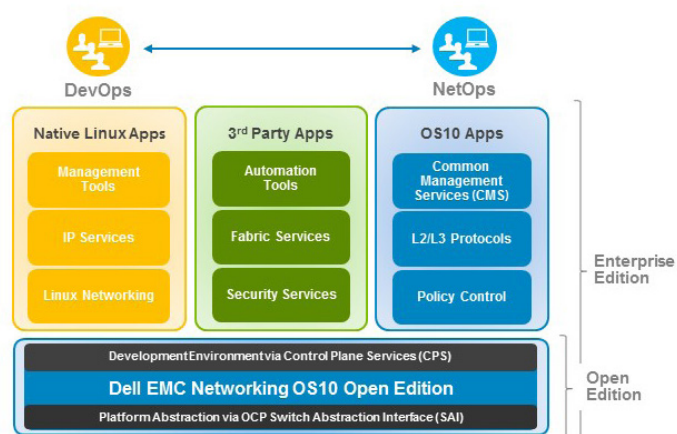


DELL EMC NETWORKING OS10.2.2 ENTERPRISE EDITION

The Dell EMC Networking OS10 Enterprise Edition is a Network Operating System supporting multiple architectures and environments. The networking world is moving from a monolithic stack to a pick-your-own-world, and the OS10 solution is designed to allow multi-layered disaggregation of the network functionality. While OS10 contributions to Open Source provide users freedom and flexibility to pick their own 3rd party networking, monitoring, management and orchestration applications, OS10 Enterprise Edition bundles an industry-hardened networking stack featuring standard L2 and L3 protocols over a standard and well accepted CLI interface.



Specifications

Supported Platforms

40G: S6010-ON, S6000-ON
10G: S4048T-ON, S4048-ON
1G: S3048-ON

Software Specifications

IEEE Compliance

802.1AB LLDP
TIA-1057 LLDP-MED
802.1s MSTP
802.1w RSTP
802.3ab Gigabit Ethernet (1000Base-T)
802.3ad Link Aggregation with LACP
802.3ae 10 Gigabit Ethernet (10GBase-X)
802.3ba 40 Gigabit Ethernet (40GBase-X)
802.3i Ethernet (10Base-T)
802.3u Fast Ethernet (100Base-TX)
802.3z Gigabit Ethernet (1000BaseX)

Layer2 Protocols

802.1D Compatible
802.1p L2 Prioritization
802.1Q VLAN Tagging
802.1s MSTP
802.1w RSTP

802.1t RPVST+
802.3ad Link Aggregation with LACP
VLT (Virtual Link Trunking)

RFC Compliance

768 UDP
793 TCP
854 Telnet
959 FTP
1321 MD5
1350 TFTP
2474 Differentiated Services
2698 Two Rate Three Color Marker
3164 Syslog
4254 SSHv2

General IPv4 Protocols

791 IPv4
792 ICMP
826 ARP
1027 Proxy ARP
1035 DNS (client)
1042 Ethernet Transmission
1191 Path MTU Discovery
1305 NTPv4
1519 CIDR
1812 Routers

1858 IP Fragment Filtering
2131 DHCP (server and relay)
2338 VRRP
3021 31-bit Prefixes
3046 DHCP Option 82 (Relay)

General IPv6 Protocols

1981 Path MTU Discovery*
2460 IPv6
2461 Neighbor Discovery*
2462 Stateless Address AutoConfig
2463 ICMPv6
2464 Ethernet Transmission
2675 Jumbo grams
3587 Global Unicast Address Format
4291 IPv6 Addressing

OSPF

1587 NSSA
1745 OSPF/BGP interaction
1765 OSPF Database overflow
2154 MD5
2328 OSPFv2
2370 Opaque LSA
3101 OSPF NSSA
3623 OSPF Graceful Restart (Helper mode)*

BGP

1997	Communities
2385	MD5
2439	Route Flap Damping
2796	Route Reflection
2842	Capabilities
2918	Route Refresh
3065	Confederations
4271	BGP-4
4360	Extended Communities
4893	4-byte ASN
5396	4-byte ASN Representation
5492	Capabilities Advertisement

Linux Distribution

Debian Linux version 8.4
Linux Kernel 3.16

MIBS

IP MIB– Net SNMP
IP Forward MIB– Net SNMP
Host Resources MIB– Net SNMP
IF MIB – Net SNMP
LLDP MIB
Entity MIB
LAG MIB
Dell-Vendor MIB
TCP MIB – Net SNMP
UDP MIB – Net SNMP
SNMPv2 MIB – Net SNMP

Network Management

SNMPv1/2
SSHv2
FTP, TFTP, SCP
Syslog
Port Mirroring
RADIUS
802.1X
Support Assist (Phone Home)

Automation

Control Plane Services APIs
Linux utilities & Scripting Tools
Netconf APIs

Quality of Service

Access Control Lists
Prefix List
Route-Map
Rate Shaping (Egress)
Rate Policing (Ingress)
Scheduling Algorithms
 Round Robin
 Weighted Round Robin
 Deficit Round Robin
 Strict Priority
Weighted Random Early Detect*

* Partial support

Scalability

Number of VLANs	4094
Number of IPv4 Routes	16k
Number of IPv6 Routes	16K
Number of Interfaces in a Port Channel	32
Number of Port Channel Interfaces	128
Number of Loopback Interfaces	128
Number of Null Interfaces	128
Number of MAC Addresses	128k
Number of ARP entries	48k
Number of IPv4 ACLs	3k
Number of L2 ACLs	3k
Number of OSPF Sessions	64
Number of BGP Sessions	128
Number of VRRP Sessions	64
Number of VLT nodes	2
Number of VLT Peers	1
Number of DHCP sessions	16k
Number of SSH sessions	16
Number of FTP sessions	1
Number of local auth. user accounts	32
Number of concurrent SNMP get/set	15
Number of NTP Servers	300
Number of secondary IPs per interface	128

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