Fabric Engine Feature Support Matrix

For Fabric Engine Release 8.7

Table of Contents

About this Document

The topics in this section discuss the purpose of this document, the conventions used, ways to provide feedback, additional help, and information regarding other Extreme Networks publications.

Purpose

This document provides information on features in Extreme Networks Fabric Engine™. Fabric Engine runs on the following product families:

- ExtremeSwitching 5320 Series
- ExtremeSwitching 5420 Series
- ExtremeSwitching 5520 Series
- ExtremeSwitching 5720 Series

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**
>
> Prior to Fabric Engine 8.6, 5520 Series and 5420 Series platforms ran VOSS. VOSS support ends for these platforms with VOSS 8.5.x. Unless otherwise noted, feature support introduced in earlier VOSS releases is also available in Fabric Engine releases.
>
> 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 *Fabric Engine Release Notes*.

This document arranges the features alphabetically, based on how those features are included in the *Fabric Engine User Guide*. For example, Table 19 on page 17 includes both Directed Broadcast and High Secure Mode.

The tables in this document also appear in the conceptual feature content of the *Fabric Engine User Guide*.

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

Documentation and Training

Find Extreme Networks product information at the following locations:

Current Product Documentation
Release Notes
Hardware and software compatibility for Extreme Networks products
Extreme Optics Compatibility
Other resources such as white papers, data sheets, and case studies

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

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Extreme Portal

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

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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.

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

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

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1. Go to The Hub.
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3. Select a product for which you would like to receive notifications.

4. Select **Subscribe**.

5. To select additional products, return to the **Product Announcements** list and repeat steps 3 and 4.

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

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The Information Development team at Extreme Networks has made every effort to ensure that this document is accurate, complete, and easy to use. We strive to improve our documentation to help you in your work, so we want to hear from you. We welcome all feedback, but we especially want to know about:

*   Content errors, or confusing or conflicting information.

*   Improvements that would help you find relevant information.

*   Broken links or usability issues.

To send feedback, do either of the following:

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*   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.

Fabric Engine Features A to C

Table 1: Access Control Entry product support

Feature	Product	Release introduced
QoS Access Control Entries (ACE)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Security ACEs	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
IPv4 ACL filter enhancement - Apply ACE with both Security and QoS actions	5320 Series	Fabric Engine 8.6
	5420 Series	Fabric Engine 8.7
	5720 Series	Fabric Engine 8.7
	5520 Series	Fabric Engine 8.7
Filter enhancement - Apply ACE to Routed Packets only	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.4
	5720 Series	Fabric Engine 8.7
Policy Based Routing (redirect-next-hop)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 1: Access Control Entry product support (continued)

Feature	Product	Release introduced
Policy Based Routing (redirect-next-hop) with VRF support	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 2: Access Control List product support

Feature	Product	Release introduced
Access Control List (ACL)-based filtering, including egress ACLs, ingress ACLs, Layer 2 to Layer 4 filtering, port-based, and VLAN-based	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
InVSN Filter	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
IPv6 ingress filters	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
IPv6 egress filters	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
IPv6 ACL DSCP Remarking	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.5
	5720 Series	Fabric Engine 8.7

Table 3: Address Resolution Protocol product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6

Table 3: Address Resolution Protocol product support (continued)

Feature	Product	Release introduced
Address Resolution Protocol (ARP) including Proxy ARP and Static ARP	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Gratuitous ARP filtering	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 4: Advanced Feature Bandwidth Reservation product support

Feature	Product	Release introduced
Advanced Feature Bandwidth Reservation **Note:** If your switch does not have this boot flag, it is because the hardware reserves the bandwidth automatically with no user interaction.	5320 Series	Fabric Engine 8.6 5320-24P-8XE, 5320-24T-8XE, 5320-48P-8XE, and 5320-48T-8XE only
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 5: Alternative routes product support

Feature	Product	Release introduced
Alternative routes for IPv4	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine
Alternative routes for IPv6	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 6: Application Telemetry product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6

Table 6: Application Telemetry product support (continued)

Feature	Product	Release introduced
Application Telemetry	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Application Telemetry Host Monitoring	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 7: Authentication for Privileged EXEC Mode product support

Feature	Product	Release introduced
Authentication for Privileged EXEC CLI Command Mode	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.4
	5720 Series	Fabric Engine 8.7

Table 8: Auto-Negotiation product support

Feature	Product	Release introduced
Auto-Negotiation	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4 **Note:** SFP-DD ports are only available if you disable Advanced Feature Bandwidth Reservation.
	5520 Series	VOSS 8.2.5 Only on the following switch models: 5520-24T 5520-24W 5520-48T 5520-48W 5520-12MW-36W 5520-48SE QSFP28/QSFP+ ports, and all fixed fiber ports, at 1 Gbps only **Note:** QSFP28 ports are only available if you disable Advanced Feature Bandwidth Reservation.

