



Extreme ONE OS Switching v22.2.1.0 Scale and Standards Matrix

Switching and Protocol Capacity Specifications

9039429-00 Rev AA
December 2025



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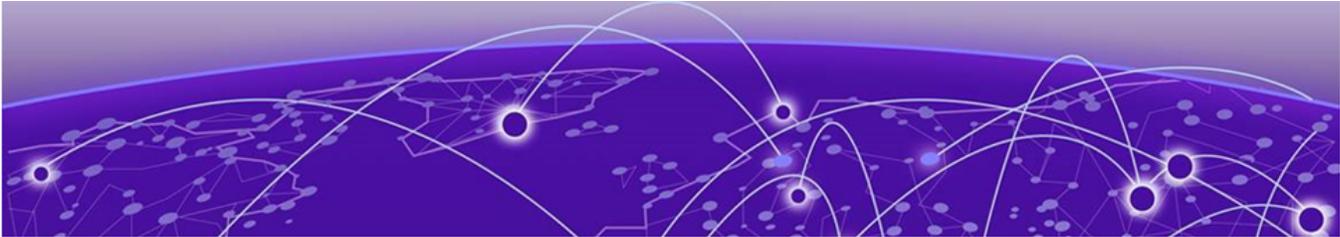
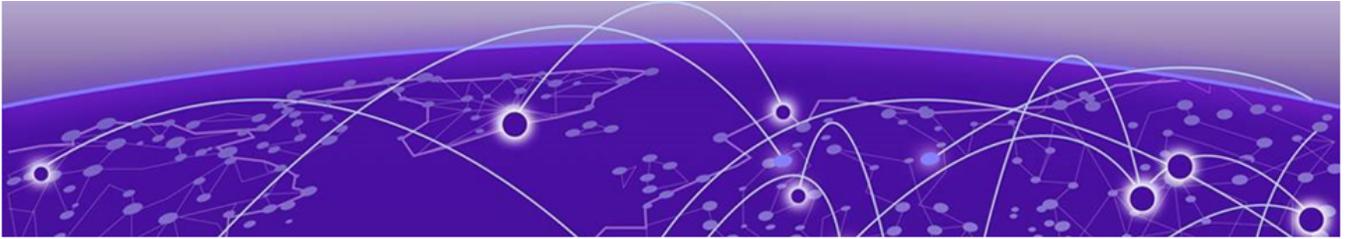


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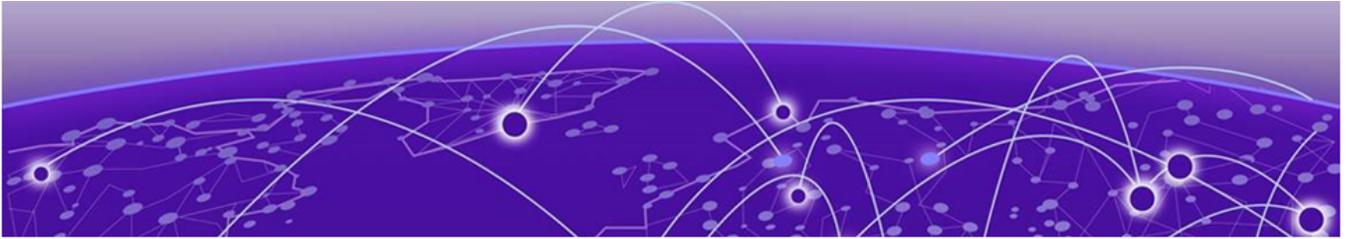
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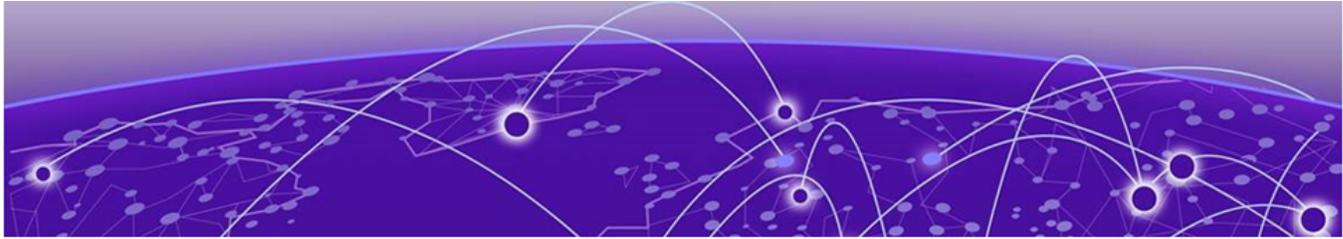
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Abstract

This scale and standards matrix for Extreme ONE OS Switching version 22.2.1.0 outlines core technical specifications and capacity benchmarks for major switching platforms, emphasizing Layer 2/3 networking, protocol support, and management features. It highlights key capabilities in MAC address scaling, VLAN and interface limits, advanced routing, and security controls, while summarizing guidance for deployment, performance optimization, and troubleshooting. The matrix is designed for network engineers and administrators seeking a clear reference for platform capabilities and operational scenarios.



