



# VOSS Feature Support Matrix

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# Contents

<b>Chapter 1: About this Document</b> .....	4
Purpose.....	4
Documentation and Training.....	5
Getting Help.....	5
Providing Feedback.....	6
<b>Chapter 2: VOSS Features A to C</b> .....	7
<b>Chapter 3: VOSS Features D to F</b> .....	21
<b>Chapter 4: VOSS Features G to I</b> .....	38
<b>Chapter 5: VOSS Features J to L</b> .....	49
<b>Chapter 6: VOSS Features M to O</b> .....	56
<b>Chapter 7: VOSS Features P to R</b> .....	63
<b>Chapter 8: VOSS Features S to U</b> .....	73
<b>Chapter 9: VOSS Features V to X</b> .....	83
<b>Chapter 10: VOSS Features Y and Z</b> .....	87

# Chapter 1: About this Document

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

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## Purpose

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

- Extreme Networks VSP 4000 Series (includes VSP 4450 Series)
- Extreme Networks VSP 4900 Series
- Extreme Networks VSP 7200 Series
- Extreme Networks VSP 7400 Series
- Extreme Networks VSP 8000 Series (includes VSP 8200 Series and VSP 8400 Series)
- Extreme Networks VSP 8600 Series
- Extreme Networks 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 [Release Notes for VOSS](#).

This document arranges the features alphabetically, based on how those features are included in the configuration documents. For example, [Table 18: Denial-of-service attack prevention product support](#) on page 21 includes both Directed Broadcast and High Secure Mode.

The tables in this document also appear in the conceptual feature content of the configuration documents.

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## Documentation and Training

Find Extreme Networks product information at the following locations:

[Current Product Documentation](#)

[Release Notes](#)

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

[Extreme Optics Compatibility](#)

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

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

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## Getting Help

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

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

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

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

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

1. Go to [www.extremenetworks.com/support/service-notification-form](http://www.extremenetworks.com/support/service-notification-form).
2. Complete the form (all fields are required).
3. Select the products for which you would like to receive notifications.

 **Note:**

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

4. Select **Submit**.

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## Providing Feedback

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

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

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

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

# Chapter 2: VOSS Features A to C

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

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring QoS and ACL-Based Traffic Filtering for VOSS</a> .		
Platform specific considerations for ACL and ACE behavior are documented in ACL Filters Behavior Differences, which is in <a href="#">Configuring QoS and ACL-Based Traffic Filtering for VOSS</a> .		
QoS Access Control Entries (ACE)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	VOSS 8.0.50
Security ACEs	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

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

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring QoS and ACL-Based Traffic Filtering for VOSS</a> .		
Platform specific considerations for ACL and ACE behavior are documented in ACL Filters Behavior Differences, which is in <a href="#">Configuring QoS and ACL-Based Traffic Filtering for VOSS</a> .		
Access Control List (ACL)-based filtering, including egress ACLs,	VSP 4450 Series	VSP 4000 4.0

*Table continues...*

Feature	Product	Release introduced
ingress ACLs, Layer 2 to Layer 4 filtering, port-based, and VLAN-based	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
InVSN Filter	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
IPv6 ingress filters	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
IPv6 egress filters	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

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


Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv4 Routing for VOSS</a> .		

*Table continues...*



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

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

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
<b>Advanced Feature Bandwidth Reservation</b>  <b>Note:</b> If your switch does not have this boot flag, it is because the hardware reserves the bandwidth automatically with no user interaction.	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	VOSS 8.0.50 XA1480 only- demonstration feature

**Table 5: Alternative routes product support**

Feature	Product	Release introduced
Alternative routes for IPv4	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1

*Table continues...*

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv4 Routing for VOSS</a> .	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 For configuration details, see <a href="#">Configuring IPv6 Routing for VOSS</a> .	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
For configuration details, see <a href="#">Monitoring Performance for VOSS</a> .		
Application Telemetry	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	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
For configuration details, see <a href="#">Administering VOSS</a> .		
Authentication for Privileged EXEC CLI Command Mode	VSP 4450 Series	VOSS 8.2
	VSP 4900 Series	VOSS 8.2
	VSP 7200 Series	VOSS 8.2
	VSP 7400 Series	VOSS 8.2
	VSP 8200 Series	VOSS 8.2
	VSP 8400 Series	VOSS 8.2
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	VOSS 8.2

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

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Auto-Negotiation	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1 Switch models: <ul style="list-style-type: none"> <li>• VSP4900-24S and VSP4900-48P - all fixed ports</li> <li>• VSP4900-12MXU-12XE - all fixed ports, with ports 13 to 24 at 1 Gbps only</li> <li>• VSP4900-24XE - all fixed ports at 1 Gbps only</li> </ul> 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: Bidirectional Forwarding Detection (BFD) product support**

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

*Table continues...*

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

**Table 10: Border Gateway Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring BGP Services for VOSS</a> .		
Border Gateway Protocol for IPv4 (BGPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5

*Table continues...*

Feature	Product	Release introduced
	XA1400 Series	VOSS 8.0.50
BGP+ (BGPv4 for IPv6).	VSP 4450 Series	VOSS 5.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
BGPv6	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported
External BGP (eBGP)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Internal BPG (iBGP)	VSP 4450 Series	VOSS 4.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Route metric for BGP route redistribution	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1


*Table continues...*

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

**Table 11: Bridge Protocol Data Unit (BPDU) Guard product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring VLANs, Spanning Tree, and NLB for VOSS</a> .		
Bridge Protocol Data Unit (BPDU) Guard	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 12: Certificate order priority product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
Certificate order priority  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0

*Table continues...*

Feature	Product	Release introduced
	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 13: Channelization product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Channelization of 40 Gbps ports	VSP 4450 Series	Not Applicable
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0 VSP 7432CQ only
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	Not Applicable
Channelization of 100 Gbps ports	VSP 4450 Series	Not Applicable
	VSP 4900 Series	Not Applicable
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	VOSS 8.0 VSP 7432CQ only
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Supported
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Applicable