Table 8: Auto-Negotiation product support (continued)

Feature	Product	Release introduced
		5520-VIM-4XE at 1 Gbps only and 5520-VIM-4YE at 25 Gbps only
	5720 Series	Fabric Engine 8.7

Table 9: Auto-sense product support

Feature	Product	Release introduced
Auto-sense	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	5720 Series	Fabric Engine 8.7
Auto-sense ports can apply Fabric Attach (FA)-specific configuration	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4.2
	5520 Series	VOSS 8.4.2
	5720 Series	Fabric Engine 8.7

Table 10: Bidirectional Forwarding Detection (BFD) product support

Feature	Product	Release introduced
BFD (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
BFD (IPv6)	5320 Series	Fabric Engine 8.6 demonstration feature
	5420 Series	VOSS 8.4 demonstration feature
	5520 Series	VOSS 8.2.5 demonstration feature
	5720 Series	Fabric Engine 8.7 demonstration feature

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

Feature	Product	Release introduced
BFD over Fabric Extend Tunnels (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 11: Border Gateway Protocol product support

Feature	Product	Release introduced
Border Gateway Protocol for IPv4 (BGPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
BGP+ (BGPv4 for IPv6).	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
BGPv6	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
External BGP (eBGP)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Internal BPG (iBGP)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Route metric for BGP route redistribution	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 11: Border Gateway Protocol product support (continued)

Feature	Product	Release introduced
iBGP over user-created VRFs	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

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

Feature	Product	Release introduced
Bridge Protocol Data Unit (BPDU) Guard	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 13: Certificate order priority product support

Feature	Product	Release introduced
Certificate order priority	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 14: Channelization product support

Feature	Product	Release introduced
Channelization of 40 Gbps ports	5320 Series	Not Applicable
	5420 Series	Not Applicable
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 14: Channelization product support (continued)

Feature	Product	Release introduced
Channelization of 100 Gbps ports	5320 Series	Not Applicable
	5420 Series	Not Applicable
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 15: Client and Server product support

Feature	Product	Release introduced
File Transfer Protocol (FTP) server and client (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
File Transfer Protocol (FTP) server and client (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Hypertext Transfer Protocol (HTTP) and Hypertext Transfer Protocol Secure (HTTPS) (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Hypertext Transfer Protocol (HTTP) and Hypertext Transfer Protocol Secure (HTTPS) (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Remote Login (Rlogin) server/client (IPv4)	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
Rlogin server (IPv6)	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Table 15: Client and Server product support (continued)

Feature	Product	Release introduced
Rlogin client (IPv6)	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
Remote Shell (RSH) server/client	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
Secure Copy (SCP) **Note:** The switch does not support the WinSCP client.	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Secure File Transfer Protocol (SFTP) server (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Secure File Transfer Protocol (SFTP) server (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Telnet server and client (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Telnet server and client (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Trivial File Transfer Protocol (TFTP) server and client (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 15: Client and Server product support (continued)

Feature	Product	Release introduced
TFTP server (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
TFTP client (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 16: Command Line Interface product support

Feature	Product	Release introduced
Command Line Interface (CLI)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 17: Connectivity Fault Management product support

Feature	Product	Release introduced
IEEE 802.1ag Connectivity Fault Management (CFM): • Layer 2 Ping • TraceRoute • TraceTree	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
CFM configuration on C-VLANs	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Table 18: Custom Logon Banner product support

Feature	Product	Release introduced
Custom logon banner	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Fabric Engine Features D to F

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

Feature	Product	Release introduced
Directed Broadcast	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
High Secure mode (hsecure boot configuration flag)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 20: DHCPv6 Guard product support

Feature	Product	Release introduced
DHCPv6 Guard	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 21: Differentiated Services product support

Feature	Product	Release introduced
Differentiated Services (DiffServ) including Per-Hop Behavior	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 22: Digital Certificate/PKI product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6

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

Feature	Product	Release introduced
Digital Certificate/PKI	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Subject alternative name	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Certificate fingerprint validation	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	5720 Series	Fabric Engine 8.7
Multiple CA Trustpoints and multiple Certificate Identities	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.3.100
	5720 Series	Fabric Engine 8.7

Table 23: Distributed Virtual Routing Controller product support

Feature	Product	Release introduced
DvR Controller	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
dvr-one-ip	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	VOSS 8.3
	5720 Series	Fabric Engine 8.7
Distributed Virtual Routing (DvR) In-band Management	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Fabric Engine 8.7

Table 24: Distributed Virtual Routing Leaf product support

Feature	Product	Release introduced
DvR Leaf	5320 Series	Fabric Engine 8.6

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

Feature	Product	Release introduced
		5320-48P-8XE and 5320-48T-8XE only
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
DvR In-band Management	5320 Series	Fabric Engine 8.6 5320-48P-8XE and 5320-48T-8XE only
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Management I-SID Assignment to DvR Leaf	5320 Series	Fabric Engine 8.6 5320-48P-8XE and 5320-48T-8XE only
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.5
	5720 Series	Fabric Engine 8.7

Table 25: Domain Name Service product support

Feature	Product	Release introduced
Domain Name Service (DNS) client (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
DNS client (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 26: Dynamic ARP Inspection (DAI) product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6

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

Feature	Product	Release introduced
Dynamic ARP Inspection (DAI)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 27: Dynamic Host Configuration Protocol product support

Feature	Product	Release introduced
Dynamic Host Configuration Protocol (DHCP) Relay	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
DHCP Option 82	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

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

Feature	Product	Release introduced
IPv6 DHCP Relay	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

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

Feature	Product	Release introduced
DHCP Snooping(IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
DHCP Snooping (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

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

Feature	Product	Release introduced
Neighbor Discovery Inspection (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 30: Dynamic Nickname Assignment product support

Feature	Product	Release introduced
Dynamic Nickname Assignment	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Extends the assignment behavior with a `prefix` parameter	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	5720 Series	Fabric Engine 8.7

