Extreme Network OS
Features and Standards Support Matrix

Supporting Network OS 7.2.0

Contents

Introduction

Document history

The document history indicates changes made with each revision.

On October 30, 2017, Extreme Networks, Inc. acquired the data center networking business from Brocade Communications Systems, Inc. This document has been updated to remove or replace references to Brocade Communications, Inc. with Extreme Networks., Inc., as appropriate.

Document title	Release	Summary of changes	Publication date	Document number
Network OS Features and Standards Support Matrix	7.0.0	Title change from previous releases and new features and updates added	12 February 2016	53-1004085-01
Network OS Features and Standards Support Matrix	7.0.1	Minor updates	22 May 2016	53-1004434-01
Network OS Features and Standards Support Matrix	7.1.0	New features supported	21 November 2016	53-1004577-01
Network OS Features and Standards Support Matrix	7.2.0	New features supported	10 July 2017	53-1005135-01

Objective

The purpose of this document is to provide a consolidated view of all supported features and the standards with which each Extreme VDX platforms is compliant.

This document also lists the release in which each feature or standard was introduced, with Network OS Release 3.0.0 serving as the release baseline. Setting the baseline to 3.0.0 means that features and standards listed as being introduced in release 3.0.0 were actually introduced in 3.0.0 or earlier. Use the tables to determine if a feature or standard is supported on your product.

> NOTE
> The following products are not supported on Network OS 5.0.0 or later:
> * Extreme VDX 6710
> * Extreme VDX 6720
> * Extreme VDX 6730

Document feedback

Quality is our first concern at Extreme, and we have made every effort to ensure the accuracy and completeness of this document. However, if you find an error or an omission, or you think that a topic needs further development, we want to hear from you.

You can provide feedback in two ways:

- Use our short online feedback form at http://www.extremenetworks.com/documentation-feedback-pdf/
- Email us at internalinfodev@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.

Data Center Fabric

IP Fabric

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	No	No	No	7.0.0	7.0.0	7.0.0
Static Anycast Gateway	No	No	No	7.0.0	No	7.0.0
ARP suppression	No	No	No	7.0.0	No	7.0.0
BGP-EVPN	No	No	No	7.0.0	7.0.0	7.0.0
IGMP snooping	No	No	No	7.2.0	7.2.0	7.2.0
Protocol Independent Multicast - Sparse Mode (PIM-SM)	No	No	No	7.2.0	7.2.0	7.2.0

VCS Fabric

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.1.0	4.1.0	6.0.0
VCS fabric build	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
VCS non-trivial merge	No	No	No	5.0.0	5.0.0	6.0.0
VCS to VCS Connectivity	3.0.0	3.0.0	3.0.0	4.1.0	4.1.0	6.0.0
Automatic migration of port profiles (AMPP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
AMPP over VLAG	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Transparent Interconnection of Lots of Links (TRILL)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Metro VCS	No	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
Standard ISLs for Ethernet only	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
Simple ring topologies between two or three locations	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
Transparent LAN Services (TLS)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
VLAG convergence	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Long Distance ISLs	No	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Logical Chassis	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Logical Chassis High Availability (HA)	4.1.0	4.1.0	4.1.0	4.1.0	4.1.0	6.0.0
Conversational MAC Learning (CML)	No	No	No	5.0.0	5.0.0	6.0.0

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
RBridges with different local configurations in a logical chassis	No	No	No	5.0.1	5.0.1	6.0.0
Configurable load balancing	3.0.0	3.0.0	3.0.0	4.1.0	4.1.0	6.0.0
VCS fabric to FC SAN Connectivity (via 6730 only)	No	No	3.0.0	4.1.0	4.1.0	6.0.0
Fabric Virtual Gateway	No	No	No	5.0.0	5.0.0	6.0.0
Auto Fabric	No	No	No	6.0.0	6.0.0	6.0.0
D_Port on TRILL ISL	No	No	No	7.0.0	7.0.0	7.0.0
2K egress ACL hardware profile TCAM support	No	No	No	7.2.0	7.2.0	7.2.0

IP Multicast

IGMP – Internet Group Management Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IGMP snooping	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IGMP dynamic m-router over VLAG	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IGMP/MLD unified daemon	No	No	No	7.0.0	7.0.0	7.0.0

IPv4 Multicast Routing

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IP Multicast in VCS	3.0.1	3.0.1	3.0.1	4.0.0	3.0.1	6.0.0
Mtrace	No	No	No	7.0.0	7.0.0	7.0.0

IPv4 Multicast VLAN Traffic Reduction

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
IPv4 multicast switching	No	No	No	4.0.0	4.0.0	6.0.0

IPv6 Multicast Routing

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	No	No	No	5.0.0	5.0.0	6.0.0

IPv6 Multicast VLAN Traffic Reduction

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
IPv6 multicast switching	No	No	No	5.0.0	5.0.0	6.0.0