**Table 14: Client and Server product support**

Feature	Product	Release introduced	Release deprecated
For configuration details, see <a href="#">Administering VOSS</a> .			
File Transfer Protocol (FTP) server and client (IPv4)	VSP 4450 Series	VSP 4000 4.0	Not applicable
	VSP 4900 Series	VOSS 8.1	Not applicable
	VSP 7200 Series	VOSS 4.2.1	Not applicable
	VSP 7400 Series	VOSS 8.0	Not applicable
	VSP 8200 Series	VSP 8200 4.0	Not applicable

*Table continues...*

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

*Table continues...*



Feature	Product	Release introduced	Release deprecated
Rlogin server (IPv6)	VSP 4450 Series	VOSS 4.1	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 4.2.1	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 4.1	VOSS 8.2
	VSP 8400 Series	VOSS 4.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 6.2	Not applicable
	XA1400 Series	Not Supported	VOSS 8.2
Rlogin client (IPv6)	VSP 4450 Series	VOSS 7.0	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 7.0	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 7.0	VOSS 8.2
	VSP 8400 Series	VOSS 7.0	VOSS 8.2
	VSP 8600 Series	VSP 8600 8.0	Not applicable
	XA1400 Series	Not Supported	VOSS 8.2
Remote Shell (RSH) server/client	VSP 4450 Series	VSP 4000 4.0	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 4.2.1	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VSP 8200 4.0	VOSS 8.2
	VSP 8400 Series	VOSS 4.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 4.5	Not applicable
	XA1400 Series	VOSS 8.0.50	VOSS 8.2
Secure Copy (SCP)  * <b>Note:</b>  The switch does not support the WinSCP client.	VSP 4450 Series	VSP 4000 4.0	Not applicable
	VSP 4900 Series	VOSS 8.1	Not applicable
	VSP 7200 Series	VOSS 5.0	Not applicable
	VSP 7400 Series	VOSS 8.0	Not applicable
	VSP 8200 Series	VSP 8200 4.0	Not applicable
	VSP 8400 Series	VOSS 5.0	Not applicable
	VSP 8600 Series	VSP 8600 4.5	Not applicable
	XA1400 Series	VOSS 8.0.50	Not applicable
Secure File Transfer Protocol (SFTP) server (IPv4)	VSP 4450 Series	VOSS 4.2	Not applicable
	VSP 4900 Series	VOSS 8.1	Not applicable
	VSP 7200 Series	VOSS 4.2.1	Not applicable

Table continues...

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

*Table continues...*

Feature	Product	Release introduced	Release deprecated
	VSP 8600 Series	VSP 8600 4.5	Not applicable
	XA1400 Series	VOSS 8.0.50	Not applicable
TFTP server (IPv6)	VSP 4450 Series	VOSS 4.1	Not applicable
	VSP 4900 Series	VOSS 8.1	Not applicable
	VSP 7200 Series	VOSS 4.2.1	Not applicable
	VSP 7400 Series	VOSS 8.0	Not applicable
	VSP 8200 Series	VOSS 4.1	Not applicable
	VSP 8400 Series	VOSS 4.2	Not applicable
	VSP 8600 Series	VSP 8600 6.2	Not applicable
	XA1400 Series	Not Supported	Not applicable
TFTP client (IPv6)	VSP 4450 Series	VOSS 7.0	Not applicable
	VSP 4900 Series	VOSS 8.1	Not applicable
	VSP 7200 Series	VOSS 7.0	Not applicable
	VSP 7400 Series	VOSS 8.0	Not applicable
	VSP 8200 Series	VOSS 7.0	Not applicable
	VSP 8400 Series	VOSS 7.0	Not applicable
	VSP 8600 Series	VSP 8600 8.0	Not applicable
	XA1400 Series	Not Supported	Not applicable

**Table 15: Command Line Interface product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring User Interfaces and Operating Systems for VOSS</a> .		
Command Line Interface (CLI)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 4200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 16: Connectivity Fault Management product support**

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

*Table continues...*

Feature	Product	Release introduced
IEEE 802.1ag Connectivity Fault Management (CFM): <ul style="list-style-type: none"> <li>• Layer 2 Ping</li> <li>• TraceRoute</li> <li>• TraceTree</li> </ul>	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50 Layer 2 Ping only
CFM configuration on C-VLANs	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 17: Custom Logon Banner product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Custom logon banner	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

\* **Note:**  
Configurable using CLI only.

# Chapter 3: VOSS Features D to F

**Table 18: Denial-of-service attack prevention product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
Directed Broadcast	VSP 4450 Series	VOSS 5.1.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.1
	VSP 8400 Series	VOSS 5.1.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
High Secure mode (hsecure boot configuration flag)	VSP 4450 Series	VSP 4450 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 19: DHCPv6 Guard product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
DHCPv6 Guard	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


*Table continues...*

Feature	Product	Release introduced
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 20: Differentiated Services product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring QoS and ACL-Based Traffic Filtering for VOSS</a> .		
Differentiated Services (DiffServ) including Per-Hop Behavior	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 21: Digital Certificate/PKI product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
Digital Certificate/PKI  <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
Subject alternative name	VSP 4450 Series	VOSS 7.1.3
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.1.3
	VSP 7400 Series	VOSS 8.0.6
	VSP 8200 Series	VOSS 7.1.3
	VSP 8400 Series	VOSS 7.1.3
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1

**Table 22: Distributed Virtual Routing product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv4 Routing for VOSS</a> .		
Distributed Virtual Routing (DvR) Controller  <b>! Important:</b> Because of a change in VOSS 6.0.1.2, the best practice is to use a <i>minimum</i> software version of 6.0.1.2 in DvR deployments.	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1.5 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 <i>minimum</i> software version of 6.0.1.2 in DvR deployments.	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0.1
	VSP 8400 Series	VOSS 6.0.1
	VSP 8600 Series	Not supported
	XA1400 Series	Not Supported
Distributed Virtual Routing (DvR) dvr-one-ip	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.2 demonstration feature
	VSP 7200 Series	VOSS 8.2 demonstration feature
	VSP 7400 Series	VOSS 8.2 demonstration feature
	VSP 8200 Series	VOSS 8.2 demonstration feature
	VSP 8400 Series	VOSS 8.2 demonstration feature
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported
Distributed Virtual Routing (DvR) In-band Management	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0.1
	VSP 8400 Series	VOSS 6.0.1

Table continues...

