

# **VOSS Feature Support Matrix**

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## **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.

### **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 <u>Release Notes for VSP 8600</u>.

This document arranges the features alphabetically, based on how those features are included in the configuration documents. For example, <u>Table 18: Denial-of-service attack prevention product</u> <u>support</u> 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.

## **Documentation and Training**

Find Extreme Networks product information at the following locations:

<u>Current Product Documentation</u> <u>Release Notes</u> <u>Hardware and software compatibility</u> for Extreme Networks products <u>Extreme Optics Compatibility</u> <u>Other resources</u> 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 <u>www.extremenetworks.com/education/</u>.

## **Getting Help**

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

- Extreme 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.
- <u>Call GTAC</u> 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: <u>www.extremenetworks.com/support/contact</u>

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

- Your Extreme Networks service contract number, or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)

- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

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

- 1. Go to <u>www.extremenetworks.com/support/service-notification-form</u>.
- 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.

## **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.

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

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

# **Chapter 2: VOSS Features A to C**

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

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

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

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

Feature	Product	Release introduced
For configuration details, see Configuring IPv4 Routing for VOSS.		

Feature	Product	Release introduced
Address Resolution Protocol	VSP 4450 Series	VSP 4000 4.0
(ARP) including Proxy ARP and Static ARP	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 Admi	nistering VOSS	
Advanced Feature Bandwidth	VSP 4450 Series	Not Supported
Reservation	VSP 4900 Series	Not Supported
😒 Note:	VSP 7200 Series	Not Supported
If your switch does not have	VSP 7400 Series	VOSS 8.0
this boot flag, it is because	VSP 8200 Series	Not Supported
the hardware reserves the bandwidth automatically with	VSP 8400 Series	Not Supported
no user interaction.	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

Feature	Product	Release introduced
For configuration details, see	VSP 7200 Series	VOSS 4.2.1
Configuring IPv4 Routing for VOSS.	VSP 7400 Series	VOSS 8.0
· · · · · · · · · · · · · · · · · · ·	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Alternative routes for IPv6	VSP 4450 Series	VOSS 5.1
For configuration details, see	VSP 4900 Series	VOSS 8.1
Configuring IPv6 Routing for	VSP 7200 Series	VOSS 5.1
VOSS.	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 Moni	For configuration details, see Monitoring Performance for VOSS.		
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	VSP 4450 Series	VOSS 8.0.5	
Monitoring	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 Admir	nistering VOSS.	
Authentication for Privileged	VSP 4450 Series	VOSS 8.2
EXEC CLI Command Mode	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 Administering VOSS.		
Auto-Negotiation	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
		Switch models:
		VSP4900-24S and VSP4900-48P - all fixed ports
		<ul> <li>VSP4900-12MXU-12XE - all fixed ports, with ports 13 to 24 at 1 Gbps only</li> </ul>
		<ul> <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 Administering VOSS.		

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

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

Feature	Product	Release introduced		
For configuration details, see Config	For configuration details, see Configuring BGP Services for VOSS.			
Border Gateway Protocol for IPv4	VSP 4450 Series	VSP 4000 4.0		
(BGPv4)	VSP 4900 Series	VOSS 8.1		
	VSP 7200 Series	VOSS 4.2.1		
	VSP 7400 Series	VOSS 8.0		
	VSP 8200 Series	VOSS 4.1		
	VSP 8400 Series	VOSS 4.2		
	VSP 8600 Series	VSP 8600 4.5		
	XA1400 Series	VOSS 8.0.50		
BGP+ (BGPv4 for IPv6).	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		

Feature	Product	Release introduced
	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	VSP 4450 Series	VOSS 6.1
redistribution	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	VOSS 8.0.50
iBGP over user-created VRFs	VSP 4450 Series	VOSS 8.1
	VSP 4900 Series	VOSS 8.1

Feature	Product	Release introduced
	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 Config	For configuration details, see Configuring VLANs, Spanning Tree, and NLB for VOSS.		
Bridge Protocol Data Unit (BPDU)	VSP 4450 Series	VOSS 6.0	
Guard	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 Config	For configuration details, see Configuring Security for VOSS.		
Certificate order priority	VSP 4450 Series	VOSS 5.1.2	
😒 Note:	VSP 4900 Series	VOSS 8.1	
VOSS Releases 6.0 and	VSP 7200 Series	VOSS 5.1.2	
6.0.1 do not support this	VSP 7400 Series	VOSS 8.0	
feature.	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 Administering VOSS.		
Channelization of 40 Gbps ports	VSP 4450 Series	Not Applicable

Feature	Product	Release introduced
	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		
For configuration details, see Admir	For configuration details, see Administering VOSS.			
File Transfer Protocol (FTP) server	VSP 4450 Series	VSP 4000 4.0		
and client (IPv4)	VSP 4900 Series	VOSS 8.1		
	VSP 7200 Series	VOSS 4.2.1		
	VSP 7400 Series	VOSS 8.0		
	VSP 8200 Series	VSP 8200 4.0		
	VSP 8400 Series	VOSS 4.2		
	VSP 8600 Series	VSP 8600 4.5		
	XA1400 Series	VOSS 8.0.50		
File Transfer Protocol (FTP) server	VSP 4450 Series	VOSS 4.1		
and client (IPv6)	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		