PIM – Protocol Independent Multicast

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	No	No	No	4.0.0	4.0.0	6.0.0
PIM Neighbor Filter / Multicast Boundary	No	No	No	6.0.1	6.0.1	6.0.1
Add/remove PIM neighbor filter	No	No	No	6.0.1	6.0.1	6.0.1
Add/remove multicast boundary	No	No	No	6.0.1	6.0.1	6.0.1
Remove static rendezvous–point (RP) address for PIM domain	No	No	No	6.0.1	6.0.1	6.0.1
Multinet	No	No	No	7.1.0	7.1.0	7.1.0

Layer 2 Switching

FCoE – Fibre Channel over Ethernet

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
FIP - FCoE Initialization Protocol version 1 and FCR device login and initialization	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
FIP - FCoE Initialization Protocol version 2 (FC-BB5 rev 2.00)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
FC-BB5 compliant Fibre Channel Forwarder (FCF)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Native FCoE forwarding	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Name Server-based zoning	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
End-to-end FCoE (initiator to target)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
FC fabric services for FCoE VN-port devices	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
FCoE coexistence with VLAG	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Support for connection to FIP Snooping Bridge (FSB) device	3.0.0	3.0.0	3.0.0	4.0.0	4.0.0	6.0.0
Fibre Channel Ports	No	No	No	5.0.0 for 6740 and 6.0.0 for 6740T and 6740T-1G	No	No
Fibre Channel Ports - Name Server-based zoning	No	No	3.0.0	5.0.0 (6740 only)	No	No
Fibre Channel Ports - Fibre Channel authentication	No	No	3.0.0	5.0.0 (6740 only)	No	No
Fibre Channel Ports - Direct attach for Fibre Channel storage (F_Port)	No	No	3.0.0	5.0.0 (6740 only)	No	No
Fibre Channel Ports - FCoE Bridging to Fibre Channel SANs (Using Access Gateway/NPIV or FC Routing)	No	No	3.0.0	5.0.0 (6740 only)	No	No
FCoE to Fibre Channel Bridging	No	No	No	4.0.0	No	No
FCoE on QSFP+ port	No	No	No	4.0.0	No	No
FCoE traffic over standard LAG	No	No	No	4.0.0	3.0.0	6.0.0
Interface binding	No	No	No	4.0.0	3.0.0	6.0.0

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
FCoE on multiple logical SANs	No	No	No	6.0.0	6.0.0	6.0.0
FCoE Logical SAN and Multiple FCoE VLANs	No	No	No	6.0.1	6.0.1	6.0.1

LAG – Link Aggregation Group

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
LAG in VCS mode	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
VLAG minimum links	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Full link utilization without STP	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
VLAG	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
8-port mode LAG on 10G interfaces	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
LACP partner SID validation	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
VLAG scalabilty support	No	No	No	7.0.0	7.0.0	7.0.0

UDLD – Uni-Directional Link Detection

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
UDLD Traps	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0

VLAN – Virtual LAN

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
VLAN debug support	3.1.0	3.1.0	3.1.0	4.0.0	3.1.0	6.0.0
PVLAN - Private VLAN	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
VE on default VLAN	No	No	No	5.0.1	5.0.1	6.0.0
Uplink switch	No	No	No	7.2.0	7.2.0	7.2.0
VLAN creation blocking	No	No	No	7.2.0	7.2.0	7.2.0

VXLAN – Virtual Extensible LAN

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Overlay Gateway	No	No	No	4.1.0	No	6.0.0
VCS VXLAN Gateway for VMWare NSX	No	No	No	4.1.1	No	6.0.0
VXLAN NSX replicator load balancing	No	No	No	7.0.1	No	7.0.1
vMotion across VXLAN tunnels	No	No	No	5.0.1	No	6.0.0

xSTP – Spanning Tree Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
BPDU drop	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
Distributed Spanning Tree Protocol (DiST/STPoVCS)	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
Cisco vPC peer-switch support	No	No	No	6.0.0	6.0.0	6.0.0
IEEE 801.1d STP	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 801.1d STP PortFast	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 801.1d STP BPDU Guard	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 801.1d STP BPDU filter	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 801.1d STP Root Guard	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 801.1d STP Rapid STP (RSTP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 801.1d STP Multiple STP (MSTP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 801.1d STP Pre-VLAN spanning	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 801.1d Tree Plus (PVST+)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 801.1d Rapid-PVST+ (RPVST+)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 801.1s MSTP	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 801.2w RSTP	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

Layer 3 Routing/Network Layer

ARP – Address Resolution Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
DAI – Dynamic ARP Inspection	No	No	No	6.0.1	6.0.1	6.0.1
Conversational ARP	No	No	No	7.0.0	No	7.0.0

BFD – BiDirectional Forwarding Detection

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
BFD optimization	No	No	No	7.0.0	7.0.0	7.0.0