Table 31: Egress Tunnel Shaping product support

Feature	Product	Release introduced
Egress Tunnel Shaping	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Table 32: Endpoint Tracking product support

Feature	Product	Release introduced
Endpoint Tracking	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 33: Energy Efficient Ethernet product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6

Table 33: Energy Efficient Ethernet product support (continued)

Feature	Product	Release introduced
Energy Efficient Ethernet (EEE)	5420 Series	VOSS 8.4 All fixed ports on 5420F-24T-4XE, 5420F-24P-4XE, 5420F-48T-4XE, 5420F-48P-4XE, 5420F-48P-4XL, 5420F-8W-16P-4XE, 5420F-16MW-32P-4XE, 5420M-24W-4YE, 5420M-48W-4YE, 5420M-24T-4YE, 5420M-48T-4YE, 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5 All fixed ports on 5520-24T, 5520-24W, 5520-48T, 5520-48W, and 5520-12MW-36W
	5720 Series	Fabric Engine 8.7

Table 34: Energy Saver product support

Feature	Product	Release introduced
Energy Saver	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4 Switch models: 5420F-24T-4XE, 5420F-24P-4XE, 5420F-48T-4XE, 5420F-48P-4XE, 5420F-48P-4XL, 5420F-8W-16P-4XE, 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE, 5420M-24W-4YE, 5420M-48W-4YE, 5420M-24T-4YE, 5420M-48T-4YE, 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5 All fixed ports on 5520-24T, 5520-24W, 5520-48T,

Table 34: Energy Saver product support (continued)

Feature	Product	Release introduced
		5520-48W, and 5520-12MW-36W
	5720 Series	Fabric Engine 8.7

Table 35: Enhanced Secure Mode product support

Feature	Product	Release introduced
Enhanced Secure mode	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Enhanced Secure mode for JITC and non-JITC sub-modes.	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Enhanced Secure mode - sensitive file protection	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.5
	5720 Series	Fabric Engine 8.7

Table 36: Enterprise Device Manager product support

Feature	Product	Release introduced
Enterprise Device Manager (EDM)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Read-Only user for EDM	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 37: Entity MIB product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6

Table 37: Entity MIB product support (continued)

Feature	Product	Release introduced
Entity MIB - Physical Table	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Entity MIB enhancements and integration for the following: • Physical Table • Alias Mapping Table • Physical Contains Table • Last Change Time object	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Entity MIB - Logical Table includes the following logical interface entities: • VLANs • MLTs • Circuitless IP (CLIP) • Fabric Extend interfaces (logical layer 2 and layer 3 IS-IS interfaces)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.4
	5720 Series	Fabric Engine 8.7

Table 38: Equal Cost Multiple Path for IPv4 product support

Feature	Product	Release introduced
Equal Cost Multiple Path (ECMP) for IPv4	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 39: Equal Cost Multiple Path for IPv6 product support

Feature	Product	Release introduced
ECMP for IPv6	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more

Table 39: Equal Cost Multiple Path for IPv6 product support (continued)

Feature	Product	Release introduced
		than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 40: ECMP Pathlist with Fabric Connect product support

Feature	Product	Release introduced
ECMP Pathlist with Fabric Connect (IS-IS routes)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 41: E-Tree and Private VLANs product support

Feature	Product	Release introduced
E-Tree and Private VLANs	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Routing on Private VLANs	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.5
	5720 Series	Fabric Engine 8.7

Table 42: Extensible Authentication Protocol over LAN product support

Feature	Product	Release introduced
Extensible Authentication Protocol (EAP) and EAP over LAN (EAPoL)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
EAPoL MHMA-MV	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

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

Feature	Product	Release introduced
EAPoL enhancements: Enhanced MHMV, Fail Open VLAN, Guest VLAN	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
EAP enhancements: EAP on Flex UNI ports, Auto-sense ports, auto-isid-offset	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	5720 Series	Fabric Engine 8.7
EAP enhancements: Wake on LAN, Guest I-SID, Fail Open I-SID	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	5720 Series	Fabric Engine 8.7
Non EAPoL MAC RADIUS authentication	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
QoS Priority Assignment	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
RADIUS Dynamic User-Based Policies	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	5720 Series	Fabric Engine 8.7
RADIUS Port and VLAN based Attributes	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.4
	5720 Series	Fabric Engine 8.7

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

Feature	Product	Release introduced
Continuity Mode for Fail Open VLAN and Fail Open I-SID	5320 Series	Fabric Engine 8.6
	5420 Series	Fabric Engine 8.6
	5520 Series	Fabric Engine 8.6
	5720 Series	Fabric Engine 8.7

Table 43: Extreme Integrated Application Hosting product support

Feature	Product	Release introduced
Extreme Integrated Application Hosting	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Fabric Engine 8.7 5720-24MXW and 5720-48MXW
Fabric IPsec Gateway virtual machine	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Fabric Engine 8.7 5720-24MXW and 5720-48MXW
Egress Shaper for Fabric Extend tunnels on Fabric IPsec Gateway virtual machine	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Fabric Engine 8.7 5720-24MXW and 5720-48MXW

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

Feature	Product	Release introduced
ExtremeCloud IQ - Site Engine backup configuration ZIP file For more information, see ExtremeCloud IQ - Site Engine documentation.	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 45: Fabric Attach product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6

Table 45: Fabric Attach product support (continued)