Feature	Product	Release introduced
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
Hypertext Transfer Protocol	VSP 4450 Series	VOSS 4.1
(HTTP) and Hypertext Transfer Protocol Secure (HTTPS) (IPv4)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Hypertext Transfer Protocol	VSP 4450 Series	VOSS 4.1
(HTTP) and Hypertext Transfer Protocol Secure (HTTPS) (IPv6)	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
Remote Login (Rlogin) server/	VSP 4450 Series	VSP 4000 4.0
client (IPv4)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Rlogin server (IPv6)	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported
Rlogin client (IPv6)	VSP 4450 Series	VOSS 7.0

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	VSP 8600 8.0
	XA1400 Series	Not Supported
Remote Shell (RSH) server/client	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 Copy (SCP)	VSP 4450 Series	VSP 4000 4.0
Note:	VSP 4900 Series	VOSS 8.1
The switch does not support	VSP 7200 Series	VOSS 5.0
the WinSCP client.	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Secure File Transfer Protocol	VSP 4450 Series	VOSS 4.2
(SFTP) server (IPv4)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Secure File Transfer Protocol	VSP 4450 Series	VOSS 4.2
(SFTP) server (IPv6)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0

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

Feature	Product	Release introduced
	XA1400 Series	Not Supported
TFTP 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

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

Feature	Product	Release introduced
For configuration details, see Config	guring User Interfaces and Operating	Systems for VOSS.
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 Trout	bleshooting VOSS.	
IEEE 802.1ag Connectivity Fault	VSP 4450 Series	VSP 4000 4.0
Management (CFM):	VSP 4900 Series	VOSS 8.1
Layer 2 Ping	VSP 7200 Series	VOSS 4.2.1
TraceRoute	VSP 7400 Series	VOSS 8.0
TraceTree	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

Feature	Product	Release introduced
	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 Admir	nistering VOSS.	
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
		😵 Note:
		Configurable using CLI only.
	XA1400 Series	VOSS 8.0.50

# **Chapter 3: VOSS Features D to F**

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

Feature	Product	Release introduced	
For configuration details, see Config	For configuration details, see Configuring Security for VOSS.		
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	VSP 4450 Series	VSP 4450 4.0	
configuration flag)	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 Config	uring Security for VOSS.	
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

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 Config	guring QoS and ACL-Based Traffic Fi	Itering for VOSS.
Differentiated Services (DiffServ)	VSP 4450 Series	VSP 4000 4.0
including Per-Hop Behavior	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 Configuration	For configuration details, see Configuring Security for VOSS.		
Digital Certificate/PKI	VSP 4450 Series	VOSS 5.1.2	
🛪 Note:	VSP 4900 Series	VOSS 8.1	
VOSS Releases 6.0 and	VSP 7200 Series	VOSS 5.1.2	
6.0.1 do not support this	VSP 7400 Series	VOSS 8.0	
feature.	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 Confi	guring IPv4 Routing for VOSS	
Distributed Virtual Routing (DvR)	VSP 4450 Series	Not Supported
Controller	VSP 4900 Series	VOSS 8.1.5
Important: Because of a change in VOSS 6.0.1.2, the best		VSP4900-12MXU-12XE, VSP4900-24S, and VSP4900-24XE only
practice is to use a minimum	VSP 7200 Series	VOSS 6.0.1
software version of 6.0.1.2 in DvR deployments.	VSP 7400 Series	VOSS 8.0
DWR deployments.	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)	VSP 4450 Series	VOSS 6.1
Leaf	VSP 4900 Series	VOSS 8.1
Important:	VSP 7200 Series	VOSS 6.0.1
Because of a change in	VSP 7400 Series	VOSS 8.0
VOSS 6.0.1.2, the best practice is to use a <i>minimum</i>	VSP 8200 Series	VOSS 6.0.1
software version of 6.0.1.2 in	VSP 8400 Series	VOSS 6.0.1
DvR deployments.	VSP 8600 Series	Not supported
	XA1400 Series	Not Supported
Distributed Virtual Routing (DvR)	VSP 4450 Series	Not Supported
dvr-one-ip	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)	VSP 4450 Series	VOSS 6.1
In-band Management	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

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 Adn	For configuration details, see Administering VOSS.		
Domain Name Service (DNS)	VSP 4450 Series	VSP 4000 4.0	
client (IPv4)	VSP 4900 Series	VOSS 8.1	
	VSP 7200 Series	VOSS 4.2.1	
	VSP 7400 Series	VOSS 8.0	
	VSP 8200 Series	VSP 8200 4.0	
	VSP 8400 Series	VOSS 4.2	
	VSP 8600 Series	VSP 8600 4.5	
	XA1400 Series	VOSS 8.0.50	
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 Config	guring Security for VOSS.	
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 Ho	st Configuration Protoc	ol product support

Feature	Product	Release introduced
For configuration details, see Configuring IPv4 Routing for VOSS.		
Dynamic Host Configuration	VSP 4450 Series	VSP 4000 4.0
Protocol (DHCP) Relay	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

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

Feature	Product	Release introduced
For configuration details, see Config	guring IPv6 Routing for VOSS.	
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 productsupport

Feature	Product	Release introduced
For configuration details, see Configuring Security for VOSS.		