BGP4 – IPv4 Border Gateway Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
BGP VRF support	No	No	No	6.0.1	6.0.1	6.0.1
Dynamic route leaking	No	No	No	6.0.1	6.0.1	6.0.1
Dynamic Neighbor Support	No	No	No	7.1.0	7.1.0	7.1.0
BGP add path	No	No	No	7.0.0	7.0.0	7.0.0
BGP auto-shutdown	No	No	No	7.0.0	7.0.0	7.0.0
BGP-EVPN	No	No	No	7.0.0	7.0.0	7.0.0
BGP generalized TTL security mechanism (GTSM) support	No	No	No	7.0.0	7.0.0	7.0.0
BGP multicast support	No	No	No	7.0.0	7.0.0	7.0.0
BGP graceful shutdown	No	No	No	7.2.0	7.2.0	7.2.0
IP unencumbered ECMP	No	No	No	7.2.0	7.2.0	7.2.0
Auto Neighbor Discovery	No	No	No	7.2.0	7.2.0	7.2.0

BGP4+ – IPv6 Border Gateway Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Configuring BGP4+ neighbors using global IPv6 addresses	No	No	No	5.0.0	5.0.0	6.0.0
Importing routes in BGP4+	No	No	No	5.0.0	5.0.0	6.0.0
Advertising the default BGP4+ route	No	No	No	5.0.0	5.0.0	6.0.0
Clearing BGP4+ information	No	No	No	5.0.0	5.0.0	6.0.0
Displaying BGP4+ information	No	No	No	5.0.0	5.0.0	6.0.0
Using the IP default route as a valid next-hop for a BGP4+ route	No	No	No	5.0.0	5.0.0	6.0.0
Enabling next-hop recursion	No	No	No	5.0.0	5.0.0	6.0.0
BGP4+ graceful restart	No	No	No	5.0.0	5.0.0	6.0.0
Advertising routes from the local AS to BMGP	No	No	No	5.0.0	5.0.0	6.0.0
Network prefix to advertise	No	No	No	5.0.0	5.0.0	6.0.0
Aggregating routes advertised to BGP4 neighbors	No	No	No	5.0.0	5.0.0	6.0.0
Displaying MBGP information	No	No	No	5.0.0	5.0.0	6.0.0
IPv6 support	No	No	No	5.0.0	5.0.0	6.0.0
AS confederation (BGP IPv4)	No	No	No	5.0.0	5.0.0	6.0.0
Extended communities	No	No	No	5.0.0	5.0.0	6.0.0
BGP VRF support	No	No	No	6.0.1	6.0.1	6.0.1

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Dynamic route leaking	No	No	No	6.0.1	6.0.1	6.0.1
BGP graceful shutdown	No	No	No	7.2.0	7.2.0	7.2.0
IP unencumbered ECMP	No	No	No	7.2.0	7.2.0	7.2.0
Auto Neighbor Discovery	No	No	No	7.2.0	7.2.0	7.2.0

DHCP – Dynamic Host Configuration Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
DHCP (IPv4)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
DHCP (IPv6)	No	No	No	5.0.1	5.0.1	6.0.0
DHCPv6 support for management interfaces	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
DHCP IP Helper	4.1.0	4.1.0	4.1.0	4.1.0	4.1.0	6.0.0
DHCP server	No	No	No	7.1.0 (6740T only)	No	No
Configure entire cluster using Python script in fabric cluster mode and logical chassis mode (fabric cluster mode is deprecated starting in Network OS 7.1.0)	No	No	No	6.0.1	6.0.1	6.0.1
Zero Touch Provisioning (ZTP) for a two-node cluster	No	No	No	6.0.1	6.0.1	6.0.1
DHCP auto-deployment (DAD) 2	No	No	No	7.0.0	7.0.0	7.0.0
DHCP relay agent information (option-82) support	No	No	No	7.0.0	7.0.0	7.0.0

DNS – Domain Name System

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
DNS Configuration	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
IPv4 and IPv6 DNS Server Addresses	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0

ICMP – Internet Control Message Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
ICMP (IPv4)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Enabling/disabling ICMPv6 error messages for an unreachable address	4.0.1	4.0.1	4.0.1	4.0.1	4.0.1	6.0.0
Enabling ICMPv6 echo reply messages	4.0.1	4.0.1	4.0.1	4.0.1	4.0.1	6.0.0
ICMPv6 rate limiting	4.0.1	4.0.1	4.0.1	4.0.1	4.0.1	6.0.0
Utilities to support Joint Interoperability Test Command (JITC) standards	4.0.1	4.0.1	4.0.1	4.0.1	4.0.1	6.0.0

IP Addressing

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
IP Route management	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IP Route policy	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Prefix lists (IPv4)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
SFP break-out mode	No	No	No	4.0.0	4.0.0	6.0.0
IP over port channel	No	No	No	7.0.0	7.0.0	7.0.0
Unnumbered interfaces	No	No	No	7.0.0	7.0.0	7.0.0
/31 subnet IP address for int Ve	No	No	No	7.3.0	7.3.0	7.3.0
FVG support	No	No	No	7.3.0	7.3.0	7.3.0