Feature	Product	Release introduced
Fabric Attach Server	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 46: Fabric Attach Zero Touch Client Attachment product support

Feature	Product	Release introduced
Fabric Attach Zero Touch Client Attachment	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 47: Fabric Extend product support

Feature	Product	Release introduced
Fabric Extend	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Fabric Extend over IPsec	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Fabric Engine 8.7 5720-24MXW and 5720-48MXW using Fabric IPsec Gateway
Digital Certificate Authentication for Fabric Extend over IPsec	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Fabric Engine 8.7 5720-24MXW and 5720-48MXW using Fabric IPsec Gateway
ECMP support for Fabric Extend	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 47: Fabric Extend product support (continued)

Feature	Product	Release introduced
IPsec compression	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Fabric Engine 8.7 5720-24MXW and 5720-48MXW using Fabric IPsec Gateway
Ability to adjust the maximum segment size (MSS)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.5
	5720 Series	Fabric Engine 8.7
IS-IS hello padding	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4.2
	5520 Series	VOSS 8.2.7
	5720 Series	Fabric Engine 8.7
IPsec fragmentation before encryption	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Fabric Engine 8.7 5720-24MXW and 5720-48MXW using Fabric IPsec Gateway
Ability to configure a specific IPsec source IP per tunnel	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Table 48: Fabric Mode product support

Feature	Product	Release introduced
Fabric BCB mode	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 48: Fabric Mode product support (continued)

Feature	Product	Release introduced
Fabric BEB mode	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 49: Fabric RSPAN product support

Feature	Product	Release introduced
Fabric RSPAN (Mirror to I-SID)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 50: FDB Protected by Port product support

Feature	Product	Release introduced
FDB protected by port (MAC security limit-learning)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	5720 Series	Fabric Engine 8.7

Table 51: Flight Recorder product support

Feature	Product	Release introduced
Flight Recorder for system health monitoring	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 52: Forward Error Correction product support

Feature	Product	Release introduced
Forward Error Correction (FEC) (configurable)	5320 Series	Not applicable
	5420 Series	VOSS 8.4 5420M-24T-4YE, 5420M-24W-4YE, 5420M-16MW-32P-4YE,

Table 52: Forward Error Correction product support (continued)

Feature	Product	Release introduced
		5420M-48T-4YE, and 5420M-48W-4YE
	5520 Series	VOSS 8.2.5 5520-VIM-4YE only
	5720 Series	Fabric Engine 8.7

Fabric Engine Features G to I

Table 53: High-Availability product support

Feature	Product	Release introduced
High Availability-CPU (HA-CPU) for a standalone switch	5320 Series	Not Applicable
	5420 Series	Not Applicable
	5520 Series	Not Applicable
	5720 Series	Not Applicable
High Availability-CPU (HA-CPU) for Layer 2 with Simplified vIST	5320 Series	Not Applicable
	5420 Series	Not Applicable
	5520 Series	Not Applicable
	5720 Series	Not Applicable
High Availability-CPU (HA-CPU) for Layer 3 with Simplified vIST	5320 Series	Not Applicable
	5420 Series	Not Applicable
	5520 Series	Not Applicable
	5720 Series	Not Applicable

Table 54: IEEE 802.3X Pause Frame Transmit product support

Feature	Product	Release introduced
IEEE 802.3X Pause frame transmit	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 55: Internet Control Message Protocol product support

Feature	Product	Release introduced
Internet Control Message Protocol (ICMP)	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more

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

Feature	Product	Release introduced
		than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
ICMP broadcast and multicast enable or disable	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Fragmented ICMP Packet Filtering for IPv4	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.5
	5720 Series	Fabric Engine 8.7
Fragmented ICMP Packet Filtering for IPv6	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.5
	5720 Series	Fabric Engine 8.7

Table 56: Internet Group Management Protocol product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4

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

Feature	Product	Release introduced
Internet Group Management Protocol (IGMP), including virtualization	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 57: Internet Key Exchange product support

Feature	Product	Release introduced
Internet Key Exchange (IKE) v2	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

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

Feature	Product	Release introduced
Internet Protocol Flow Information eXport (IPFIX)	5320 Series	Fabric Engine 8.6 5320-48P-8XE and 5320-48T-8XE only
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 59: Inter-VSN Routing product support

Feature	Product	Release introduced
Inter-VSN routing (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Inter-VSN routing (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 60: IOC Module Preconfiguration

Feature	Product	Release introduced
	5320 Series	Not Applicable

Table 60: IOC Module Preconfiguration (continued)

Feature	Product	Release introduced
IOC Module Preconfiguration	5420 Series	Not Applicable
	5520 Series	Not Applicable
	5720 Series	Not Applicable

Table 61: IP Phone product support

Feature	Product	Release introduced
IP Phone Support	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	5720 Series	Fabric Engine 8.7

Table 62: IP Multicast over Fabric Connect product support

Feature	Product	Release introduced
IP Multicast over Fabric Connect	5320 Series	Fabric Engine 8.6 **Note:** Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Universal Plug and Play (uPnP) Filtering	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.3
	5720 Series	Fabric Engine 8.7

Table 63: IP Route Policies product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6

Table 63: IP Route Policies product support (continued)

Feature	Product	Release introduced
IP route policies	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 64: IP Shortcuts product support