Feature	Product	Release introduced
	VSP 8600 Series	Not supported
	XA1400 Series	Not Supported

**Table 23: Domain Name Service product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Domain Name Service (DNS) client (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
DNS client (IPv6)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 24: Dynamic ARP Inspection (DAI) product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
Dynamic ARP Inspection (DAI)	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported



**Table 25: Dynamic Host Configuration Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv4 Routing for VOSS</a> .		
Dynamic Host Configuration Protocol (DHCP) Relay	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
DHCP Option 82	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

For information about DHCP Client for Management Instance and Zero Touch Deployment, see [Administering VOSS](#).

**Table 26: Dynamic Host Configuration Protocol Relay for IPv6 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv6 Routing for VOSS</a> .		
IPv6 DHCP Relay	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 27: Dynamic Host Configuration Protocol Snooping and Neighbor Discovery Inspection product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
DHCP Snooping(IPv4)	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50
DHCP Snooping (IPv6)	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
Neighbor Discovery Inspection (IPv6)	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 28: Dynamic Nickname Assignment product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
Dynamic Nickname Assignment	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0.5

*Table continues...*

Feature	Product	Release introduced
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 29: Egress Tunnel Shaping product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring QoS and ACL-Based Traffic Filtering for VOSS</a> .		
Egress Tunnel Shaping	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1

**Table 30: Endpoint Tracking product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
Endpoint Tracking	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 31: Energy Efficient Ethernet product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Energy Efficient Ethernet (EEE)	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1

*Table continues...*

Feature	Product	Release introduced
		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 32: Energy Saver product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Energy Saver	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1 VSP4900-48P and ports 1/1 to 1/12 on VSP4900-12MXU-12XE only
	VSP 7200 Series	VOSS 7.0 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 33: Enhanced Secure Mode product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Enhanced Secure mode	VSP 4450 Series	VOSS 4.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2

*Table continues...*

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

**Table 34: Enterprise Device Manager product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring User Interfaces and Operating Systems for VOSS</a> .		
Enterprise Device Manager (EDM)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Read-Only user for EDM	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0 demo feature
	XA1400 Series	VOSS 8.0.50

**Table 35: Entity MIB product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Entity MIB - Physical Table	VSP 4450 Series	VOSS 6.0

*Table continues...*

Feature	Product	Release introduced
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
Entity MIB enhancements and integration for the following: <ul style="list-style-type: none"> <li>Physical Table</li> <li>Alias Mapping Table</li> <li>Physical Contains Table</li> <li>Last Change Time object</li> </ul>	VSP 4450 Series	VOSS 6.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1.2
	VSP 8400 Series	VOSS 6.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 36: Equal Cost Multiple Path for IPv4 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv4 Routing for VOSS</a> .		
Equal Cost Multiple Path (ECMP) for IPv4	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 37: Equal Cost Multiple Path for IPv6 product support**

Feature	Product	Release introduced
For configuration details, see the following documents: <ul style="list-style-type: none"> <li><a href="#">Configuring IPv4 Routing for VOSS</a></li> <li><a href="#">Configuring IPv6 Routing for VOSS</a></li> <li><a href="#">Configuring BGP Services for VOSS</a></li> </ul>		
ECMP for IPv6	VSP 4450 Series	VOSS 5.1

*Table continues...*

Feature	Product	Release introduced
	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 38: ECMP Pathlist with Fabric Connect product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> and <a href="#">Configuring IPv4 Routing for VOSS</a> .		
ECMP Pathlist with Fabric Connect (IS-IS routes)	VSP 4450 Series	VOSS 8.1.5
	VSP 4900 Series	VOSS 8.1.5
	VSP 7200 Series	VOSS 8.1.5
	VSP 7400 Series	VOSS 8.1.5
	VSP 8200 Series	VOSS 8.1.5
	VSP 8400 Series	VOSS 8.1.5
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1.5

**Table 39: E-Tree and Private VLANs product support**

Feature	Product	Release introduced
For configuration details, see the following documents:		
<ul style="list-style-type: none"> <li>• E-Tree - <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a></li> <li>• Private VLANs - <a href="#">Configuring VLANs, Spanning Tree, and NLB for VOSS</a></li> <li>• MLT and Private VLANs - <a href="#">Configuring Link Aggregation, MLT, SMLT and vIST for VOSS</a></li> </ul>		
E-Tree and Private VLANs	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 40: Extensible Authentication Protocol over LAN product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
Extensible Authentication Protocol (EAP) and EAP over LAN (EAPoL)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
EAPoL MHMA-MV	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
EAPoL enhancements: Enhanced MHMV, Fail Open VLAN, Guest VLAN	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
Non EAPoL MAC RADIUS authentication	VSP 4450 Series	VOSS 4.2.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2.1
	VSP 8400 Series	VOSS 4.2.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
QoS Priority Assignment	VSP 4450 Series	VOSS 7.0

*Table continues...*



Feature	Product	Release introduced
	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: Extreme Integrated Application Hosting product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring User Interfaces and Operating Systems for VOSS</a> .		
Extreme Integrated Application Hosting (IAH)	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1.5 VSP4900-12MXU-12XE and VSP4900-24XE only
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
Fabric IPsec Gateway	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.2
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 42: Extreme Management Center backup configuration ZIP file product support**