IPv6 Addressing

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
IP Multicast in VCS	3.0.1	3.0.1	3.0.1	3.0.1	3.0.1	6.0.0
Tunnel Trace Route for Ipv6 flows	No	No	No	7.2.0	7.2.0	7.2.0

Multi-VRF

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
VRF-Lite (IPv4)	No	No	No	4.0.0	4.0.0	6.0.0
Inter-VRF Leading (Static)	4.1.0	4.1.0	4.1.0	4.1.0	4.1.0	6.0.0
Dynamic Route Leaking	No	No	No	5.0.1	5.0.1	6.0.0
Dynamic route leak distribution	No	No	No	6.1.0	6.1.0	6.1.0
Inter-VRF route leaking	No	No	No	7.2.0	7.2.0	7.2.0

OSPF – IPv4 Open Shortest Path First

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
OSPF in VCS	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
OSPF Type3 LSA filter	No	No	No	7.0.0	7.0.0	7.0.0

OSPFv3 – IPv6 Open Shortest Path First

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Link-State Advertisement	No	No	No	5.0.0	5.0.0	6.0.0
Link-State Advertisement:router LSAs (Type 1)	No	No	No	5.0.0	5.0.0	6.0.0
Link-State Advertisement: network LSAs (Type 2)	No	No	No	5.0.0	5.0.0	6.0.0
Link-State Advertisement: interarea-prefix LSAs for ABRs (Type 3)	No	No	No	5.0.0	5.0.0	6.0.0
Link-State Advertisement: interarea-router LSAs for ABRs (Type 4)	No	No	No	5.0.0	5.0.0	6.0.0
Link-State Advertisement: autonomous system external LSAs (Type 5)	No	No	No	5.0.0	5.0.0	6.0.0
Link-State Advertisement: Link LSAs (Type 8)	No	No	No	5.0.0	5.0.0	6.0.0
Link-State Advertisement: Intra-area prefix LSAs (Type 9)	No	No	No	5.0.0	5.0.0	6.0.0
IPsec for OSPFv3	No	No	No	5.0.0	5.0.0	6.0.0
Redistributing routes into OSPFv3	No	No	No	5.0.0	5.0.0	6.0.0
Filtering OSPFv3 routes	No	No	No	5.0.0	5.0.0	6.0.0
Default route origination	No	No	No	5.0.0	5.0.0	6.0.0

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Shortest Path First timers	No	No	No	5.0.0	5.0.0	6.0.0
Event logging	No	No	No	5.0.0	5.0.0	6.0.0
OSPFv3 interfaces to passive state globally	No	No	No	5.0.0	5.0.0	6.0.0
OSPFv3 GR Helper mode	No	No	No	5.0.0	5.0.0	6.0.0
OSPFv3 non-stop routing (NSR) support	No	No	No	5.0.0	5.0.0	6.0.0
VRF Lite	No	No	No	5.0.0	5.0.0	6.0.0
Maximum-metric router link-state advertisement (LSA)	No	No	No	6.0.1	6.0.1	6.0.1

Static Routing (IPv4)

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IPv4 Unicast routing static routes	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Add/remove static RP address with prefix list	No	No	No	6.0.1	6.0.1	6.0.1

Unicast Reverse Path Forwarding (uRPF)

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	No	No	No	7.2.0	7.2.0	7.2.0

VRRPv2 – Virtual Router Redundancy Protocol Version 2

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
VRRP & VRRP-E (IPv4)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
VRRP/VRRP-E object route tracking	No	No	No	6.0.1	6.0.1	6.0.1

VRRPv3 – Virtual Router Redundancy Protocol Version 3

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
VRRPv3 & VRRP-Ev3 (IPv4)	No	No	No	5.0.0	5.0.0	6.0.0
VRRPv3 & VRRP-Ev3 (IPv6)	No	No	No	5.0.0	5.0.0	6.0.0
VRRP/VRRP-E object route tracking	No	No	No	6.0.1	6.0.1	6.0.1

Management

Access Gateway

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	No	No	4.1.0	5.0.0 for the 6740; 6.0.0 for the 6740T and 6740T-1G	No	No
Multi-hop Access Gateway Switch	No	No	No	6.0.0	6.0.0	6.0.0
Dynamic AG enablement	No	No	No	6.0.0	6.0.0	6.0.0
VLANs for local FC/FCoE storage	No	No	No	6.0.1	6.0.1	6.0.1

CLI – Command Line Interface

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Switch management	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Telnet	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0