Feature	Product	Release introduced
IP Shortcut routing including ECMP	5320 Series	Fabric Engine 8.6 **Note:** Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
IPv6 Shortcut routing	5320 Series	Fabric Engine 8.6 **Note:** Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
IPv4 IS-IS accept policies	5320 Series	Fabric Engine 8.6 **Note:** Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 64: IP Shortcuts product support (continued)

Feature	Product	Release introduced
IPv6 IS-IS accept policies	5320 Series	Fabric Engine 8.6 **Note:** Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 65: IP Source Guard product support

Feature	Product	Release introduced
IP Source Guard (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
IP Source Guard (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 66: IP Source Routing product support

Feature	Product	Release introduced
IP Source Routing enable or disable	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 67: IPsec product support

Feature	Product	Release introduced
	5320 Series	Not Supported

Table 67: IPsec product support (continued)

Feature	Product	Release introduced
IPsec NAT-T	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
IPsec transport mode	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
IPsec tunnel mode	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
IPsec for the Out-of-band management port (IPv4)	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
IPsec for the Out-of-band management port (IPv6)	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
Digital Certificates for IPsec Authentication	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Fabric Engine 8.7 5720-24MXW and 5720-48MXW for Fabric Extend over IPsec.

Table 68: IPv6-in-IPv4 tunnels product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6

Table 68: IPv6-in-IPv4 tunnels product support (continued)

Feature	Product	Release introduced
IPv6-in-IPv4 tunnels	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

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

Feature	Product	Release introduced
IPv6 Router Advertisement (RA) Guard	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 70: IQ Agent product support

Feature	Product	Release introduced
ExtremeCloud IQ Agent	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 71: IS-IS product support

Feature	Product	Release introduced
IS-IS authentication with SHA-256	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Suspend duplicate system ID detection	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Multiple IS-IS parallel adjacencies	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Fabric Engine Features J to L

Table 72: Key Health Indicator product support

Feature	Product	Release introduced
Key Health Indicator (KHI)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 73: Layer 2 Video Surveillance install script product support

Feature	Product	Release introduced
Layer 2 Video Surveillance install script	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Table 74: Layer 2 VSN product support

Feature	Product	Release introduced
Equal Cost Trees (ECT)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Layer 2 Virtual Service Network (VSN)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Switched UNI	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 74: Layer 2 VSN product support (continued)

Feature	Product	Release introduced
Transparent Port UNI (T-UNI)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 75: Layer 3 Video Surveillance install script product support

Feature	Product	Release introduced
Layer 3 Video Surveillance install script (formerly known as the run vms endura script)	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Table 76: Layer 3 VSN product support

Feature	Product	Release introduced
Layer 3 VSN	5320 Series	Fabric Engine 8.6 **Note:** Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 77: Licensing product support

Feature	Product	Release introduced
Universal Hardware licenses	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
License files signed using Extreme Networks signature	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 77: Licensing product support (continued)

Feature	Product	Release introduced
Subscription-based licenses	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
Ability to extend the Factory Default Premier Trial License	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.4
	5720 Series	Fabric Engine 8.7

Table 78: Link Debounce for WAN Links

Feature	Product	Release introduced
Link Debounce	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.5
	5720 Series	Fabric Engine 8.7

Table 79: Link Layer Discovery Protocol product support

Feature	Product	Release introduced
Industry Standard Discovery Protocol (ISDP) (CDP compatible)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Link Layer Discovery Protocol (LLDP)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

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

Feature	Product	Release introduced
Link Layer Discovery Protocol-Media Endpoint Discovery (LLDP-MED)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

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

Feature	Product	Release introduced
Link-state tracking (LST)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 81: Linux kernel version product support

Feature	Product	Release introduced
Linux kernel version	5320 Series	5.4 as of Fabric Engine 8.6
	5420 Series	5.4 as of Fabric Engine 8.6
	5520 Series	5.4 as of Fabric Engine 8.6
	5720 Series	5.4 as of Fabric Engine 8.7

Table 82: Logs and traps product support

Feature	Product	Release introduced
Logging to a file and syslog (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Logging to a file and syslog (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Simple Mail Transfer Protocol (SMTP) for log notification	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 82: Logs and traps product support (continued)

Feature	Product	Release introduced
System Logging compliance with RFC 5424 and RFC 3339	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
TLS client for secure syslog	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Fabric Engine Features M to O

Table 83: MACsec product support

Feature	Product	Release introduced
MACsec 2AN mode (static)	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
MACsec 4AN mode (static)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.2.5 • 5520-24T and 5520-24W - all fixed ports except 1/25 and 1/26 • 5520-12MW-36W, 5520-48SE, 5520-48T, and 5520-48W - all fixed ports except 1/49 and 1/50 • VIMs: 5520-VIM-4XE and 5520-VIM-4YE only
	5720 Series	Fabric Engine 8.7 • 5720-24MW and 5720-24MXW - all fixed ports except 1/25 and 1/26 • 5720-48MW and 5720-48MXW - all fixed ports except 1/49 and 1/50 • VIMs: 5720-VIM-2CE and 5720-VIM-6YE

Table 83: MACsec product support (continued)

