: Network Load Balancing product support (continued)**

Feature	Product	Release introduced
Network Load Balancing (NLB) - unicast operation	5420 Series	Not Supported
	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 90: Network operating system personality product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 91: Network Time Protocol product support**

Feature	Product	Release introduced	Release deprecated
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**Table 91: Network Time Protocol product support (continued)**

Feature	Product	Release introduced	Release deprecated
For configuration details, see <a href="#">VOSS User Guide</a> .			
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 authentication	5420 Series	Not Supported	Not Applicable
	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 91: 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 restrict	5420 Series	VOSS 8.4	Not Applicable
	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 92: nni-mstp boot flag product support**

Feature	Product	Release introduced
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**Table 92: nni-mstp boot flag product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
nni-mstp boot flag ( <b>boot config flags nni-mstp</b> )	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 93: OSPF product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 93: OSPF product support (continued)**

Feature	Product	Release introduced
Secure hash algorithm 1 (SHA-1) and SHA-2	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 94: OSPFv3 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 95: PIM over IPv6 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 96: Port Mirroring product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Ingress mirroring (port and flow-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: 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 97: Power Manager product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 98: Power over Ethernet product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 98: 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 98: 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-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	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: 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-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	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 99: Protocol Independent Multicast-Source Specific Mode product support**

Feature	Product	Release introduced
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**Table 99: Protocol Independent Multicast-Source Specific Mode product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
PIM-Source Specific Mode (PIM-SSM) for IPv4	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 4.0.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 100: Protocol Independent Multicast - Sparse Mode product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Protocol Independent Multicast-Sparse Mode (PIM-SM) for IPv4	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 4.0.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 101: QoS and VoIP product support**

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

**Table 101: 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 102: Queue Profiles product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 103: RADIUS product support**

Feature	Product	Release introduced	Release deprecated
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**Table 103: RADIUS product support (continued)**

Feature	Product	Release introduced	Release deprecated
For configuration details, see <a href="#">VOSS User Guide</a> .			
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: <ul style="list-style-type: none"> <li>• Acct-Terminate-Cause</li> <li>• Event-Timestamp</li> <li>• Service Type</li> </ul>	5420 Series	VOSS 8.4	
	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
RADIUS, community-based users (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

**Table 103: RADIUS product support (continued)**

Feature	Product	Release introduced	Release deprecated
RADIUS secure communication using IPSec for IPv4  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	5420 Series	Not supported	Not Applicable
	5520 Series	Not Supported	Not Applicable
	VSP 4450 Series	VOSS 5.1.2	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8400 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature	Not Applicable
	XA1400 Series	VOSS 8.0.50	VOSS 8.2
RADIUS secure communication using IPSec for IPv6  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	5420 Series	Not Supported	Not Applicable
	5520 Series	Not Supported	Not Applicable
	VSP 4450 Series	VOSS 5.1.2	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8400 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
RADIUS Security (RADSec)	5420 Series	VOSS 8.4	Not Applicable
	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 103: RADIUS product support (continued)**

Feature	Product	Release introduced	Release deprecated
RFC 5176 – Dynamic Authorization Extensions to RADIUS	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	Not supported	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable
RFC 5997 – RADIUS Reachability Server Status	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	Not supported	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable

**Table 104: Rate Limiting, Policing, and Shaping product support**

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

**Table 104: 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 105: Remote Monitoring product support**

Feature	Product	Release introduced
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**Table 105: Remote Monitoring product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Remote Monitoring 1 (RMON1) for Layer 1 and Layer 2  <b>Note:</b> VOSS Release 5.0 and 5.1 do not support RMON1.	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
Remote Monitoring 2 (RMON2) for network and application layer protocols	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	Not Supported
	XA1400 Series	VOSS 8.2

**Table 106: Representational State Transfer Configuration Protocol (RESTCONF) product support**

Feature	Product	Release introduced
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**Table 106: Representational State Transfer Configuration Protocol (RESTCONF) product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Representational State Transfer Configuration Protocol (RESTCONF)	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	Not Supported
	XA1400 Series	Not Supported

**Table 107: RIPng product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 108: Routing Information Protocol product support**

Feature	Product	Release introduced
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**Table 108: Routing Information Protocol product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Routing Information Protocol (RIP)	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 109: RSMLT for IPv4 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 110: RSMLT for IPv6 product support**

Feature	Product	Release introduced
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**Table 110: RSMLT for IPv6 product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 111: run spbm installation script product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 112: Secure Shell product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 112: 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 112: 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 1024  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this change.	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
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

**Table 113: Segmented Management Instance product support**

Feature	Product	Release introduced
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**Table 113: Segmented Management Instance product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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  <b>Note:</b> VOSS 8.1.50 does not support this feature.
Segmented Management Instance - Management Interface OOB	5420 Series	VOSS 8.4
	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 113: 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  <b>Note:</b> VOSS 8.1.50 does not support this feature.
Segmented Management Instance — ability to migrate VLAN or loopback IP address	5420 Series	Not Applicable
	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 113: Segmented Management Instance product support (continued)**