Configuration Fundamentals

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Virtual IP Address	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
PING support on management interfaces	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
Traceroute support on management interfaces	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
Edge Loop Detection (ELD)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Counter for Fibre Channel ports	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
Storage F-port	No	No	4.0.0	4.0.0	4.0.0	6.0.0
FlexPorts	No	No	No	5.0.0 for 6740; 6.0.0 for 6740T and 6740T-1G	No	No
Management VRF support	No	No	No	5.0.1	5.0.1	6.0.0
FlexPorts on QSFP ports	No	No	No	6.0.0	6.0.0	6.0.0
SFP breakout mode (static)	No	No	No	No	5.0.0	No
SFP breakout mode (dynamic)	No	No	No	6.0.0	No	6.0.0
Dynamic QSFP breakout	No	No	No	6.0.0	6.0.0	6.0.0
Default Configuration Start-Up	No	No	No	6.0.0	6.0.0	6.0.0
Operational Data via REST APIs	No	No	No	6.0.0	6.0.0	6.0.0
Manageability RFEs	No	No	No	7.0.0	7.0.0	7.0.0

High Availability

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

In-band Management

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

Licensing

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Licensing enhancements	No	No	No	7.0.0	7.0.0	7.0.0

LLDP – Link Layer Discovery Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
LLDP-Med	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
iSCSI TLV support	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
Support for two LLDP neighbors	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
Display system names	5.0.1	5.0.1	5.0.1	5.0.1	5.0.1	6.0.0

Management GUI

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

NTP – Network Time Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Source IP support for NTP messages	No	No	No	5.0.1	5.0.1	6.0.0

SNMP – Simple Network Management Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
SNMPv1 support	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
SNMPv2 support	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
SNMPv3 traps and informs	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
System and Resources MIBS (SNMPv3)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
SNMP trap host configuration	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
SNMPv3 password encryption	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
SNMP HTTP updates	7.0.0	7.0.0	7.0.0	7.0.0	7.0.0	7.0.0

Software Installation and Upgrade

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Firmware upgrade and downgrade	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
DAD – DHCP Automatic Deployment	4.1.0	4.1.0	4.1.0	4.1.0	4.1.0	6.0.0
Use inband management software interface to perform software upgrades	No	No	No	5.0.1	5.0.1	6.0.0
Infrastructure updates	7.0.0	7.0.0	7.0.0	7.0.0	7.0.0	7.0.0

Virtual Fabrics

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[Introduced]	No	No	No	4.1.0	4.1.0	6.0.0
Virtual Fabric extended broadcast domain	No	No	No	5.0.0	5.0.0	6.0.0
Fabric Virtual Gateway for scaled environments	No	No	No	6.0.1	6.0.1	6.0.1

VMware

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
VMware	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
VM Aware Network Automation	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
VM-Aware Network Automation with vSphere 5.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
VM-Aware Network Automation with 8000 MAC Addresses	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
VLAGs with 32 ports	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
iESX v5.1 support	3.0.1	3.0.1	3.0.1	3.0.1	3.0.1	6.0.0
VCS Gateway	No	No	No	No	No	6.0.0

Monitoring

Hardware Monitoring

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Show media optical monitoring	No	No	No	5.0.1	5.0.1	6.0.0
Link state tracking	No	No	No	6.0.1	6.0.1	6.0.1
System resource monitoring	No	No	No	7.1.0	7.1.0	7.1.0

MAPS – Monitoring and Alerting Policy Suite

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

OAM – Operations, Administration, and Maintenance

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Maintenance mode	No	No	No	7.0.0	7.0.0	7.0.0

Port Mirroring

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RSPAN - Remote Switched Port Analyzer	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0

RAS – Reliability, Availability, and Serviceability

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Audit log	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
RASlog	3.0.1	3.0.1	3.0.1	3.0.1	3.0.1	6.0.0
ISSU – In-Service Software Upgrade	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
Management Module Failover	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Copy support	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Packet capture	4.1.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
Line Card Auto-recovery	4.0.1	4.0.1	4.0.1	4.0.1	4.0.1	6.0.0
RAS enhancements for debug counters	No	No	No	7.0.0	7.0.0	7.0.0

RMON – Remote Network Monitoring

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

sFlow

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
sFlow auto-adjust and backoff	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Flow-based sFlow	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
Multiple sflow collectors and IPv6 based sflows	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
Virtual Fabric support	No	No	No	5.0.1	5.0.1	6.0.0

Syslog

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Secure syslog	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Support for syslog messages using Chassis Virtual IP	No	No	No	5.0.1	5.0.1	6.0.0

Sysmon

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

NOS Network Automation and Orchestration Technologies

NETCONF – Network Configuration Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
NETCONF support for Fibre Channel interfaces	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

OpenStack integration

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Support for Layer 2 gateways	No	No	No	7.0.0	7.0.0	7.0.0
ML2 plugin	No	No	No	7.1.0	7.1.0	7.1.0
L3 SVI plugin	No	No	No	7.1.0	7.1.0	7.1.0
IP Fabric plugin	No	No	No	7.1.0	7.1.0	7.1.0
VCS Fabric plugin	No	No	No	7.1.0	7.1.0	7.1.0

REST API

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	No	No	No	5.0.0	5.0.0	6.0.0

Scripting

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Python scripting	6.0.1	6.0.1	6.0.1	6.0.1	6.0.1	6.0.1
Puppet scripting	6.0.1	6.0.1	6.0.1	6.0.1	6.0.1	6.0.1