Feature	Product	Release introduced
MACsec encryption cipher suites	5320 Series	Fabric Engine 8.6 Both 128 bits and 256 bits
	5420 Series	VOSS 8.5 Both 128 bits and 256 bits
	5520 Series	VOSS 8.2.5 • 5520-24T and 5520-24W - all fixed ports except 1/25 and 1/26 • 5520-12MW-36W, 5520-48SE, 5520-48T, and 5520-48W - all fixed ports except 1/49 and 1/50 • VIMs: 5520-VIM-4XE and 5520-VIM-4YE only
	5720 Series	Fabric Engine 8.7 • 5720-24MW and 5720-24MXW - all fixed ports except 1/25 and 1/26 • 5720-48MW and 5720-48MXW - all fixed ports except 1/49 and 1/50 • VIMs: 5720-VIM-2CE and 5720-VIM-6YE

Table 83: MACsec product support (continued)

Feature	Product	Release introduced
MACsec Key Agreement (MKA)	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	VOSS 8.5 • 5520-24T and 5520-24W • 5520-12MW-36W, 5520-48SE, 5520-48T, and 5520-48W • VIMs: 5520-VIM-4XE and 5520-VIM-4YE only
	5720 Series	Fabric Engine 8.7 • 5720-24MW and 5720-24MXW - all fixed ports except 1/25 and 1/26 • 5720-48MW and 5720-48MXW - all fixed ports except 1/49 and 1/50 • VIMs: 5720-VIM-2CE and 5720-VIM-6YE

Table 84: Mroute statistics product support

Feature	Product	Release introduced
Multicast route (mroute) statistics for IPv4 and IPv6	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 85: MSTP-Fabric Connect Multi Homing product support

Feature	Product	Release introduced
MSTP-Fabric Connect Multi Homing	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 86: Multi-area SPB

Feature	Product	Release introduced
	5320 Series	Not Supported

Table 86: Multi-area SPB (continued)

Feature	Product	Release introduced
Multi-area SPB Boundary Node	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Table 87: Multicast Listener Discovery product support

Feature	Product	Release introduced
Multicast Listener Discovery (MLD)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 88: MultiLink Trunking product support

Feature	Product	Release introduced
MultiLink Trunking (MLT) / Link Aggregation Group (LAG)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 89: Multiple CLI Users product support

Feature	Product	Release introduced
Multiple CLI users per role	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 90: Network Load Balancing product support

Feature	Product	Release introduced
Network Load Balancing (NLB) - multicast operation	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 90: Network Load Balancing product support (continued)

Feature	Product	Release introduced
Network Load Balancing (NLB) - unicast operation	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 91: Network operating system personality product support

Feature	Product	Release introduced
Dual-boot personalities	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 92: Network Time Protocol product support

Feature	Product	Release introduced
NTPv3 client	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
NTPv3 with SHA authentication	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
NTPv4 client for IPv4	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
NTPv4 client for IPv6	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 92: Network Time Protocol product support (continued)

Feature	Product	Release introduced
NTPv4 master and restrict	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 93: nni-mstp boot flag product support

Feature	Product	Release introduced
nni-mstp boot flag (**boot config flags nni-mstp**)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 94: OSPF product support

Feature	Product	Release introduced
Open Shortest Path First (OSPF)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Secure hash algorithm 1 (SHA-1) and SHA-2	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 95: OSPFv3 product support

Feature	Product	Release introduced
OSPFv3	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
OSPFv3 support for CLIP interfaces	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Fabric Engine Features P to R

Table 96: PIM over IPv6 product support

Feature	Product	Release introduced
PIM over IPv6	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 97: Port-Based Rate Limiting, Policing, and Shaping product support

Feature	Product	Release introduced
Egress port shaper	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Ingress dual rate port policers	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
Ingress policer and port rate limiter	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.5
	5720 Series	Fabric Engine 8.7
QoS ingress port rate limiter	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 98: Port Mirroring product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6

Table 98: Port Mirroring product support (continued)

Feature	Product	Release introduced
Ingress mirroring (port and flow-based)	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Egress mirroring (port-based)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 99: Power Manager product support

Feature	Product	Release introduced
Power Management	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 100: Power over Ethernet product support

Feature	Product	Release introduced
Power over Ethernet (PoE)	5320 Series	Fabric Engine 8.6 5320-24P-8XE, 5320-48P-8XE, 5320-16P-4XE, and 5320-16P-4XE-DC.
	5420 Series	VOSS 8.4 5420F-24P-4XE, 5420F-48P-4XE, 5420F-48P-4XL, 5420F-8W-16P-4XE, 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE, 5420M-24W-4YE, 5420M-48W-4YE, and 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5 5520-12MW-36W, 5520-24W and 5520-48W only
	5720 Series	Fabric Engine 8.7 5720-24MW, 5720-48MW, 5720-24MXW, and 5720-48MXW

Table 100: Power over Ethernet product support (continued)

Feature	Product	Release introduced
PoE/PoE+ allocation using LLDP	5320 Series	Fabric Engine 8.6 5320-24P-8XE, 5320-48P-8XE, 5320-16P-4XE, and 5320-16P-4XE-DC.
	5420 Series	VOSS 8.4 5420F-24P-4XE, 5420F-48P-4XE 5420F-8W-16P-4XE, , 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE , 5420F-48P-4XL, 5420M-24W-4YE, 5420M-48W-4YE, and 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5 5520-12MW-36W, 5520-24W and 5520-48W only
	5720 Series	Fabric Engine 8.7 5720-24MW, 5720-48MW, 5720-24MXW, and 5720-48MXW
Fast PoE	5320 Series	Fabric Engine 8.6 5320-24P-8XE, 5320-48P-8XE, 5320-16P-4XE, and 5320-16P-4XE-DC.
	5420 Series	VOSS 8.4 5420F-24P-4XE, 5420F-48P-4XE 5420F-8W-16P-4XE, , 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE , 5420F-48P-4XL, 5420M-24W-4YE, 5420M-48W-4YE, and 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5 5520-12MW-36W, 5520-24W and 5520-48W only
	5720 Series	Fabric Engine 8.7 5720-24MW, 5720-48MW, 5720-24MXW, and 5720-48MXW

