Extreme ONE OS Switching v22.2.0.0 Scale and Standards Matrix

Switching and Protocol Capacity Specifications

9039345-00 Rev AA
July 2025

Legal Notice

Extreme Networks, Inc. reserves the right to make changes in specifications and other information contained in this document and its website without prior notice. The reader should in all cases consult representatives of Extreme Networks to determine whether any such changes have been made.
The hardware, firmware, software or any specifications described or referred to in this document are subject to change without notice.

Trademarks

Extreme Networks and the Extreme Networks logo are trademarks or registered trademarks of Extreme Networks, Inc. in the United States and/or other countries.

All other names (including any product names) mentioned in this document are the property of their respective owners and may be trademarks or registered trademarks of their respective companies/owners.
For additional information on Extreme Networks trademarks, see: www.extremenetworks.com/ about-extreme-networks/company/legal/trademarks

Open Source Declarations

Some software files have been licensed under certain open source or third-party licenses. End-user license agreements and open source declarations can be found at: https:// www.extremenetworks.com/support/policies/open-source-declaration/

Contents

Preface 1
Text Conventions 1
Documentation and Training 3
Getting Help 3
Providing Feedback 4
Abstract 5
Scalability Matrix 6

Preface

Read the following topics to learn about:

- The meanings of text formats used in this document.
- Where you can find additional information and help.
- How to reach us with questions and comments.

Text Conventions

Unless otherwise noted, information in this document applies to all supported environments for the products in question. Exceptions, like command keywords associated with a specific software version, are identified in the text.

When a feature, function, or operation pertains to a specific hardware product, the product name is used. When features, functions, and operations are the same across an entire product family, such as Extreme Switching switches or routers, the product is referred to as *the switch* or *the router*.

Table 1: Notes and warnings

Icon	Notice Type	Alerts you to...
	Tip	Helpful tips and notices for using the product
	Note	Useful information or instructions
	Important	Important features and instructions
	Caution	Risk of personal injury, system damage, or loss of data
	Warning	Risk of severe personal injury

Table 2: Text

Convention	Description
screen displays	This typeface indicates command syntax, or represents information as it is displayed on the screen.

The words *enter* and *type*	When you see the word *enter* in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says *type*.
Key names	Key names are written in boldface, for example **Ctrl** or **Esc**. If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press **Ctrl+Alt+Del**
Words in italicized type	Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.
NEW!	New information. In a PDF, this is searchable text.

Table 3: Command syntax

Convention	Description
bold text	Bold text indicates command names, keywords, and command options.
italic text	Italic text indicates variable content.
[ ]	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
{ **x** | **y** | **z** }	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
x | **y**	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, such as passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, ***member*** [***member***...].
\	In command examples, the backslash indicates a “soft” line break. When a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

Documentation and Training

Find Extreme Networks product information at the following locations:

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

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

Getting Help

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

Extreme Portal

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

The Hub

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

Call GTAC

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

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

- Your Extreme Networks service contract number and/or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any action(s) already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)

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

Subscribe to Product Announcements

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

1. Go to The Hub.
2. In the list of categories, expand the **Product Announcements** list.
3. Select a product for which you would like to receive notifications.
4. Select **Subscribe**.
5. To select additional products, return to the **Product Announcements** list and repeat steps 3 and 4.

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

Providing Feedback

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

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

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

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

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

Abstract

The Extreme ONE OS Switching v22.2.0.0 Scale and Standards Matrix defines technical specifications for the 8730-32D switch platform across Layer 2/3 networking and management protocols. Layer 2 capabilities include 120 trunk groups with 64-port LACP aggregation, 120,000 MAC addresses, 4094 VLANs/Bridge Domains, and 12,000 logical interfaces with 1000 BD-VNI VXLAN mappings. Layer 3 IPv4 implementation supports 1.4 million FIB entries, 2 million BGP RIB capacity with 2000 peers across 1024 VRFs, 32,000 ARP entries, and ECMP load balancing with 128 paths per group across 4000 overlay/1000 underlay groups. IPv6 functionality provides 100,000 routes, 32,000 ND entries, and 2 million BGPv6 RIB with 1024 peers. Security architecture incorporates 2047 ingress/egress ACL entries for IPv4+IPv6 and Layer 2 filtering, while network management operates through SNMP (256 communities, 18 trap hosts), gNMI telemetry (32 sessions, 256 subscriptions), and BFD with 1000 hardware-accelerated IPv4/IPv6 sessions for sub-second convergence detection.

Scalability Matrix

Support Type	8730-32D
Layer 2 Switching	
Number of trunk groups supported	120
Number of ports per trunk group	64
Max LACP trunk threshold	64
Maximum MAC addresses per switch	120000
Jumbo frames	NA
Number of VLANs	4094
Maximum Bridge Domains (BD)	4094(VLAN) + 4094 (BD)
Maximum port-BD/port-VLAN association (Logical Interfaces or LIFs)	12000
Maximum BD-VNI mapping	1000
Layer 3 Features - IPv4	
Maximum IP interfaces per system (IPv4, IPv6)	NA
Maximum Static VXLAN Tunnel (IPv4)	1000
Maximum Virtual Ethernet Interfaces per system	8192
Maximum ARP entries	32000
Maximum static ARP entries	32000
Maximum IP next-hops	32000
Possible secondary IP addresses	NA
Maximum loopback interfaces	1000
Maximum static route entries	10000
Maximum BGP peer groups	1024
Maximum BGP routes in RIB	2M (in + out)
BGP peers (IPv4 and IPv6 concurrent including all VRFs)	2000
BGP dynamic listen range supported (IPv4 and IPv6 concurrent including all VRFs)	2000
Maximum BGP additional paths for received prefixes	128
Maximum IPv4 routes	1.4M
Maximum VRFs per system (BGP VRF IPv4/IPv6)	1024
Maximum VRFs per system static VRF IPv4/IPv6)	1024
ECMP FEC scale	NA
Maximum ECMP paths	128
Maximum ECMP Groups	4000 (Overlay) + 1000 (Underlay)
Maximum ECMP Paths per system	8000 (Overlay) + 8000 (Underlay)

RH Max ECMP flow set	16000
Layer 3 Features - IPv6	
Maximum IPv6 static route entries	10000
Maximum IPv6 routes	100000
Maximum ND entries	32000
Maximum BGPv6 routes in the RIB	2M (in + out)
Maximum BGPv6 neighbors	1024
Maximum DHCPv6 Delegated Prefixes	NA
Rate Limiting and Traffic Policing Features	
Granularity	NA
Number of rate-limiters/traffic-policers per system	NA
ACL	
Maximum security IPv4+IPv6 ACL per system	2047 (Ingress) + 2047 (Egress)
Maximum L2 ACL per system	2047 (Ingress) + 2047 (Egress)
Policy Based Routing (PBR)	NA
IPv6 PBR	NA
Maximum configurable PBR route maps	NA
Maximum configurable stanzas in PBR	NA
Maximum receive IPv4+IPv6 ACL per system	2047
SNMP	
Maximum communities	256
Maximum contexts	NA
Maximum community maps	NA
Maximum SNMP v3 users	10
Maximum groups	NA
Maximum views	NA
Maximum v1/v2c/v3 trap hosts	18
gNMI	
Maximum Sessions	32
Maximum Subscriptions	256
Maximum payload for set	4MB
BFD	
IPv4 Hardware Sessions	1000
IPv6 Hardware Sessions	1000
IPv4/IPv6 Concurrent Hardware Sessions	Any combination of IPv4 + IPv6 up to total 1000 is supported.