Feature	Product	Release introduced
Extreme Management Center backup configuration ZIP file	VSP 4450 Series	VOSS 6.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1.2

*Table continues...*

Feature	Product	Release introduced
For more information, see Extreme Management Center documentation.	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 43: Fabric Attach product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
Fabric Attach	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 44: Fabric Attach Zero Touch Client Attachment product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
Fabric Attach Zero Touch Client Attachment	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.3
	XA1400 Series	Not Supported

**Table 45: Fabric Extend product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
Fabric Extend	VSP 4450 Series	VOSS 5.0*
	VSP 4900 Series	VOSS 8.1

*Table continues...*

Feature	Product	Release introduced
*Platforms require an Open Networking Adapter (ONA).	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
Fabric Extend over IPsec	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	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
ECMP support for Fabric Extend	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50

**Table 46: Fabric Mode product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
Fabric BCB mode	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

*Table continues...*

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

**Table 47: Fabric RSPAN product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Troubleshooting VOSS</a> .		
Fabric RSPAN (Mirror to I-SID)	VSP 4450 Series	VOSS 6.0 Flow-based mirroring into single I-SID only
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 48: FDB Protected by Port product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring VLANs, Spanning Tree, and NLB for VOSS</a> .		
FDB protected by port (MAC security limit-learning)	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 49: Flight Recorder product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Troubleshooting VOSS</a> .		
Flight Recorder for system health monitoring	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 50: Forward Error Correction product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Forward Error Correction (FEC) (configurable)	VSP 4450 Series	Not Applicable
	VSP 4900 Series	VOSS 8.1 VIM5-4YE at 25 Gbps
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	Not Supported
	VSP 8400 Series	VOSS 8.0
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Applicable

# Chapter 4: VOSS Features G to I

**Table 51: High-Availability product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
High Availability-CPU (HA-CPU) for a standalone switch	VSP 4450 Series	Not Applicable
	VSP 4900 Series	Not Applicable
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Applicable
High Availability-CPU (HA-CPU) for Layer 2 with Simplified vIST	VSP 4450 Series	Not Applicable
	VSP 4900 Series	Not Applicable
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	VSP 8600 6.3
	XA1400 Series	Not Applicable
High Availability-CPU (HA-CPU) for Layer 3 with Simplified vIST	VSP 4450 Series	Not Applicable
	VSP 4900 Series	Not Applicable
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	VSP 8600 6.3
	XA1400 Series	Not Applicable

**Table 52: IEEE 802.3X Pause Frame Transmit product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
IEEE 802.3X Pause frame transmit	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1.50

**Table 53: Internet Control Message Protocol product support**

Feature	Product	Release introduced
Internet Control Message Protocol (ICMP)  For configuration details, see <a href="#">Configuring IPv4 Routing for VOSS</a> .	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  For configuration details, see the following documents: <ul style="list-style-type: none"> <li>• <a href="#">Configuring IPv4 Routing for VOSS</a></li> <li>• <a href="#">Configuring IPv6 Routing for VOSS</a></li> </ul>	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 54: Internet Group Management Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IP Multicast Routing Protocols for VOSS</a> .		

*Table continues...*

Feature	Product	Release introduced
Internet Group Management Protocol (IGMP), including virtualization	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 55: Internet Key Exchange product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
Internet Key Exchange (IKE) v2 <b>* Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	VOSS 8.0.50

**Table 56: Internet Protocol Flow Information eXport (IPFIX) product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Monitoring Performance for VOSS</a> .		
Internet Protocol Flow Information eXport (IPFIX)	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported



**Table 57: Inter-VSN Routing product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
Inter-VSN routing (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
Inter-VSN routing (IPv6)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported

**Table 58: IOC Module Preconfiguration**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
IOC Module Preconfiguration	VSP 4450 Series	Not supported
	VSP 4900 Series	Not supported
	VSP 4900 Series	Not supported
	VSP 7200 Series	Not supported
	VSP 7400 Series	Not supported
	VSP 8200 Series	Not supported
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not supported

**Table 59: IP Multicast over Fabric Connect product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Multicast Services for VOSS</a> .		
IP Multicast over Fabric Connect	VSP 4450 Series	VSP 4000 4.0

*Table continues...*

Feature	Product	Release introduced
	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 60: IP Route Policies product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv4 Routing for VOSS</a> .		
IP route policies	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 61: IP Shortcuts product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Layer 3 Services for VOSS</a> .		
IP Shortcut routing including ECMP	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
IPv6 Shortcut routing	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0

*Table continues...*

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

**Table 62: IP Source Guard product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
IP Source Guard (IPv4)	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50
IP Source Guard (IPv6)	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1

*Table continues...*

Feature	Product	Release introduced
	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 63: IP Source Routing product support**

Feature	Product	Release introduced
For configuration details, see the following documents:		
<ul style="list-style-type: none"> <li>• <a href="#">Configuring IPv4 Routing for VOSS</a></li> <li>• <a href="#">Configuring IPv6 Routing for VOSS</a></li> </ul>		
IP Source Routing enable or disable	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 64: IPsec product support**

Feature	Product	Release introduced	Release deprecated
For configuration details, see <a href="#">Configuring Security for VOSS</a> .			
IPsec NAT-T	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	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

*Table continues...*

Feature	Product	Release introduced	Release deprecated
	VSP 8200 Series	VOSS 4.2	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	Not Supported	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
IPsec tunnel mode	VSP 4450 Series	Not Supported	Not Applicable
	VSP 4900 Series	Not Supported	Not Applicable
	VSP 7200 Series	Not Supported	Not Applicable
	VSP 7400 Series	Not Supported	Not Applicable
	VSP 8200 Series	Not Supported	Not Applicable
	VSP 8400 Series	Not Supported	Not Applicable
	VSP 8600 Series	Not Supported	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable
IPsec for the Out-of-band management port (IPv4)	VSP 4450 Series	VOSS 4.2	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 4.2.1	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 4.2	VOSS 8.2
	VSP 8400 Series	VOSS 4.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Applicable	Not Applicable
IPsec for the Out-of-band management port (IPv6)	VSP 4450 Series	VOSS 6.0	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 6.0	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 6.0	VOSS 8.2
	VSP 8400 Series	VOSS 6.0	VOSS 8.2
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Applicable	Not Applicable