Table 100: Power over Ethernet product support (continued)

Feature	Product	Release introduced
Perpetual PoE	5320 Series	Fabric Engine 8.6 5320-24P-8XE, 5320-48P-8XE, 5320-16P-4XE, and 5320-16P-4XE-DC.
	5420 Series	VOSS 8.4 5420F-24P-4XE, 5420F-48P-4XE 5420F-8W-16P-4XE, , 5420F-16W-32P-4XE, 5420F-16MW-32P-4XE , 5420F-48P-4XL, 5420M-24W-4YE, 5420M-48W-4YE, and 5420M-16MW-32P-4YE
	5520 Series	VOSS 8.2.5 5520-12MW-36W, 5520-24W and 5520-48W only
	5720 Series	Fabric Engine 8.7 5720-24MW, 5720-48MW, 5720-24MXW, and 5720-48MXW

Table 101: Protocol Independent Multicast-Source Specific Mode product support

Feature	Product	Release introduced
PIM-Source Specific Mode (PIM-SSM) for IPv4	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 102: Protocol Independent Multicast - Sparse Mode product support

Feature	Product	Release introduced
Protocol Independent Multicast-Sparse Mode (PIM-SM) for IPv4	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 102: Protocol Independent Multicast - Sparse Mode product support (continued)

Feature	Product	Release introduced
PIM Infinite Threshold for IPv4 and IPv6	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.5
	5520 Series	VOSS 8.5
	5720 Series	Fabric Engine 8.7

Table 103: QoS and VoIP product support

Feature	Product	Release introduced
Automatic QoS	5320 Series	Not Supported Use Auto-sense with IP Phone support instead.
	5420 Series	Not Supported Use Auto-sense with IP Phone support instead.
	5520 Series	Not Supported Use Auto-sense with IP Phone support instead.
	5720 Series	Not Supported Use Auto-sense with IP Phone support instead.

Table 104: Queue Profiles product support

Feature	Product	Release introduced
QoS per queue rate limiting	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 105: RADIUS product support

Feature	Product	Release introduced
RADIUS (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 105: RADIUS product support (continued)

Feature	Product	Release introduced
RADIUS, community-based users (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
RADIUS secure communication using IPSec for IPv4	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
RADIUS secure communication using IPSec for IPv6	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
RADIUS Security (RADSec)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
RFC 5176 – Dynamic Authorization Extensions to RADIUS	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
RFC 5997 – RADIUS Reachability Server Status	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 106: Remote Monitoring product support

Feature	Product	Release introduced
Remote Monitoring 1 (RMON1) for Layer 1 and Layer 2	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 106: Remote Monitoring product support (continued)

Feature	Product	Release introduced
Remote Monitoring 2 (RMON2) for network and application layer protocols	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 107: Representational State Transfer Configuration Protocol (RESTCONF) product support

Feature	Product	Release introduced
Representational State Transfer Configuration Protocol (RESTCONF)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 108: RIPng product support

Feature	Product	Release introduced
RIPng	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 109: Routing Information Protocol product support

Feature	Product	Release introduced
Routing Information Protocol (RIP)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 110: RSMLT for IPv4 product support

Feature	Product	Release introduced
	5320 Series	Not Supported

Table 110: RSMLT for IPv4 product support (continued)

Feature	Product	Release introduced
IPv4 RSMLT	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 111: RSMLT for IPv6 product support

Feature	Product	Release introduced
IPv6 RSMLT	5320 Series	Not Supported
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 112: run spbm installation script product support

Feature	Product	Release introduced
run spbm installation script	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Fabric Engine Features S to U

Table 113: Secure Shell product support

Feature	Product	Release introduced
Secure Shell (SSH) server (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Secure Shell (SSH) client (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Secure Sockets Layer (SSL) certificate management	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
SSH server (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
SSH client (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
SSH client disable	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 113: Secure Shell product support (continued)

Feature	Product	Release introduced
SSH key sizes in multiples of 1024	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
SSH rekey	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 114: Segmented Management Instance product support

Feature	Product	Release introduced
Segmented Management Instance - Management Interface CLIP	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Segmented Management Instance - Management Interface OOB	5320 Series	Not Applicable
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Segmented Management Instance - Management Interface VLAN	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Segmented Management Instance — ability to migrate VLAN or loopback IP address	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 114: Segmented Management Instance product support (continued)

Feature	Product	Release introduced
Segmented Management Instance — DHCP Client for Management Interface OOB or Management Interface VLAN	5320 Series	Fabric Engine 8.6 OOB not supported
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 115: sFlow product support

Feature	Product	Release introduced
sFlow	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
sFlow collector reachability on user-created VRFs	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Table 116: Simple Loop Prevention Protocol product support

Feature	Product	Release introduced
Simple Loop Prevention Protocol (SLPP)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine

Table 117: Simple Network Management Protocol product support

Feature	Product	Release introduced
Simple Network Management Protocol (SNMP) v1/2/3 (IPv4)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 117: Simple Network Management Protocol product support (continued)