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 Networks switches, the product is referred to as *the switch*.

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 or 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 <i>enter</i> and <i>type</i>	When you see the word <i>enter</i> 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 <i>type</i> .
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
<i>Words in italicized type</i>	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.
<i>italic text</i>	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, <i>member [member...]</i> .
\	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 articles, white papers, and case studies

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

Extreme Portal

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

The Hub

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

Call GTAC

For immediate support: (800) 998 2408 (toll-free in U.S. and Canada) or 1 (408) 579 2800. 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, or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

Subscribe to Product Announcements

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

1. Go to [The Hub](#).
2. In the list of categories, expand the **Product Announcements** list.
3. Select a product for which you would like to receive notifications.
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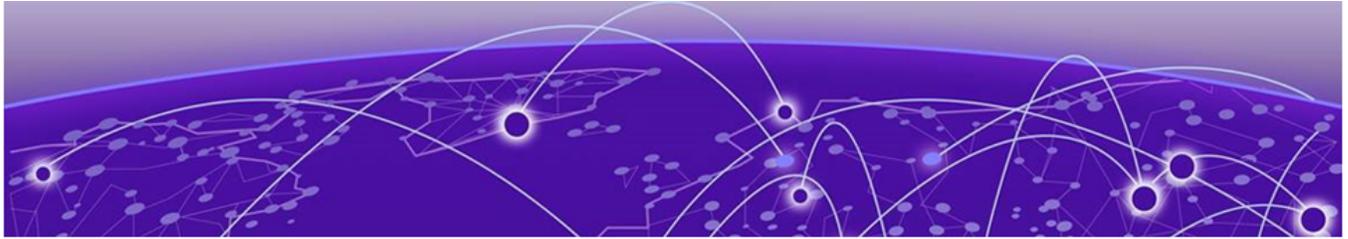
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The User Enablement team at Extreme Networks has made every effort to ensure that this document is accurate, complete, and easy to use. We strive to improve our documentation to help you in your work, so we want to hear from you. We welcome all feedback, 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, email us at Product-Documentation@extremenetworks.com.

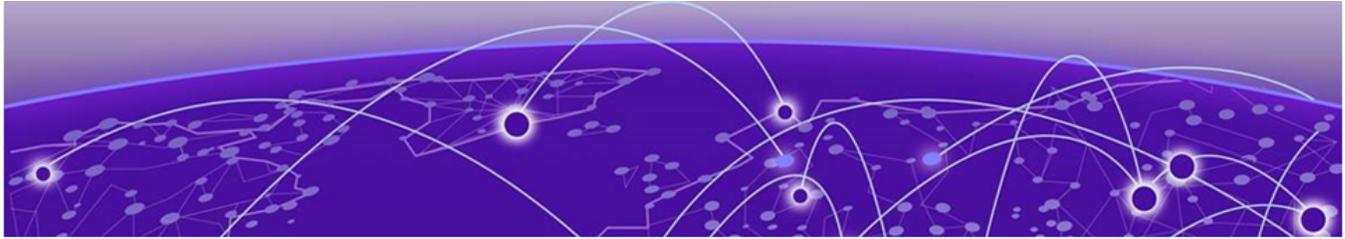
Provide as much detail as possible including the publication title, topic heading, and page number (if applicable), along with your comments and suggestions for improvement.



What's New in this Document

Extreme ONE OS Switching 22.2.1.0 supports Extreme 8520, Extreme 8720, Extreme 8730, and Extreme 8820 hardware platforms.

For more information about this release, see the *Release Notes*.



Scalability Matrix

Support Type	8730	8720/8520	8820
Layer 2 Switching			
Number of trunk groups supported	128	128	144
Number of ports per trunk group	64	64	64
Maximum LACP trunk threshold	64	64	64
Maximum MAC addresses per switch	120000	96000	600000
Jumbo frames	L2-9216 / L3-9194	L2-9216 / L3-9194	L2-9216 / L3-9194
Number of VLANs	4094	4094	4094
Maximum Bridge Domains (BD)	4094 (VLAN Mode BD) + 4096 (Default Mode BD)	4094 (VLAN Mode BD) + 4096 (Default Mode BD)	4094 (VLAN Mode BD) + 4096 (Default Mode BD)
LIF (Default Mode BD/VLAN Mode BD)	10000 (Default Mode BD) / 12000 (VLAN Mode BD)	12000 (Default Mode BD) / 12000 (VLAN Mode BD)	40000 (Default Mode BD) / 64000 (Default +VLAN mode BD)
Layer 3 - IPv4			
Maximum IP interfaces per system (Ipv4, Ipv6)	8000	4000	8000
Maximum Virtual Ethernet Interfaces per system	8000	8000	8000
Maximum ARP entries	32000	47000	100000
Maximum IP next-hops	32000	47000	64000
Maximum loopback interfaces	1000	1000	1000
Maximum OSPF areas (per VRF)	NA	NA	NA