Feature	Product	Release introduced
DHCP Snooping(IPv4)	VSP 4450 Series	VOSS 6.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 6.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1
	VSP 8400 Series	VOSS 6.1
	VSP 8600 Series	Not Supported
	XA1400 Series	VOSS 8.0.50
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	VSP 4450 Series	VOSS 5.1
(IPv6)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

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

Feature	Product	Release introduced
For configuration details, see Config	guring Fabric Basics and Layer 2 Ser	vices for VOSS.
Dynamic Nickname Assignment	VSP 4450 Series	VOSS 7.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0.5
	VSP 8200 Series	VOSS 7.0
	VSP 8400 Series	VOSS 7.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

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

Feature	Product	Release introduced
For configuration details, see Config	guring QoS and ACL-Based Traffic Fil	Itering for VOSS.
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 Config	guring Fabric Basics and Layer 2 Ser	vices for VOSS.
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 Admin	nistering VOSS.	
Energy Efficient Ethernet (EEE)	VSP 4450 Series	Not Supported
	VSP 4900 Series	VOSS 8.1
		All fixed ports on VSP4900-48P and ports 1/1-1/12 on VSP4900-12MXU-12XE
	VSP 7200 Series	Not Supported
	VSP 7400 Series	Not Supported
	VSP 8200 Series	Not Supported
	VSP 8400 Series	VOSS 8.1

Feature	Product	Release introduced
		8424GT
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

#### Table 32: Energy Saver product support

Feature	Product	Release introduced	
For configuration details, see Admir	For configuration details, see Administering VOSS.		
Energy Saver	VSP 4450 Series	VOSS 7.0	
	VSP 4900 Series	VOSS 8.1	
		VSP4900-48P and ports 1/1 to 1/12 onVSP4900-12MXU-12XE only	
	VSP 7200 Series	VOSS 7.0	
		VSP 7254XTQ only	
	VSP 7400 Series	Not Supported	
	VSP 8200 Series	Not Supported	
	VSP 8400 Series	VOSS 7.0	
	VSP 8600 Series	Not Supported	
	XA1400 Series	Not Supported	

#### Table 33: Enhanced Secure Mode product support

Feature	Product	Release introduced
For configuration details, see Admi	nistering VOSS	
Enhanced Secure mode	VSP 4450 Series	VOSS 4.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
Enhanced Secure mode for JITC and non-JITC sub-modes.	VSP 4450 Series	VOSS 5.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1

Feature	Product	Release introduced
	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 Configuring User Interfaces and Operating Systems for VOSS.		
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 demonstration feature
	XA1400 Series	VOSS 8.0.50

#### Table 35: Entity MIB product support

Feature	Product	Release introduced	
For configuration details, see Admir	For configuration details, see <u>Administering VOSS</u> .		
Entity MIB - Physical Table	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	

Feature	Product	Release introduced
	XA1400 Series	VOSS 8.0.50
Entity MIB enhancements and	VSP 4450 Series	VOSS 6.1.2
integration for the following:	VSP 4900 Series	VOSS 8.1
Physical Table	VSP 7200 Series	VOSS 6.1.2
<ul> <li>Alias Mapping Table</li> </ul>	VSP 7400 Series	VOSS 8.0
Physical Contains Table	VSP 8200 Series	VOSS 6.1.2
Last Change Time object	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 Config	guring IPv4 Routing for VOSS.	
Equal Cost Multiple Path (ECMP)	VSP 4450 Series	VSP 4000 4.0
for IPv4	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50

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

Feature	Product	Release introduced	
For configuration details, see the fol	llowing documents:		
<u>Configuring IPv4 Routing for VOS</u>	<u>S</u>		
<u>Configuring IPv6 Routing for VOS</u>	<u>S</u>		
<u>Configuring BGP Services for VO</u>	<u>Configuring BGP Services for VOSS</u>		
ECMP for IPv6	VSP 4450 Series	VOSS 5.1	
	VSP 4900 Series	VOSS 8.1	
	VSP 7200 Series	VOSS 5.1	
	VSP 7400 Series	VOSS 8.0	
	VSP 8200 Series	VOSS 5.1	
	VSP 8400 Series	VOSS 5.1	
	VSP 8600 Series	VSP 8600 6.2	
	XA1400 Series	Not Supported	

#### Table 38: ECMP Pathlist with Fabric Connect product support

Feature	Product	Release introduced		
For configuration details, see <u>Confi</u> <u>IPv4 Routing for VOSS</u> .	For configuration details, see <u>Configuring Fabric Basics and Layer 2 Services for VOSS</u> and <u>Configuring</u> IPv4 Routing for VOSS.			
ECMP Pathlist with Fabric	VSP 4450 Series	VOSS 8.1.5		
Connect (IS-IS routes)	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 fol	lowing documents:	
• E-Tree - Configuring Fabric Basic	s and Layer 2 Services for VOSS	
Private VLANs - Configuring VLAI	Ns, Spanning Tree, and NLB for VOS	<u>S</u>
MLT and Private VLANs - Configu	ring Link Aggregation, MLT, SMLT ar	nd vIST for VOSS
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 Config	juring Security for VOSS.	
Extensible Authentication Protocol	VSP 4450 Series	VOSS 4.1
(EAP) and EAP over LAN (EAPoL)	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

Feature	Product	Release introduced
	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	VSP 4450 Series	VOSS 6.1
MHMV, Fail Open VLAN, Guest VLAN	VSP 4900 Series	VOSS 8.1
VLAN	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	VSP 4450 Series	VOSS 4.2.1
authentication	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
	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 Insight product support

Feature	Product	Release introduced
For configuration details, see Config	guring User Interfaces and Operating	Systems for VOSS.
Extreme Insight	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

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

Feature	Product	Release introduced
Extreme Management Center	VSP 4450 Series	VOSS 6.1.2
backup configuration ZIP file	VSP 4900 Series	VOSS 8.1
For more information, see Extreme Management Center documentation.	VSP 7200 Series	VOSS 6.1.2
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.1.2
	VSP 8400 Series	VOSS 6.1.2
	VSP 8600 Series	VSP 8600 6.1
	XA1400 Series	VOSS 8.0.50