YANG

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

Security

802.1x Port-based Authentication

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
802.1x Readiness	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0
Port Security	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

AAA - Authentication, Authorization, and Accounting

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

ACLs - Access Control Lists

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
ACLs (IPv4)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
ACLs (IPv6)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
MAC ACLs	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
ACLs for security	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IP ACL for Management Interface	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Filtering IPv6 packets based on DSCP values	No	No	No	5.0.0	5.0.0	6.0.0
Filtering IPv6 packets based on routing header type	No	No	No	5.0.0	5.0.0	6.0.0
Apply an IPv6 ACL to a router interface	No	No	No	5.0.0	5.0.0	6.0.0
Adding a comment to an IPv6 ACL entry	No	No	No	5.0.0	5.0.0	6.0.0
IPv6 extended ACLs	No	No	No	5.0.0	5.0.0	6.0.0
IPv6 accounting	No	No	No	5.0.0	5.0.0	6.0.0
Apply ACL to either switched packets, routed packets, or both	No	No	No	6.0.0	6.0.0	6.0.0

Fabric Authentication

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

FIPS – Federal Information Processing Standards

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

HTTP/HTTPS

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
REST API and Element Manager Support	6.0.0	6.0.0	6.0.0	6.0.0	6.0.0	6.0.0
HTTPS certificates	No	No	No	6.0.0	6.0.0	6.0.0

LDAP – Lightweight Directory Access Protocol

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	6.0.0

MAC Port-based Authentication

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
OUI-base port security	4.0.1	4.0.1	4.0.1	4.0.1	4.0.1	6.0.0
Port security with dynamically learned MAC	4.0.1	4.0.1	4.0.1	4.0.1	4.0.1	6.0.0
MAC move detection	No	No	No	6.0.0	6.0.0	6.0.0
MAC consistency check	No	No	No	6.0.0	6.0.0	6.0.0
MAC Authentication Bypass	No	No	No	7.1.0	7.1.0	7.1.0

PBR – Policy-Based Routing

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
PBR (IPv4)	No	No	No	4.1.0	4.1.0	6.0.0
PBR (IPv6)	No	No	No	5.0.0	5.0.0	6.0.0

RA Guard – Router Advertisement Guard

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
ICMPv6 RA Guard	3.0.1	3.0.1	3.0.1	3.0.1	3.0.1	6.0.0
IPv6 RA Guard	No	No	No	6.0.0	6.0.0	6.0.0

RADIUS

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Authentication and accounting	3.0	3.0	3.0	4.0	3.0	6.0
RADIUS authentication through management interfaces	3.0	3.0	3.0	4.0	3.0	6.0
Server-side RADIUS support	3.0	3.0	3.0	4.0	3.0	6.0
Client-side RADIUS support	3.0	3.0	3.0	4.0	3.0	6.0

Security Vulnerability

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Protecting against TCP SYN attacks	4.0.1	4.0.1	4.0.1	4.0.1	4.0.1	6.0.0

SSH – Secure Shell

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Secure copy SCP	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
SSH multiplexed sessions support	No	No	No	7.1.0	7.1.0	7.1.0

TACACS & TACACS+

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
TACACS & TACACS+ authentication, authorization, and accounting	3.0	3.0	3.0	4.0	3.0	6.0
Server-side TACACS & TACACS+ support	3.0	3.0	3.0	4.0	3.0	6.0
Client-side TACACS & TACACS+ support	3.0	3.0	3.0	4.0	3.0	6.0
Mixed vendor environment TACACS & TACACS + support	3.0	3.0	3.0	4.0	3.0	6.0

User Accounts & Passwords

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Managing user accounts	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Accept user names starting with an underscore	No	No	No	5.0.1	5.0.1	6.0.0

Zoning

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Zone Alias Names	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

Traffic Management

QoS – Quality of Service

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Routing	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Trunking	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Eight priority levels for QoS	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
CoS IEEE 802.1p	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Differentiated services code point (DSCP) to traffic class mutation	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
DSCP to CoS mutation	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
DSCP to DSCP mutation	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
DSCP trust	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Random early discard	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Per-port QoS configuration	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Strict priority (SP) scheduling	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Shaped deficit weighted round-robin (SDWRR) scheduling	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
ACL-based QoS	No	No	No	4.0.0	3.0.0	6.0.0
Dual-rate three-color token bucket	No	No	No	4.0.0	3.0.0	6.0.0
ACL-based remarking of CoS/DSCP/Precedence	No	No	No	4.0.0	3.0.0	6.0.0
ACL-based sFlow	No	No	No	4.0.0	3.0.0	6.0.0
Queue-based shaping	No	No	No	4.0.0	3.0.0	6.0.0
Legacy Ethernet pause support	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Configurable generation of priority tagged packets	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Configurable tail drop threshold	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Layer2 and Layer3 QoS	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Control traffic prioritization	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Enhanced Transmission Selection (ETS) and Priority Flow Control (PFC)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
Random Early Discard (RED)	3.0.1	3.0.1	3.0.1	3.0.1	3.0.0	6.0.0
Flow-based QoS	4.0.0	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
Auto QoS for network-attached storage	4.1.0	4.1.0	4.1.0	4.1.0	4.1.0	6.0.0
Enhancement QoS buffer knobs	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	6.0.0
System flow-based QoS	No	No	No	5.0.0	5.0.0	6.0.0