Feature	Product	Release introduced
Segmented Management Instance – DHCP Client for Management Interface OOB or Management Interface VLAN	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	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 114: sFlow product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 114: sFlow product support (continued)**

Feature	Product	Release introduced
sFlow collector reachability on user-created VRFs	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	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 115: Simple Loop Prevention Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Simple Loop Prevention Protocol (SLPP)	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 116: Simple Network Management Protocol product support**

Feature	Product	Release introduced
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**Table 116: Simple Network Management Protocol product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Simple Network Management Protocol (SNMP) v1/2/3 (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
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 117: SLA Mon product support**

Feature	Product	Release introduced
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**Table 117: SLA Mon product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 118: SLPP Guard product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 119: SONMP product support**

Feature	Product	Release introduced
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**Table 119: SONMP product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 120: Spanning Tree Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Spanning Tree Protocol (STP): <ul style="list-style-type: none"> <li>• Multiple STP (MSTP)</li> <li>• Rapid STP (RSTP)</li> </ul>	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 121: spbm-config-mode product support**

Feature	Product	Release introduced
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**Table 121: spbm-config-mode product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
spbm-config-mode ( <b>boot config flags spbm-config-mode</b> )	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 4.0.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 122: SPB-PIM Gateway product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
SPB-PIM Gateway controller node	5420 Series	Not Supported
	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 122: 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 123: Static routing product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 124: TACACS+ product support**

Feature	Product	Release introduced
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**Table 124: TACACS+ product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 using IPSec for IPv4  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	VOSS 8.0.50

**Table 125: TLS server for secure HTTPS product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
TLS server for secure HTTPS  <b>Note:</b>	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1

**Table 125: TLS server for secure HTTPS 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

**Table 126: Two-Factor Authentication for SSH product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Two-Factor Authentication for SSH	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 demo feature
	XA1400 Series	VOSS 8.0.50

**Table 127: Unicast Reverse Path Forwarding product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Unicast Reverse Path Forwarding (URPF) checking (IPv4)	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 4.5
	XA1400 Series	Not Supported

**Table 127: Unicast Reverse Path Forwarding product support (continued)**

Feature	Product	Release introduced
Unicast Reverse Path Forwarding (URPF) checking (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 4.5
	XA1400 Series	Not Supported



# VOSS Features V to X

**Table 128: Virtual Inter-Switch Trunk product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Switch cluster (multi-chassis LAG) -Virtual Inter-Switch Trunk (vIST)	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 6.1
	XA1400 Series	Not Supported

**Table 129: Virtual Link Aggregation Control Protocol (VLACP) product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Virtual Link Aggregation Control Protocol (VLACP)	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 129: 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 130: Virtual Router Redundancy Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Virtual Router Redundancy Protocol (VRRP)	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 130: 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 131: Virtual Router Redundancy Protocol for IPv6 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 131: 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 132: Virtual Routing and Forwarding product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
Virtualization with IPv4 Virtual Routing and Forwarding (VRF) <ul style="list-style-type: none"> <li>• ARP</li> <li>• DHCP Relay</li> <li>• Inter-VRF Routing (static, dynamic, and policy)</li> <li>• Local routing</li> <li>• OSPFv2</li> <li>• RIPv1 and v2</li> <li>• Route policies</li> <li>• Static routing</li> <li>• VRRP</li> </ul>	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
Increased VRF and Layer 3 VSN scaling	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 8.0
	XA1400 Series	Not Supported

**Table 132: 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 following features and functions: <ul style="list-style-type: none"> <li>IPv6 Interfaces and IPv6 Static Routes in VRFs and Layer 3 VSNs</li> <li>ECMP and Alternative route</li> <li>Route redistribution for static and direct routes</li> <li>VRRPv3 for IPv6</li> <li>DHCP Relay</li> <li>IPv6 Reverse Path Forwarding</li> <li>ICMP Ping and Traceroute</li> </ul>	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
IPv6 Virtualization for the following features and functions: <ul style="list-style-type: none"> <li>Open Shortest Path First for IPv6 (OSPFv3)</li> <li>IPv6 Border Gateway Protocol (IPv6 BGP)</li> <li>IPv6 route redistribution enhancements</li> </ul>	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 133: VXLAN Gateway product support**

Feature	Product	Release introduced
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**Table 133: VXLAN Gateway product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 VXLAN Gateway	5420 Series	Not Supported
	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 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



# VOSS Features Y and Z

**Table 134: Zero Touch Deployment product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 135: Zero Touch Fabric Configuration product support**

Feature	Product	Release introduced
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**Table 135: Zero Touch Fabric Configuration product support (continued)**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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 136: Zero Touch Provisioning Plus product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">VOSS User Guide</a> .		
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