#### Table 43: Fabric Attach product support

Feature	Product	Release introduced
For configuration details, see Config	guring Fabric Basics and Layer 2 Ser	vices for VOSS.
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

Feature	Product	Release introduced
For configuration details, see Config	guring Fabric Basics and Layer 2 Ser	vices for VOSS.
Fabric Attach Zero Touch Client	VSP 4450 Series	VOSS 6.0
Attachment	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 44: Fabric Attach Zero Touch Client Attachment product support

#### Table 45: Fabric Extend product support

Feature	Product	Release introduced
For configuration details, see Configuring Fabric Basics and Layer 2 Services for VOSS.		
Fabric Extend	VSP 4450 Series	VOSS 5.0*
*Platforms require an Open	VSP 4900 Series	VOSS 8.1
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
	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

Feature	Product	Release introduced
	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 Configuring Fabric Basics and Layer 2 Services for VOSS.		
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
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 Troub	leshooting VOSS.	
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

Feature	Product	Release introduced
	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 Config	guring VLANs, Spanning Tree, and N	LB for VOSS.
FDB protected by port (MAC	VSP 4450 Series	VSP 4000 4.0
security limit-learning)	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 Troub	For configuration details, see <u>Troubleshooting VOSS</u> .		
Flight Recorder for system health	VSP 4450 Series	VSP 4000 4.0	
monitoring	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 Administering VOSS.		
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

Feature	Product	Release introduced
	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 <u>Administering VOSS</u> .		
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)	VSP 4450 Series	Not Applicable
for Layer 2 with Simplified vIST	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)	VSP 4450 Series	Not Applicable
for Layer 3 with Simplified vIST	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 Admir	nistering VOSS	
IEEE 802.3X Pause frame	VSP 4450 Series	VOSS 6.0
transmit	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	VSP 4450 Series	VSP 4000 4.0
(ICMP)	VSP 4900 Series	VOSS 8.1
For configuration details, see	VSP 7200 Series	VOSS 4.2.1
Configuring IPv4 Routing for VOSS.	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	VSP 4450 Series	VOSS 5.1
enable or disable	VSP 4900 Series	VOSS 8.1
For configuration details, see the	VSP 7200 Series	VOSS 5.1
following documents:	VSP 7400 Series	VOSS 8.0
<u>Configuring IPv4 Routing for</u> VOSS	VSP 8200 Series	VOSS 5.1
<u>Configuring IPv6 Routing for</u>	VSP 8400 Series	VOSS 5.1
VOSS	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 Configuring IP Multicast Routing Protocols for VOSS.		

Feature	Product	Release introduced
Internet Group Management	VSP 4450 Series	VSP 4000 4.0
Protocol (IGMP), including virtualization	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 Config	guring Security for VOSS.	
Internet Key Exchange (IKE) v2	VSP 4450 Series	VOSS 5.1.2
🛪 Note:	VSP 4900 Series	VOSS 8.1
VOSS Releases 6.0 and	VSP 7200 Series	VOSS 5.1.2
6.0.1 do not support this	VSP 7400 Series	VOSS 8.0
feature.	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 Monited	oring Performance for VOSS.	
Internet Protocol Flow Information	VSP 4450 Series	Not Supported
eXport (IPFIX)	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 Configuring Fabric Basics and Layer 2 Services for VOSS.		
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 Admir	nistering VOSS	
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 Configuring Fabric Multicast Services for VOSS.		
IP Multicast over Fabric Connect	VSP 4450 Series	VSP 4000 4.0

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 Config	guring IPv4 Routing for VOSS.	
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 Cont	For configuration details, see Configuring Fabric Layer 3 Services for VOSS.		
IP Shortcut routing including	VSP 4450 Series	VSP 4000 4.0	
ECMP	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	

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 Confi	For configuration details, see Configuring Security for VOSS.		
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	

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 for	For configuration details, see the following documents:		
<u>Configuring IPv4 Routing for VOS</u>	<u>88</u>		
<u>Configuring IPv6 Routing for VOS</u>	<u>38</u>		
IP Source Routing enable or	VSP 4450 Series	VOSS 5.1	
disable	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	
For configuration details, see Configuration	For configuration details, see Configuring Security for VOSS.		
IPsec NAT-T	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 8.1.50	
IPsec transport 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	

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

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

Feature	Product	Release introduced
For configuration details, see Configuring IPv6 Routing for VOSS.		
IPv6-in-IPv4 tunnels	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1

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 Config	guring Security for VOSS	
IPv6 Router Advertisement (RA)	VSP 4450 Series	VOSS 5.0
Guard	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.0
	VSP 8400 Series	VOSS 5.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

## Table 67: IPv6 virtualization product support

Feature	Product	Release introduced
IPv6 Virtualization for the following	VSP 4450 Series	VOSS 7.0
features and functions:	VSP 4900 Series	VOSS 8.1
IPv6 Interfaces and IPv6 Static	VSP 7200 Series	VOSS 7.0
Routes in VRFs and Layer 3 VSNs	VSP 7400 Series	VOSS 8.0
ECMP and Alternative route	VSP 8200 Series	VOSS 7.0
Route redistribution for static	VSP 8400 Series	VOSS 7.0
<ul><li>and direct routes</li><li>VRRPv3 for IPv6</li></ul>	VSP 8600 Series	VSP 8600 8.0
<ul> <li>DHCP Relay</li> <li>IPv6 Reverse Path Forwarding</li> <li>ICMP Ping and Traceroute</li> </ul>	XA1400 Series	Not Supported
For configuration details, see <u>Configuring IPv6 Routing for</u> <u>VOSS</u> .		