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
Enhanced QoS buffering	No	No	No	5.0.1	5.0.1	6.0.0
VLAN-based QoS	No	No	No	5.0.1	5.0.1	6.0.0
DSCP Trust	No	No	No	7.2.0	7.2.0	7.2.0
DSCP Remapping	No	No	No	7.2.0	7.2.0	7.2.0
DSCP to CoS Mapping	No	No	No	7.2.0	7.2.0	7.2.0
DSCP to Traffic Class Mapping	No	No	No	7.2.0	7.2.0	7.2.0
Weighted Random Early Detection (WRED)	No	No	No	7.2.0	7.2.0	7.2.0

Rate Limiting and Shaping

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	No	No	No
Traffic policies	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
ACL-based rate limit	No	No	No	4.0.0	3.0.0	6.0.0
BUM traffic control	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
BUM storm control	No	No	No	4.0.0	3.0.0	6.0.0

VPN

EVPN – Ethernet VPN

Feature	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
[introduced]	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

Network OS RFC compliance

NOTE

The following products are not supported on Network OS 5.0.0 or later:

Extreme

VDX 6710 , VDX 6720 , and VDX 6730.

RFC number	RFC Name	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
RFC768	User Datagram Protocol (UDP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC783	TFTP Protocol (revision 2)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC791	Internet Protocol (IP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC792	Internet Control Message Protocol (ICMP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC793	Transmission Control Protocol (TCP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC826	ARP	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC854	Telnet Protocol Specification	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC894	A Standard for the Transmission of IP Datagram over Ethernet Networks	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC959	FTP	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC1027	Using ARP to Implement Transparent Subnet Gateways (Proxy ARP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC1112	IGMP v1	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC1157	SNMPv1/v2c	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC1213	MIB II	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC1492	TACACS+	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC1519	Classless Interdomain Routing (CIDR)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC1584	Multicast Extensions to OSPF	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC1587	OSPF NSSA Option	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC1700	Assigned Numbers	No	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC 1745	BGP – OSPF Interactions	No	No	No	5.0.0	5.0.0	6.0.0
RFC1765	OSPF Database Overflow	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC1772	Application of the Border Port Protocol in the Internet	No	4.0.0	4.0.0	4.0.0	4.0.0	6.0.0
RFC1812	Requirements for IP Version 4 Routers	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC1997	BGP Communities Attribute	No	No	No	4.0.0	4.0.0	6.0.0
RFC2068	HTTP Server	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC2131	DHCP	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

RFC number	RFC Name	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
RFC2154	OSPF with Digital Signatures (MD-5 Support)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC2236	IGMPv2	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC2267	Network Ingress Filtering	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC2328	OSPF Version 2	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC2370	OSPF Opaque Link-State Advertisement (LSA) Option-Partial Support	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC2385	Protection of BGP Sessions with the TCP MD5 Signature Option	No	No	No	No	4.0.0	6.0.0
RFC2439	BGP Route Flap Damping	No	No	No	No	4.0.0	6.0.0
RFC2460	Internet Protocol, Version 6 (v6) Specification (on management interface)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC2464	Transmission of IPv6 Packets over Ethernet Networks (on management interface)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC2474	Definition of the Differentiated Services Field in the IPv4 and IPv6 Headers (only for IPv4)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC2545	Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing	No	No	No	5.0.0	5.0.0	6.0.0
RFC2571	Architecture for Describing SNMP Framework	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC2858	Multiprotocol Extensions for BGP-4	No	No	No	5.0.0	5.0.0	6.0.0
RFC2865	Remote Authentication Dial In User Service (RADIUS)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC2918	Route Refresh Capability for BGP-4	No	No	No	5.0.0	5.0.0	6.0.0
RFC 3065	Autonomous System Confederations for BGP	No	No	No	5.0.0	5.0.0	6.0.0
RFC3101	OSPF Not-So-Stubby-Area (NSSA) Option	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC3107	Carrying Label Information in BGP-4	No	No	No	5.0.0	5.0.0	6.0.0
RFC3137	OSPF Stub Router Advertisement	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC3176	sFlow	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC3392	Capabilities Advertisement with BGPv4	No	No	No	5.0.0	5.0.0	6.0.0
RFC3411	An Architecture for Describing SNMP Frameworks	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC3412	Message Processing and Dispatching for the SNMP	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0