Feature	Product	Release introduced
SNMP (IPv6)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 118: SLA Mon product support

Feature	Product	Release introduced
SLA Mon	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Table 119: SLPP Guard product support

Feature	Product	Release introduced
SLPP Guard	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 120: SONMP product support

Feature	Product	Release introduced
SONMP	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 121: Spanning Tree Protocol product support

Feature	Product	Release introduced
Spanning Tree Protocol (STP): • Multiple STP (MSTP)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5

Table 121: Spanning Tree Protocol product support (continued)

Feature	Product	Release introduced
• Rapid STP (RSTP)	5720 Series	Fabric Engine 8.7

Table 122: spbm-config-mode product support

Feature	Product	Release introduced
spbm-config-mode (**boot config flags spbm-config-mode**)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine

Table 123: SPB-PIM Gateway product support

Feature	Product	Release introduced
SPB-PIM Gateway controller node	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	VOSS 8.2.5
	5720 Series	Not Supported
SPB-PIM Gateway interface	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	VOSS 8.2.5
	5720 Series	Not Supported

Table 124: Static routing product support

Feature	Product	Release introduced
Static routing	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 125: TACACS+ product support

Feature	Product	Release introduced
	5320 Series	Fabric Engine 8.6

Table 125: TACACS+ product support (continued)

Feature	Product	Release introduced
TACACS+	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
TACACS+ secure communication using IPSec for IPv4	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 126: TLS server for secure HTTPS product support

Feature	Product	Release introduced
TLS server for secure HTTPS	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 127: Two-Factor Authentication for SSH product support

Feature	Product	Release introduced
Two-Factor Authentication for SSH	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 128: Unicast Reverse Path Forwarding product support

Feature	Product	Release introduced
Unicast Reverse Path Forwarding (URPF) checking (IPv4)	5320 Series	Fabric Engine 8.6 5320-48P-8XE and 5320-48T-8XE only
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 128: Unicast Reverse Path Forwarding product support (continued)

Feature	Product	Release introduced
Unicast Reverse Path Forwarding (URPF) checking (IPv6)	5320 Series	Fabric Engine 8.6 5320-48P-8XE and 5320-48T-8XE only
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Fabric Engine Features V to X

Table 129: Virtual Inter-Switch Trunk product support

Feature	Product	Release introduced
Switch cluster (multi-chassis LAG) -Virtual Inter-Switch Trunk (vIST)	5320 Series	Not Supported
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 130: Virtual Link Aggregation Control Protocol (VLACP) product support

Feature	Product	Release introduced
Virtual Link Aggregation Control Protocol (VLACP)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
VLACP Flap Detect and Damping	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 131: Virtual Router Redundancy Protocol product support

Feature	Product	Release introduced
Virtual Router Redundancy Protocol (VRRP)	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 131: Virtual Router Redundancy Protocol product support (continued)

Feature	Product	Release introduced
VRRPv3 for IPv4	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 132: Virtual Router Redundancy Protocol for IPv6 product support

Feature	Product	Release introduced
IPv6 VRRP	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
VRRPv3 for IPv6	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 133: Virtual Routing and Forwarding product support

Feature	Product	Release introduced
Virtualization with IPv4 Virtual Routing and Forwarding (VRF) • ARP • DHCP Relay • Inter-VRF Routing (static, dynamic, and policy) • Local routing • OSPFv2 • RIPv1 and v2 • Route policies • Static routing • VRRP	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
Increased VRF and Layer 3 VSN scaling	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 133: Virtual Routing and Forwarding product support (continued)

Feature	Product	Release introduced
IBGP over user-created VRFs	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
IPv6 Virtualization for the following features and functions: • IPv6 Interfaces and IPv6 Static Routes in VRFs and Layer 3 VSNs • ECMP and Alternative route • Route redistribution for static and direct routes • VRRPv3 for IPv6 • DHCP Relay • IPv6 Reverse Path Forwarding • ICMP Ping and Traceroute	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
IPv6 Virtualization for the following features and functions: • Open Shortest Path First for IPv6 (OSPFv3) • IPv6 Border Gateway Protocol (IPv6 BGP) • IPv6 route redistribution enhancements	5320 Series	Fabric Engine 8.6 Only 5320-48P-8XE and 5320-48T-8XE support more than one VRF with IP configuration.
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 134: VXLAN Gateway product support

Feature	Product	Release introduced
VXLAN Gateway	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported
OVSDB protocol support for VXLAN Gateway	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Table 134: VXLAN Gateway product support (continued)

Feature	Product	Release introduced
ECMP support for VXLAN Gateway	5320 Series	Not Supported
	5420 Series	Not Supported
	5520 Series	Not Supported
	5720 Series	Not Supported

Fabric Engine Features Y and Z

Table 135: Zero Touch Deployment product support

Feature	Product	Release introduced
Zero Touch Deployment	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 136: Zero Touch Fabric Configuration product support

Feature	Product	Release introduced
Zero Touch Fabric Configuration	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7
LLDP Fabric Connect TLV	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7

Table 137: Zero Touch Provisioning Plus product support

Feature	Product	Release introduced
Zero Touch Provisioning Plus	5320 Series	Fabric Engine 8.6
	5420 Series	VOSS 8.4
	5520 Series	VOSS 8.2.5
	5720 Series	Fabric Engine 8.7