Feature	Product	Release introduced
IPv6 Virtualization for the following	VSP 4450 Series	VOSS 8.0
features and functions:	VSP 4900 Series	VOSS 8.1
Open Shortest Path First for	VSP 7200 Series	VOSS 8.0
<ul><li>IPv6 (OSPFv3)</li><li>IPv6 Border Gateway Protocol</li></ul>	VSP 7400 Series	VOSS 8.0
(IPv6 BGP)	VSP 8200 Series	VOSS 8.0
IPv6 route redistribution	VSP 8400 Series	VOSS 8.0
enhancements	VSP 8600 Series	VSP 8600 8.0
For configuration details, see <u>Configuring IPv6 Routing for</u> <u>VOSS</u> .	XA1400 Series	Not Supported
iBGP over user-created VRFs	VSP 4450 Series	VOSS 8.1
For configuration details, see	VSP 4900 Series	VOSS 8.1
Configuring BGP Services for	VSP 7200 Series	VOSS 8.1
VOSS.	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	Configuring User Interfaces and C	perating Systems for VOSS
IQAgent	VSP 4450 Series	Not supported
	VSP 4900 Series	VOSS 8.1.1 - demonstration feature
		VSP4900-48P only
		VIMs: VIM5-4YE, VIM5-4X, VIM5-4XE, and VIM5-2Y only
	VSP 7200 Series	Not supported
	VSP 7400 Series	VOSS 8.1.1 - demonstration feature
	VSP 8200 Series	Not supported
	VSP 8400 Series	Not supported
	VSP 8600 Series	Not supported
	XA1400 Series	VOSS 8.1.1 - demonstration feature

#### Table 69: IS-IS product support

Feature	Product	Release introduced
For configuration details, see Configuring Fabric Basics and Layer 2 Services for VOSS.		
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	VSP 4450 Series	VOSS 6.1
detection	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 Monitor	oring Performance for VOSS.	
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 Confi	guring Fabric Basics and Layer 2 Ser	vices for VOSS.
Layer 2 Video Surveillance install	VSP 4450 Series	VOSS 6.1
script	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 Configuring Fabric Basics and Layer 2 Services for VOSS.		
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	VSP 4450 Series	VSP 4000 4.0
(VSN)	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 Config	guring Fabric Layer 3 Services for VC	<u>SS</u> .
Layer 3 Video Surveillance install	VSP 4450 Series	VOSS 4.1
script (formerly known as the run vms endura script)	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 Config	guring Fabric Layer 3 Services for VC	<u>DSS</u> .
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 Admin	istering VOSS.	
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

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 Administering VOSS.		
Industry Standard Discovery	VSP 4450 Series	VOSS 6.0
Protocol (ISDP) (CDP compatible)	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	VSP 4450 Series	VOSS 6.0
(LLDP)	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-	VSP 4450 Series	VOSS 7.0
Media Endpoint Discovery (LLDP- MED)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 7.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 7.0

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 Config	guring Link Aggregation, MLT, SMLT a	and vIST for VOSS.
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 Admir	For configuration details, see Administering VOSS.		
Linux kernel version	VSP 4450 Series	4.9 as of VOSS 7.0	
Important:	VSP 4900 Series	4.14 as of VOSS 8.1	
For VSP 4450 Series, VSP	VSP 7200 Series	4.9 as of VOSS 7.0	
7200 Series, VSP 8200, and	VSP 7400 Series	4.14 as of VOSS 8.0	
VSP 8400 Series, kernel	VSP 8200 Series	4.9 as of VOSS 7.0	
version 4.9 has special upgrade considerations the	VSP 8400 Series	4.9 as of VOSS 7.0	
first time you upgrade to a release that supports it. You	VSP 8600 Series	4.9 as of VSP 8600 8.0	
must first upgrade to a stepping-stone release, 6.1.x , <i>before</i> you upgrade to the release with the new kernel.	XA1400 Series	4.14 as of VOSS 8.1	

### Table 79: Logs and traps product support

Feature	Product	Release introduced
For configuration details, see Troubleshooting VOSS.		

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	VSP 4450 Series	VOSS 6.0
(SMTP) for log notification	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	VSP 4450 Series	VOSS 6.1.2
RFC 5424 and RFC 3339	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

Fea	iture	Product	Release introduced
*	Note:	VSP 7400 Series	VOSS 8.0
	VOSS Releases 6.0 and 6.0.1 do not support this feature.	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 Configuring Security for VOSS.				
MACsec 2AN mode	VSP 4450 Series	VSP 4000 4.0		
Note:	VSP 4900 Series	Not Supported		
VOSS 5.0 officially removed	VSP 7200 Series	VOSS 4.2.1		
the replay protection		VSP 7254XTQ only		
commands. Do not use replay protection in earlier	VSP 7400 Series	Not Supported		
releases.	VSP 8200 Series	VOSS 4.1		
	VSP 8400 Series	VOSS 4.2		
	VSP 8600 Series	Not Supported		
	XA1400 Series	Not Supported		
MACsec 4AN mode	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		
MACsec encryption cipher suites	VSP 4450 Series	VOSS 8.1		
		128 bits only		
	VSP 4900 Series	VOSS 8.1		
		<ul> <li>VSP4900-48Psupports 128-bit on all fixed ports.</li> </ul>		
		VSP4900-24XE supports 128-bit and 256-bit on all fixed ports.		