RFC number	RFC Name	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
RFC3413	Simple Network Management Protocol (SNMP) Applications	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC3623	Graceful OSPF Restart	No	No	No	5.0.0	5.0.0	6.0.0
RFC3768	Virtual Router Redundancy Protocol (VRRP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC4115	Port-based Policer	No	No	No	4.0.0	3.0.0	6.0.0
RFC4213	Basic Transition Mechanisms for IPv6 Hosts and Routers - partial support (dual stack interfaces)	No	No	No	5.0.0	5.0.0	6.0.0
RFC4271	BGP	4.0.1	4.0.1	4.0.1	4.0.1	4.0.1	6.0.0
RFC4292	IP Forwarding MIB	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC4293	Management Information Base for the Internet Protocol (IP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC4360	BGP Extended Communities Attribute	No	No	No	5.0.0	5.0.0	6.0.0
RFC4443	Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification	No	No	No	5.0.0	5.0.0	6.0.0
RFC4456	BGP Route Reflection	No	No	No	4.0.0	4.0.0	6.0.0
RFC4510	Lightweight Directory Access Protocol (LDAP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC4541	MLDv1 Snooping	No	No	No	5.0.0	5.0.0	6.0.0
RFC4552	Authentication / Confidentiality for OSPF v3	No	No	No	5.0.0	5.0.0	6.0.0
RFC4601	PIM/SM Protocol Specification	No	No	No	4.0.1	4.0.1	6.0.0
RFC4724	Graceful Restart Mechanism for BGP	No	No	No	5.0.0	5.0.0	6.0.0
RFC4732	BGP MPLS-based Ethernet VPN	No	No	No	7.0.0	7.0.0	7.0.0
RFC4861	Neighbor Discovery for IP version 6 (IPv6)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC4862	IPv6 Stateless Address Autoconfiguration	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC4893	BGP Support for Four-Octet AS Number Space	No	No	No	4.0.0	4.0.0	6.0.0
RFC5059	BSR mechanism for PIM support	No	No	No	4.0.1	4.0.1	6.0.0
RFC5065	Autonomous System Confederations for BGP	No	No	No	5.0.0	5.0.0	6.0.0
RFC5082	BGP GTSM	No	No	No	7.0.0	7.0.0	7.0.0
RFC5187	OSPFv3 Graceful Restart (Helper Only)	No	No	5.0.0	5.0.0	6.0.0	6.0.0
RFC5340	OSPF for IPv6	No	No	No	5.0.0	5.0.0	6.0.0

RFC number	RFC Name	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
RFC5492	Capabilities Advertisement with BGP-4	No	No	No	5.0.0	5.0.0	6.0.0
RFC5798	VRRP Version 3 for IPv4 and IPv6	No	No	No	5.0.0	5.0.0	6.0.0
RFC5880	Bidirectional Forwarding Detection (BFD)	No	No	No	6.0.1	6.0.1	6.0.1
RFC5881	Bidirectional Forwarding Detection (BFD) for IPv4 and IPv6 (Single Hop)	No	No	No	6.0.1	6.0.1	6.0.1
RFC5882	Generic Application of Bidirectional Forwarding Detection (BFD)	No	No	No	6.0.1	6.0.1	6.0.1
RFC5883	Bidirectional Forwarding Detection (BFD) for Multihop Paths	No	No	No	6.0.1	6.0.1	6.0.1
RFC6020	YANG - A Data Modeling Language for the Network Configuration Protocol (NETCONF)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
RFC7348	Virtual eXtensible Local Area Network (VXLAN): A Framework for Overlaying Virtualized Layer 2 Networks over Layer 3 Networks	No	No	No	4.1.0	No	6.0.0

Network OS IEEE standards compliance

NOTE
The following products are not supported on Network OS 5.0.0 or later:
Extreme
VDX 6710 , VDX 6720 , and VDX 6730.

IEEE standard number	IEEE standard name	VDX 6710	VDX 6720	VDX 6730	VDX 6740, VDX 6740T, and VDX 6740T-1G	VDX 8770	VDX 6940
IEEE 802.1D	Spanning Tree Protocol	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.1s	Multiple Spanning Tree	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.1w	Rapid Reconfiguration of Spanning Tree Protocol	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.3	Ethernet	No	No	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.3ad	Link Aggregation with LACP	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.3ae	10G Ethernet	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.1Q	VLAN Tagging	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.1p	Class of Service Prioritization and Tagging	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.1v	VLAN Classification by Protocol and Port	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.1AB	Link Layer Discovery Protocol (LLDP)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.3x	Flow Control (Pause Frames)	3.0.0	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.3ab	1000BASE-T	3.0.0	3.0.0	3.0.0	4.0.0	No	6.0.0
IEEE 802.3z	1000BASE-X	3.0.0	3.0.0	3.0.0	4.0.0	No	6.0.0
IEEE 802.1Qbb	Priority-based Flow Control	No	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.1Qaz	Enhanced Transmission Selection	No	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0
IEEE 802.1 DCB	Capability Exchange Protocol (Proposed under the DCB Task Group of IEEE 802.1 Working Group)	No	3.0.0	3.0.0	4.0.0	3.0.0	6.0.0