**Table 65: IPv6-in-IPv4 tunnels product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv6 Routing for VOSS</a> .		
IPv6-in-IPv4 tunnels	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1

*Table continues...*

Feature	Product	Release introduced
	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 66: IPv6 Router Advertisement (RA) Guard product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
IPv6 Router Advertisement (RA) Guard	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 67: IPv6 virtualization product support**

Feature	Product	Release introduced
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> For configuration details, see <a href="#">Configuring IPv6 Routing for VOSS</a> .	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 continues...*

Feature	Product	Release introduced
IPv6 Virtualization for the following features and functions: <ul style="list-style-type: none"> <li>• Open Shortest Path First for IPv6 (OSPFv3)</li> <li>• IPv6 Border Gateway Protocol (IPv6 BGP)</li> <li>• IPv6 route redistribution enhancements</li> </ul> For configuration details, see <a href="#">Configuring IPv6 Routing for VOSS</a> .	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
iBGP over user-created VRFs For configuration details, see <a href="#">Configuring BGP Services for VOSS</a> .	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 68: IQAgent product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring User Interfaces and Operating Systems for VOSS</a> .		
IQAgent	VSP 4450 Series	Not supported
	VSP 4900 Series	VOSS 8.2 VIMs: VIM5-4YE, VIM5-4X, VIM5-4XE, and VIM5-2Y only
	VSP 7200 Series	Not supported
	VSP 7400 Series	VOSS 8.2
	VSP 8200 Series	Not supported
	VSP 8400 Series	Not supported
	VSP 8600 Series	Not supported
	XA1400 Series	VOSS 8.2

**Table 69: IS-IS product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
IS-IS authentication with SHA-256	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
Suspend duplicate system ID detection	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
Multiple IS-IS parallel adjacencies	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported



# Chapter 5: VOSS Features J to L

**Table 70: Key Health Indicator product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Monitoring Performance for VOSS</a> .		
Key Health Indicator (KHI)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 71: Layer 2 Video Surveillance install script product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
Layer 2 Video Surveillance install script	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1 To support this feature, VIM installation is mandatory in VSP4900-48P.
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 72: Layer 2 VSN product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
Equal Cost Trees (ECT)	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)	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
Switched UNI	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)	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 73: Layer 3 Video Surveillance install script product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Layer 3 Services for VOSS</a> .		
Layer 3 Video Surveillance install script (formerly known as the run vms endura script)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1 To support this feature, VIM installation is mandatory in VSP4900-48P.
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 74: Layer 3 VSN product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Layer 3 Services for VOSS</a> .		
Layer 3 VSN	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 75: Licensing product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
License files signed using Extreme Networks signature.	VSP 4450 Series	VOSS 6.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1.2
	VSP 8400 Series	VOSS 6.1.2

*Table continues...*

Feature	Product	Release introduced
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
Subscription-based licenses	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50

**Table 76: Link Layer Discovery Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Industry Standard Discovery Protocol (ISDP) (CDP compatible)	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
Link Layer Discovery Protocol (LLDP)	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
Link Layer Discovery Protocol-Media Endpoint Discovery (LLDP-MED)	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0

*Table continues...*

Feature	Product	Release introduced
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	VOSS 8.0.50

**Table 77: Link-state tracking (LST) product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Link Aggregation, MLT, SMLT and vIST for VOSS</a> .		
Link-state tracking (LST)	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	Not Supported

**Table 78: Linux kernel version product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
<p><b>!</b> <b>Important:</b></p> <p>For VSP 4450 Series, VSP 7200 Series, VSP 8200, and VSP 8400 Series, kernel version 4.9 has special upgrade considerations the <i>first</i> time you upgrade to a release that supports it. You must first upgrade to a stepping-stone release, 6.1.x , <i>before</i> you upgrade to the release with the new kernel.</p>	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 79: Logs and traps product support**

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

*Table continues...*


Feature	Product	Release introduced
Logging to a file and syslog (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Logging to a file and syslog (IPv6)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
Simple Mail Transfer Protocol (SMTP) for log notification	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
System Logging compliance with RFC 5424 and RFC 3339	VSP 4450 Series	VOSS 6.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1.2
	VSP 8400 Series	VOSS 6.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
TLS client for secure syslog	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2

*Table continues...*

Feature	Product	Release introduced
<p> <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.</p>	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

# Chapter 6: VOSS Features M to O

**Table 80: MACsec product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
<b>MACsec 2AN mode</b>   <b>Note:</b> VOSS 5.0 officially removed the replay protection commands. Do not use replay protection in earlier releases.	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	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
<b>MACsec 4AN mode</b>	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
<b>MACsec encryption cipher suites</b>	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> </ul>

*Table continues...*



Feature	Product	Release introduced
		<ul style="list-style-type: none"> <li>VSP4900-12MXU-12XE supports 128-bit and 256-bit on the SFP+ ports.</li> <li>VIM5-4XE and VIM5-4YE supports 128-bit and 256-bit cipher suite.</li> </ul>
	VSP 7200 Series	VOSS 8.1 128 bits only
	VSP 7400 Series	Not Supported
	VSP 8200 Series	VOSS 8.1 128 bits only
	VSP 8400 Series	VOSS 8.1 128 bits only
	VSP 8600 Series	VSP 8600 6.2 8624XS supports 128 bits only. 8606CQ supports 128 bits and 256 bits.
	XA1400 Series	Not Supported
MACsec Key Agreement (MKA)	VSP 4450 Series	Not Supported
	VSP 4900 Series	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 81: Mroute statistics product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IP Multicast Routing Protocols for VOSS</a> .		
Multicast route (mroute) statistics for IPv4 and IPv6	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