Feature	Product	Release introduced
		VSP4900-12MXU-12XE supports 128-bit and 256-bit on the SFP+ ports.
		VIM5-4XE and VIM5-4YE supports 128-bit and 256-bit cipher suite.
	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 Config	guring IP Multicast Routing Protocols	for VOSS.
Multicast route (mroute) statistics	VSP 4450 Series	Not Supported
for IPv4 and IPv6	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 5.1
	VSP 8400 Series	VOSS 5.1

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 Config	guring Fabric Basics and Layer 2 Ser	vices for VOSS.
MSTP-Fabric Connect Multi	VSP 4450 Series	VOSS 7.0
Homing	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 Config	guring IP Multicast Routing Protocols	for VOSS.
Multicast Listener Discovery	VSP 4450 Series	VOSS 5.1
(MLD)	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 Config	For configuration details, see Configuring Link Aggregation, MLT, SMLT and vIST for VOSS.		
MultiLink Trunking (MLT) / Link	VSP 4450 Series	VSP 4000 4.0	
Aggregation Group (LAG)	VSP 4900 Series	VOSS 8.1	
	VSP 7200 Series	VOSS 4.2.1	
	VSP 7400 Series	VOSS 8.0	
	VSP 8200 Series	VSP 8200 4.0	

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 Admir	nistering VOSS.	
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 Configuring VLANs, Spanning Tree, and NLB for VOSS.		
Network Load Balancing (NLB) -	VSP 4450 Series	Not Supported
multicast operation	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) -	VSP 4450 Series	Not Supported
unicast operation	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
For configuration details, see Administering VOSS.		
NTPv3 client	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
NTPv3 with SHA authentication	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	VOSS 8.0.50
NTPv4 client for IPv4	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
NTPv4 client for 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
NTPv4 master and restrict	VSP 4450 Series	VOSS 8.0

Feature	Product	Release introduced
	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 demonstration feature
	XA1400 Series	Not Supported

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

Feature	Product	Release introduced
For configuration details, see Admir	istering VOSS.	
nni-mstp boot flag (boot config	VSP 4450 Series	VOSS 6.0
flags nni-mstp)	VSP 4900 Series	VOSS 8.1
Important:	VSP 7200 Series	VOSS 6.0
This flag has special upgrade considerations the first time you upgrade to a release that supports it.	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 Config	For configuration details, see Configuring OSPF and RIP for VOSS.		
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)	VSP 4450 Series	VOSS 4.2	
and SHA-2	VSP 4900 Series	VOSS 8.1	
	VSP 7200 Series	VOSS 4.2.1	

Feature	Product	Release introduced
	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 Config	guring OSPF and RIP for VOSS.	
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
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Feature	Product	Release introduced
For configuration details, see Config	guring IP Multicast Routing Protocols	for VOSS.
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 Trou	bleshooting VOSS.	
Ingress mirroring (port and flow-	VSP 4450 Series	VSP 4000 4.0
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
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

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 Admir	For configuration details, see Administering VOSS.		
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 Administering VOSS.		
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

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 Config	guring IP Multicast Routing Protocols	for VOSS.
PIM-Source Specific Mode (PIM-	VSP 4450 Series	VOSS 4.1
SSM) for IPv4	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.0.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	Not Supported

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

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

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

Feature	Product	Release introduced
For configuration details, see Configuring QoS and ACL-Based Traffic Filtering for VOSS.		
Platform specific considerations for QoS behavior are documented in QoS Behavior Differences, which is in <u>Configuring QoS and ACL-Based Traffic Filtering for VOSS</u> .		
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 Config	guring QoS and ACL-Based Traffic Fi	Itering for VOSS.
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
For configuration details, see Confi	guring Security for VOSS.	
RADIUS (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
RADIUS attributes:	VSP 4450 Series	VOSS 7.0
Acct-Terminate-Cause	VSP 4900 Series	VOSS 8.1
Event-Timestamp	VSP 7200 Series	VOSS 7.0
Service Type	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
RADIUS, community-based users	VSP 4450 Series	VSP 4000 4.0
(IPv4)	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VSP 8200 4.0
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
RADIUS secure communication	VSP 4450 Series	VOSS 5.1.2
using IPSec for IPv4	VSP 4900 Series	VOSS 8.1
😵 Note:	VSP 7200 Series	VOSS 5.1.2
VOSS Releases 6.0 and	VSP 7400 Series	VOSS 8.0
6.0.1 do not support this	VSP 8200 Series	VOSS 5.1.2
feature.	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	VOSS 8.0.50

Feature	Product	Release introduced
RADIUS secure communication using IPSec for IPv6	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
🔀 Note:	VSP 7200 Series	VOSS 5.1.2
VOSS Releases 6.0 and	VSP 7400 Series	VOSS 8.0
6.0.1 do not support this	VSP 8200 Series	VOSS 5.1.2
feature.	VSP 8400 Series	VOSS 5.1.2
	VSP 8600 Series	VSP 8600 8.0 demonstration feature
	XA1400 Series	Not Supported
RFC 5176 – Dynamic	VSP 4450 Series	VOSS 7.0
Authorization Extensions to RADIUS	VSP 4900 Series	VOSS 8.1
NADIO3	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	VOSS 8.0.50
RFC 5997 – RADIUS Reachability	VSP 4450 Series	VOSS 7.0
Server Status	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	VOSS 8.0.50

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

Feature	Product	Release introduced
For configuration details, see Config	guring QoS and ACL-Based Traffic Fi	Itering for VOSS.
Platform specific considerations for QoS behavior are documented in QoS Behavior Differences, which is in <u>Configuring QoS and ACL-Based Traffic Filtering for VOSS</u> .		
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