Support Type	8730	8720/8520	8820
Maximum static route entries	10000	24000	24000
Maximum BGP peer groups	1024 (v4) or 1024 (v6) or 1024 (v4+v6)	1024 (v4) or 1024 (v6) or 1024 (v4+v6)	1024 (v4) or 1024 (v6) or 1024 (v4+v6)
Maximum BGP routes in RIB (RIBIN + RIBOUT)	2M	3.25M	3M
BGP peers (IPv4 and IPv6 concurrent including all VRFs)	2000	2400	2400
BGP dynamic listen range supported (IPv4 and IPv6 concurrent including all VRFs)	2000	2400	2400
Maximum BGP additional paths for received prefixes	128	128	128
Maximum IPv4 routes	1.4M	163840	2M
Maximum VRFs per system (BGP VRF IPv4/IPv6)	1024	1024	1024
Maximum VRFs per system static VRF IPv4/IPv6)	1024	1024	1024
Maximum ECMP paths	128	128	128
Maximum ECMP Groups (Overlay)	4000	1000	18000
Layer 3 Features - IPv6			
Maximum IPv6 static route entries	10000	10000	10000
Maximum IPv6 routes	1M	64512	1M
Maximum ND entries	32000	33000	100000 (100K Host with 1K BD)
Maximum BGPv6 routes in the RIB (RIBIN + RIBOUT)	2M	3.25M	3M
Maximum BGPv6 neighbors	1024	512	2400
ACL			

Support Type	8730	8720/8520	8820
Maximum shared IPv4 ACLs per system	2047 (Ingress) + 2047 (Egress)	768 (Ingress) + 512 (Egress)	4096 (Ingress) + 2048 (Egress)
Maximum shared IPv6 ACLs per system	2047 (Ingress) + 2047 (Egress)	768 (Ingress) + 512 (Egress)	4096 (Ingress) + 2048 (Egress)
Maximum shared L2 ACLs per system	2047	768	2048
Maximum number of IPv4 receive ACLs	2047	768	2048
Maximum number of IPv6 receive ACLs	2047	768	2048
Multi-Chassis Trunking (vLAG support)			
Maximum port-BD/port-VLAN association (Logical Interfaces or LIFs)	12000 (4K Vlan Mode BD + 2K Default Mode BD)	12000	56000 (8K Default Mode)
Maximum MLAG clients	64 - LACP Port-channel / 116 - Static Port-channel 120 - Ethernet	64 - LACP Port-channel / 116 - Static Port-channel 120 - Ethernet	64 - LACP Port-channel / 116 - Static port-channel 120 - Ethernet
Maximum MAC addresses for MLAG	120000	96000	250000
EVPN-VXLAN Scaling (IP Fabric)			
L2 VNI (bridge domains)	2000	2000	2000
L3 VNI	500	500	500
Layer 2			
Maximum VLANs	4094	4094	4094
Maximum Bridge Domains	4094 (VLAN mode) + 4096 (Default mode)	4094 (VLAN mode) + 4096 (Default mode)	4094 (VLAN mode) + 4096 (Default mode)
Maximum MAC entries	120000	96000	250000
Maximum ARP entries	32000	47000	100000
Maximum VNI	1500	1500	1500
Layer 3			
Maximum BGP peers (IPv4+IPv6)	2000	2400	2400
Maximum VE	8000	8000	8000
Maximum VRF	1024	1024	1024
ND entries	32000	33000	100000

Support Type	8730	8720/8520	8820
Static Anycast Gateway address per system (IPv4, IPv6)	8000	8000	8000
Static Anycast Gateway address per VE interface (IPv4, IPv6)	8000	8000	8000
BGP EVPN IPv4 and IPv6 routes	2M	2M	2M
BGP EVPN MAC IP routes	2M	2M	2M
BGP EVPN MAC routes	2M	2M	2M
SNMP			
Maximum communities	256	256	256
Maximum SNMP v3 users	10	10	10
Maximum v1/v2c/v3 trap hosts	18	18	18
gNMI			
Maximum Sessions	32	32	32
Maximum Subscriptions	512	512	512
Maximum payload for set	4MB	4MB	4MB
SSH			
Maximum SSH and Telnet concurrent sessions	32	32	32
Bidirectional Forwarding Detection (BFD)			
IPv4 Hardware Sessions	1000	1000	1200
IPv6 Hardware Sessions	1000	1000	1200
IPv4/IPv6 Concurrent Hardware Sessions	1000	1000	1200
Equal-Cost Multi-Path (ECMP)			
Maximum ECMP paths (Underlay)	16000	4000	8000

Support Type	8730	8720/8520	8820
Maximum ECMP Groups (Underlay)	1000	250	1000
Max VXLAN tunnel – Static Vxlan	1000	250	1000
Maximum Extended Bridge Domain - MLAG	4094 (VLAN mode) + 4096 (Default Mode)	4094 (VLAN mode) + 4096 (Default Mode)	4094 (VLAN mode) + 4096 (Default Mode)