*Table continues...*

Feature	Product	Release introduced
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 82: MSTP-Fabric Connect Multi Homing product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
MSTP-Fabric Connect Multi Homing	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 83: Multicast Listener Discovery product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IP Multicast Routing Protocols for VOSS</a> .		
Multicast Listener Discovery (MLD)	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 84: MultiLink Trunking product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Link Aggregation, MLT, SMLT and vIST for VOSS</a> .		
MultiLink Trunking (MLT) / Link Aggregation Group (LAG)	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

*Table continues...*

Feature	Product	Release introduced
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 85: Multiple CLI Users product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Multiple CLI users per role	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	VOSS 8.0.50

**Table 86: Network Load Balancing product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring VLANs, Spanning Tree, and NLB for VOSS</a> .		
Network Load Balancing (NLB) - multicast operation	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
Network Load Balancing (NLB) - unicast operation	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported


**Table 87: Network Time Protocol product support**

Feature	Product	Release introduced	Release deprecated
For configuration details, see <a href="#">Administering VOSS</a> .			
NTPv3 client	VSP 4450 Series	VSP 4000 4.0	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 4.2.1	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VSP 8200 4.0	VOSS 8.2
	VSP 8400 Series	VOSS 4.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 4.5	Not applicable
	XA1400 Series	VOSS 8.0.50	VOSS 8.2
NTPv3 with SHA authentication	VSP 4450 Series	VOSS 5.1	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 5.1	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 5.1	VOSS 8.2
	VSP 8400 Series	VOSS 5.1	VOSS 8.2
	VSP 8600 Series	VSP 8600 4.5	Not applicable
	XA1400 Series	VOSS 8.0.50	VOSS 8.2
NTPv4 client for IPv4	VSP 4450 Series	VOSS 7.0	Not applicable
	VSP 4900 Series	VOSS 8.1	Not applicable
	VSP 7200 Series	VOSS 7.0	Not applicable
	VSP 7400 Series	VOSS 8.0	Not applicable
	VSP 8200 Series	VOSS 7.0	Not applicable
	VSP 8400 Series	VOSS 7.0	Not applicable
	VSP 8600 Series	VSP 8600 8.0	Not applicable
	XA1400 Series	Not Supported	Not applicable
NTPv4 client for IPv6	VSP 4450 Series	VOSS 7.0	Not applicable
	VSP 4900 Series	VOSS 8.1	Not applicable
	VSP 7200 Series	VOSS 7.0	Not applicable
	VSP 7400 Series	VOSS 8.0	Not applicable
	VSP 8200 Series	VOSS 7.0	Not applicable
	VSP 8400 Series	VOSS 7.0	Not applicable
	VSP 8600 Series	VSP 8600 8.0	Not applicable
	XA1400 Series	Not Supported	Not applicable

*Table continues...*

Feature	Product	Release introduced	Release deprecated
NTPv4 master and restrict	VSP 4450 Series	VOSS 8.0	Not applicable
	VSP 4900 Series	VOSS 8.1	Not applicable
	VSP 7200 Series	VOSS 8.0	Not applicable
	VSP 7400 Series	VOSS 8.0	Not applicable
	VSP 8200 Series	VOSS 8.0	Not applicable
	VSP 8400 Series	VOSS 8.0	Not applicable
	VSP 8600 Series	VSP 8600 8.0 demonstration feature	Not applicable
	XA1400 Series	Not Supported	Not applicable

**Table 88: nni-mstp boot flag product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
<b>nni-mstp boot flag (<code>boot config flags nni-mstp</code>)</b>   <b>Important:</b> This flag has special upgrade considerations the first time you upgrade to a release that supports it.	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 89: OSPF product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring OSPF and RIP for VOSS</a> .		
Open Shortest Path First (OSPF)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Secure hash algorithm 1 (SHA-1) and SHA-2	VSP 4450 Series	VOSS 4.2
	VSP 4900 Series	VOSS 8.1

*Table continues...*

Feature	Product	Release introduced
	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 90: OSPFv3 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring OSPF and RIP for VOSS</a> .		
OSPFv3	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

# Chapter 7: VOSS Features P to R

**Table 91: PIM over IPv6 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IP Multicast Routing Protocols for VOSS</a> .		
PIM over IPv6	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

**Table 92: Port Mirroring product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Troubleshooting VOSS</a> .		
Ingress mirroring (port and flow-based)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Egress mirroring (port-based)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0

*Table continues...*

Feature	Product	Release introduced
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 93: Power Manager product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Power Management	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 94: Power over Ethernet product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Power over Ethernet (PoE)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1 VSP4900-48P and first 12 ports of VSP4900-12MXU-12XE only
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable
	VSP 8400 Series	Not Applicable
	VSP 8600 Series	Not Applicable
	XA1400 Series	Not Supported
PoE/PoE+ allocation using LLDP	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1 VSP4900-48P and first 12 ports of VSP4900-12MXU-12XE only
	VSP 7200 Series	Not Applicable
	VSP 7400 Series	Not Applicable
	VSP 8200 Series	Not Applicable

*Table continues...*



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

**Table 95: Protocol Independent Multicast-Source Specific Mode product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IP Multicast Routing Protocols for VOSS</a> .		
PIM-Source Specific Mode (PIM-SSM) for IPv4	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.0.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 96: Protocol Independent Multicast - Sparse Mode product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IP Multicast Routing Protocols for VOSS</a> .		
Protocol Independent Multicast-Sparse Mode (PIM-SM) for IPv4	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.0.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 97: QoS and VoIP product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring QoS and ACL-Based Traffic Filtering for VOSS</a> .		
Platform specific considerations for QoS behavior are documented in QoS Behavior Differences, which is in <a href="#">Configuring QoS and ACL-Based Traffic Filtering for VOSS</a> .		
Automatic QoS	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 98: Queue Profiles product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring QoS and ACL-Based Traffic Filtering for VOSS</a> .		
QoS per queue rate limiting	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 99: RADIUS product support**