Feature	Product	Release introduced
	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 Monitoring Performance for VOSS.		
Remote Monitoring 1 (RMON1) for	VSP 4450 Series	VSP 4000 4.0
Layer 1 and Layer 2	VSP 4900 Series	VOSS 8.1
😒 Note:	VSP 7200 Series	VOSS 4.2.1
VOSS Release 5.0 and 5.1	VSP 7400 Series	VOSS 8.0
do not support RMON1.	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	VSP 4450 Series	VOSS 4.2
	VSP 4900 Series	VOSS 8.1
protocols	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0

Feature	Product	Release introduced
	VSP 8200 Series	VOSS 4.2
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported

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

Feature	Product	Release introduced		
For configuration details, see Config	For configuration details, see Configuring User Interfaces and Operating Systems for VOSS.			
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 Configuring IPv6 Routing for VOSS.			
RIPng	VSP 4450 Series	VOSS 5.0	
	VSP 4900 Series	VOSS 8.1	
	VSP 7200 Series	VOSS 5.0	
	VSP 7400 Series	VOSS 8.0	
	VSP 8200 Series	VOSS 5.0	
	VSP 8400 Series	VOSS 5.0	
	VSP 8600 Series	VSP 8600 6.2	
	XA1400 Series	Not Supported	

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

Feature	Product	Release introduced
For configuration details, see Configuring OSPF and RIP for VOSS.		
Routing Information Protocol (RIP)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1

Feature	Product	Release introduced
	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 Config	For configuration details, see Configuring IPv4 Routing for VOSS.		
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 Configuring IPv6 Routing for VOSS.		
IPv6 RSMLT	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 6.2
	XA1400 Series	Not Supported

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

Feature	Product	Release introduced
For configuration details, see Configuring Fabric Basics and Layer 2 Services for VOSS.		
run spbm installation script	VSP 4450 Series	VOSS 4.1
	VSP 4900 Series	VOSS 8.1

Feature	Product	Release introduced
	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 Admin	For configuration details, see Administering VOSS.		
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)	VSP 4450 Series	VOSS 4.1	
certificate management	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	

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	VSP 4450 Series	VOSS 5.1.2
Note:	VSP 4900 Series	VOSS 8.1
VOSS Releases 6.0 and	VSP 7200 Series	VOSS 5.1.2
6.0.1 do not support this	VSP 7400 Series	VOSS 8.0
change.	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

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

Feature	Product	Release introduced		
For configuration details, see Admir	For configuration details, see Administering VOSS.			
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		
		😵 Note:		
		VOSS 8.1.50 does not support this feature.		
Segmented Management Instance	VSP 4450 Series	VOSS 7.0		
- Management Interface VLAN	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		
		😵 Note:		
		VOSS 8.1.50 does not support this feature.		
Segmented Management Instance — ability to migrate VLAN or loopback IP address	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		

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

## Table 110: sFlow product support

Feature	Product	Release introduced	
For configuration details, see Monit	For configuration details, see Monitoring Performance for VOSS.		
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	VSP 4450 Series	Not Supported	
user-created VRFs	VSP 4900 Series	Not Supported	
	VSP 7200 Series	Not Supported	
	VSP 7400 Series	Not Supported	
	VSP 8200 Series	Not Supported	
	VSP 8400 Series	Not Supported	
	VSP 8600 Series	VSP 8600 6.2	
	XA1400 Series	Not Supported	

## Table 111: Simple Loop Prevention Protocol product support

Feature	Product	Release introduced	
For configuration details, see Config	For configuration details, see Configuring VLANs, Spanning Tree, and NLB for VOSS.		
Simple Loop Prevention Protocol	VSP 4450 Series	VSP 4000 4.0	
(SLPP)	VSP 4900 Series	VOSS 8.1	
	VSP 7200 Series	VOSS 4.2.1	
	VSP 7400 Series	VOSS 8.0	
	VSP 8200 Series	VSP 8200 4.0	
	VSP 8400 Series	VOSS 4.2	
	VSP 8600 Series	VSP 8600 4.5	
	XA1400 Series	VOSS 8.0.50	

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

# Table 113: SLA Mon product support

Feature	Product	Release introduced	
For configuration details, see Config	For configuration details, see Configuring the SLA Mon Agent for VOSS.		
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 Configuring Link Aggregation, MLT, SMLT and vIST for VOSS.		
SLPP Guard	VSP 4450 Series	VOSS 6.1

Feature	Product	Release introduced
	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 Admin	For configuration details, see Administering VOSS.		
SONMP	VSP 4450 Series	VSP 4000 4.0	
	VSP 4900 Series	VOSS 8.1	
	VSP 7200 Series	VOSS 4.2.1	
	VSP 7400 Series	VOSS 8.0	
	VSP 8200 Series	VSP 8200 4.0	
	VSP 8400 Series	VOSS 4.2	
	VSP 8600 Series	VSP 8600 4.5	
	XA1400 Series	VOSS 8.0.50	

### Table 116: Spanning Tree Protocol product support

Feature	Product	Release introduced	
For configuration details, see Config	For configuration details, see Configuring VLANs, Spanning Tree, and NLB for VOSS.		
Spanning Tree Protocol (STP):	VSP 4450 Series	VSP 4000 4.0	
Multiple STP (MSTP)	VSP 4900 Series	VOSS 8.1	
Rapid STP (RSTP)	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 Configuring Fabric Basics and Layer 2 Services for VOSS.		