Feature	Product	Release introduced	Release deprecated
For configuration details, see <a href="#">Configuring Security for VOSS</a> .			
RADIUS (IPv6)	VSP 4450 Series	VOSS 4.1	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 4.2.1	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 4.1	Not Applicable
	VSP 8400 Series	VOSS 4.2	Not Applicable
	VSP 8600 Series	VSP 8600 6.2	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
RADIUS attributes: <ul style="list-style-type: none"> <li>• Acct-Terminate-Cause</li> <li>• Event-Timestamp</li> <li>• Service Type</li> </ul>	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)	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
RADIUS secure communication using IPSec for IPv4  <span style="color: green;">*</span> <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8400 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature	Not Applicable
	XA1400 Series	VOSS 8.0.50	VOSS 8.2

*Table continues...*

Feature	Product	Release introduced	Release deprecated
RADIUS secure communication using IPSec for IPv6  <b>* Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this feature.	VSP 4450 Series	VOSS 5.1.2	VOSS 8.2
	VSP 4900 Series	VOSS 8.1	VOSS 8.2
	VSP 7200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 7400 Series	VOSS 8.0	VOSS 8.2
	VSP 8200 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8400 Series	VOSS 5.1.2	VOSS 8.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature	Not Applicable
	XA1400 Series	Not Supported	Not Applicable
RADIUS Security (RADSec)	VSP 4450 Series	VOSS 8.2	Not Applicable
	VSP 4900 Series	VOSS 8.2	Not Applicable
	VSP 7200 Series	VOSS 8.2	Not Applicable
	VSP 7400 Series	VOSS 8.2	Not Applicable
	VSP 8200 Series	VOSS 8.2	Not Applicable
	VSP 8400 Series	VOSS 8.2	Not Applicable
	VSP 8600 Series	Not Supported	Not Applicable
	XA1400 Series	VOSS 8.2	Not Applicable
RFC 5176 – Dynamic Authorization Extensions to RADIUS	VSP 4450 Series	VOSS 7.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 7.0	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 7.0	Not Applicable
	VSP 8400 Series	VOSS 7.0	Not Applicable
	VSP 8600 Series	Not supported	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable
RFC 5997 – RADIUS Reachability Server Status	VSP 4450 Series	VOSS 7.0	Not Applicable
	VSP 4900 Series	VOSS 8.1	Not Applicable
	VSP 7200 Series	VOSS 7.0	Not Applicable
	VSP 7400 Series	VOSS 8.0	Not Applicable
	VSP 8200 Series	VOSS 7.0	Not Applicable
	VSP 8400 Series	VOSS 7.0	Not Applicable
	VSP 8600 Series	Not supported	Not Applicable
	XA1400 Series	VOSS 8.0.50	Not Applicable


**Table 100: Rate Limiting, Policing, and Shaping product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring QoS and ACL-Based Traffic Filtering for VOSS</a> .		
Platform specific considerations for QoS behavior are documented in QoS Behavior Differences, which is in <a href="#">Configuring QoS and ACL-Based Traffic Filtering for VOSS</a> .		
Egress port shaper	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported
Ingress dual rate port policers	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	Not Supported
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported
QoS ingress port rate limiter	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	Not Supported
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1.50

**Table 101: Remote Monitoring product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Monitoring Performance for VOSS</a> .		
Remote Monitoring 1 (RMON1) for Layer 1 and Layer 2	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1

*Table continues...*

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

**Table 102: Representational State Transfer Configuration Protocol (RESTCONF) product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring User Interfaces and Operating Systems for VOSS</a> .		
Representational State Transfer Configuration Protocol (RESTCONF)	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 103: RIPng product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv6 Routing for VOSS</a> .		
RIPng	VSP 4450 Series	VOSS 5.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0

*Table continues...*

Feature	Product	Release introduced
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 104: Routing Information Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring OSPF and RIP for VOSS</a> .		
Routing Information Protocol (RIP)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 105: RSMLT for IPv4 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv4 Routing for VOSS</a> .		
IPv4 RSMLT	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

**Table 106: RSMLT for IPv6 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv6 Routing for VOSS</a> .		
IPv6 RSMLT	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1

*Table continues...*

Feature	Product	Release introduced
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 107: run spbm installation script product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
run spbm installation script	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported



# Chapter 8: VOSS Features S to U

**Table 108: Secure Shell product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Secure Shell (SSH) server (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Secure Shell (SSH) client (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Secure Sockets Layer (SSL) certificate management	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
SSH server (IPv6)	VSP 4450 Series	VOSS 4.1

*Table continues...*

Feature	Product	Release introduced
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
SSH client (IPv6)	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported
SSH client disable	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
SSH key sizes in multiples of 1024  * <b>Note:</b> VOSS Releases 6.0 and 6.0.1 do not support this change.	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50
SSH rekey	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0


Table continues...

Feature	Product	Release introduced
	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 109: Segmented Management Instance product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Segmented Management Instance - Management Interface CLIP	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	VOSS 8.1.1 - IPv4 only  * <b>Note:</b> VOSS 8.1.50 does not support this feature.
Segmented Management Instance - Management Interface OOB	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
Segmented Management Instance - Management Interface VLAN	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.1.1 - IPv4 only

*Table continues...*

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

**Table 110: sFlow product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Monitoring Performance for VOSS</a> .		
sFlow	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
sFlow collector reachability on user-created VRFs	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	Not Supported

*Table continues...*

Feature	Product	Release introduced
	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 111: Simple Loop Prevention Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring VLANs, Spanning Tree, and NLB for VOSS</a> .		
Simple Loop Prevention Protocol (SLPP)	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: Simple Network Management Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
Simple Network Management Protocol (SNMP) v1/2/3 (IPv4)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
SNMP (IPv6)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2

*Table continues...*

Feature	Product	Release introduced
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

**Table 113: SLA Mon product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring the SLA Mon Agent for VOSS</a> .		
SLA Mon	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 114: SLPP Guard product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Link Aggregation, MLT, SMLT and vIST for VOSS</a> .		
SLPP Guard	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	VOSS 8.0.50

**Table 115: SONMP product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
SONMP	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0

*Table continues...*

Feature	Product	Release introduced
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 116: Spanning Tree Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring VLANs, Spanning Tree, and NLB for VOSS</a> .		
Spanning Tree Protocol (STP): <ul style="list-style-type: none"> <li>• Multiple STP (MSTP)</li> <li>• Rapid STP (RSTP)</li> </ul>	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 117: spbm-config-mode product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
spbm-config-mode ( <code>boot config flags spbm-config-mode</code> )	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 118: SPB-PIM Gateway product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Multicast Services for VOSS</a> .		
SPB-PIM Gateway controller node	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1.5 VSP4900-12MXU-12XE, VSP4900-24S, and VSP4900-24XE only

*Table continues...*

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

**Table 119: Static routing product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv4 Routing for VOSS</a> .		
Static routing	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

**Table 120: TACACS+ product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
TACACS+	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1

*Table continues...*



Feature	Product	Release introduced
	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	VSP 4450 Series	VOSS 5.1.2
<p><b>* Note:</b></p> <p>VOSS Releases 6.0 and 6.0.1 do not support this feature.</p>	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 121: TLS server for secure HTTPS product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring User Interfaces and Operating Systems for VOSS</a> .		
TLS server for secure HTTPS	VSP 4450 Series	VOSS 5.1.2
<p><b>* Note:</b></p> <p>VOSS Releases 6.0 and 6.0.1 do not support this feature.</p>	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1.2
	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 122: Two-Factor Authentication for SSH product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
Two-Factor Authentication for SSH	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 123: Unicast Reverse Path Forwarding product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Security for VOSS</a> .		
Unicast Reverse Path Forwarding (URPF) checking (IPv4)	VSP 4450 Series	VOSS 5.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported
Unicast Reverse Path Forwarding (URPF) checking (IPv6)	VSP 4450 Series	VOSS 5.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

# Chapter 9: VOSS Features V to X

**Table 124: Virtual Inter-Switch Trunk product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Link Aggregation, MLT, SMLT and vIST for VOSS</a> .		
Switch cluster (multi-chassis LAG) -Virtual Inter-Switch Trunk (vIST)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	Not Supported

**Table 125: Virtual Link Aggregation Control Protocol (VLACP) product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Link Aggregation, MLT, SMLT and vIST for VOSS</a> .		
Virtual Link Aggregation Control Protocol (VLACP)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
VLACP Flap Detect and Damping	VSP 4450 Series	VOSS 7.1.5
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 8.1
	VSP 7400 Series	VOSS 8.1
	VSP 8200 Series	VOSS 8.1

*Table continues...*

Feature	Product	Release introduced
	VSP 8400 Series	VOSS 8.1
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	VOSS 8.1

**Table 126: Virtual Router Redundancy Protocol product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv4 Routing for VOSS</a> .		
Virtual Router Redundancy Protocol (VRRP)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
VRRPv3 for IPv4	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

**Table 127: Virtual Router Redundancy Protocol for IPv6 product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring IPv6 Routing for VOSS</a> .		
IPv6 VRRP	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 continues...*

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

**Table 128: Virtual Routing and Forwarding product support**

Feature	Product	Release introduced
Virtualization with IPv4 Virtual Routing and Forwarding (VRF) <ul style="list-style-type: none"> <li>• ARP</li> <li>• DHCP Relay</li> <li>• Inter-VRF Routing (static, dynamic, and policy)</li> <li>• Local routing</li> <li>• OSPFv2</li> <li>• RIPv1 and v2</li> <li>• Route policies</li> <li>• Static routing</li> <li>• VRRP</li> </ul> For configuration details, see <a href="#">Configuring IPv4 Routing for VOSS</a> .	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	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported
IBGP over user-created VRFs	VSP 4450 Series	VOSS 8.1
	VSP 4900 Series	VOSS 8.1

*Table continues...*

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring BGP Services for VOSS</a> .	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 129: VXLAN Gateway product support**


Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring VXLAN Gateway for VOSS</a> .		
VXLAN Gateway	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
OVSDB protocol support for VXLAN Gateway	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	VOSS 7.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.1
	VSP 8400 Series	VOSS 7.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
ECMP support for VXLAN Gateway	VSP 4450 Series	Not Supported
	VSP 4900 Series	Not Supported
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

# Chapter 10: VOSS Features Y and Z

**Table 130: Zero Touch Deployment product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Administering VOSS</a> .		
Zero Touch Deployment	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 131: Zero Touch Fabric Configuration product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring Fabric Basics and Layer 2 Services for VOSS</a> .		
Zero Touch Fabric Configuration   <b>Note:</b> The following releases included modified Zero Touch Fabric Configuration support that can impact upgrades from earlier releases: <ul style="list-style-type: none"> <li>• VOSS 7.1.3 and later</li> <li>• VOSS 8.0.6 and later</li> <li>• VOSS 8.1 and later</li> </ul> For upgrade considerations, see <a href="#">Administering VOSS</a> .	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 132: Zero Touch Provisioning Plus product support**

Feature	Product	Release introduced
For configuration details, see <a href="#">Configuring User Interfaces and Operating Systems for VOSS</a> .		
Zero Touch Provisioning Plus	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