Feature	Product	Release introduced
spbm-config-mode (boot	VSP 4450 Series	VOSS 4.1
config flags spbm-config-	VSP 4900 Series	VOSS 8.1
mode)	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 Configuring Fabric Multicast Services for VOSS.		
SPB-PIM Gateway controller node	VSP 4450 Series	VOSS 6.0
	VSP 4900 Series	VOSS 8.1.5
		VSP4900-12MXU-12XE, VSP4900-24S, and VSP4900-24XE only
	VSP 7200 Series	VOSS 6.0
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 6.0
	VSP 8400 Series	VOSS 6.0
	VSP 8600 Series	Not Supported
	XA1400 Series	Not Supported
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 Configuring IPv4 Routing for VOSS.		
Static routing	VSP 4450 Series	VSP 4000 4.0

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	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 Configuring Security for VOSS.		
TACACS+	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 4.2.1
	VSP 7400 Series	VOSS 8.0
	VSP 8200 Series	VOSS 4.1
	VSP 8400 Series	VOSS 4.2
	VSP 8600 Series	VSP 8600 4.5
	XA1400 Series	VOSS 8.0.50
TACACS+ secure communication	VSP 4450 Series	VOSS 5.1.2
using IPSec for IPv4	VSP 4900 Series	VOSS 8.1
Note:	VSP 7200 Series	VOSS 5.1.2
VOSS Releases 6.0 and	VSP 7400 Series	VOSS 8.0
6.0.1 do not support this	VSP 8200 Series	VOSS 5.1.2
feature.	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 Config	guring User Interfaces and Operating	Systems for VOSS.
TLS server for secure HTTPS	VSP 4450 Series	VOSS 5.1.2
	VSP 4900 Series	VOSS 8.1
	VSP 7200 Series	VOSS 5.1.2

Fea	iture	Product	Release introduced
*	Note:	VSP 7400 Series	VOSS 8.0
	VOSS Releases 6.0 and 6.0.1 do not support this	VSP 8200 Series	VOSS 5.1.2
		VSP 8400 Series	VOSS 5.1.2
feature.	teature.	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 Config	uring Security for VOSS.	
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 demonstration feature
	XA1400 Series	VOSS 8.0.50

## Table 123: Unicast Reverse Path Forwarding product support

Feature	Product	Release introduced	
For configuration details, see Config	For configuration details, see Configuring Security for VOSS.		
Unicast Reverse Path Forwarding	VSP 4450 Series	VOSS 5.0	
(URPF) checking (IPv4)	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	VSP 4450 Series	VOSS 5.0	
(URPF) checking (IPv6)	VSP 4900 Series	VOSS 8.1	
	VSP 7200 Series	VOSS 5.0	
	VSP 7400 Series	VOSS 8.0	
	VSP 8200 Series	VOSS 5.0	

Feature	Product	Release introduced
	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 Config	guring Link Aggregation, MLT, SMLT a	and vIST for VOSS.
Switch cluster (multi-chassis LAG)	VSP 4450 Series	VOSS 4.1
-Virtual Inter-Switch Trunk (vIST)	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 Configuring Link Aggregation, MLT, SMLT and vIST for VOSS.		
Virtual Link Aggregation Control	VSP 4450 Series	VSP 4000 4.0
Protocol (VLACP)	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

Feature	Product	Release introduced
	VSP 8400 Series	VOSS 8.1
	VSP 8600 Series	VSP 8600 8.0
	XA1400 Series	Not Supported

Feature	Product	Release introduced
For configuration details, see Configuring IPv4 Routing for VOSS.		
Virtual Router Redundancy	VSP 4450 Series	VSP 4000 4.0
Protocol (VRRP)	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 Config	For configuration details, see Configuring IPv6 Routing for VOSS.		
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	

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)	VSP 4450 Series	VSP 4000 4.0
	VSP 4900 Series	VOSS 8.1
• ARP	VSP 7200 Series	VOSS 4.2.1
<ul><li>DHCP Relay</li><li>Inter-VRF Routing (static,</li></ul>	VSP 7400 Series	VOSS 8.0
dynamic, and policy)	VSP 8200 Series	VSP 8200 4.0
Local routing	VSP 8400 Series	VOSS 4.2
OSPFv2	VSP 8600 Series	VSP 8600 4.5
<ul><li>RIPv1 and v2</li><li>Route policies</li><li>Static routing</li><li>VRRP</li></ul>	XA1400 Series	VOSS 8.0.50
For configuration details, see <u>Configuring IPv4 Routing for</u> <u>VOSS</u> .		
Increased VRF and Layer 3 VSN	VSP 4450 Series	VOSS 6.0
scaling	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

Feature	Product	Release introduced
For configuration details, see Configuring BGP Services for	VSP 7200 Series	VOSS 8.1
VOSS.	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

# Table 129: VXLAN Gateway product support

Feature	Product	Release introduced
For configuration details, see Configuring VXLAN Gateway for VOSS.		
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	VSP 4450 Series	Not Supported
VXLAN Gateway	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	VSP 4450 Series	Not Supported
Gateway	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 Fabric Configuration product support

Feature	Product	Release introduced
For configuration details, see Configuring Fabric Basics and Layer 2 Services for VOSS.		
Zero Touch Fabric Configuration	VSP 4450 Series	VOSS 7.0
<ul> <li>Note:</li> <li>The following releases included modified Zero Touch Fabric Configuration support that can impact upgrades from earlier releases:</li> <li>VOSS 7.1.3 and later</li> <li>VOSS 8.0.6 and later</li> </ul>	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
VOSS 8.1 and later		
For upgrade considerations, see <u>Administering VOSS</u> .		