DELL EMC NETWORKING S4100-ON

High-performance open networking top-of-rack switches with multirate Gigabit Ethernet and unified ports

The S4100-ON 10GbE switches comprise Dell EMC's latest disaggregated hardware and software data center networking solutions, providing state-of-the-art 100GbE uplinks, fibre channel connectivity and a broad range of functionality to meet the growing demands of today's data center environment. These innovative, next-generation top-of-rack open networking switches offer optimum flexibility and cost-effectiveness for the enterprise, mid-market and Tier2 cloud service provider with demanding compute and storage traffic environments.

The compact S4100-ON models provide industry-leading density with up to 48 ports of 10GbE or up to 48 ports of 10GBaseT ports, 2 ports of 40GbE and 4 ports of 100GbE in a 1RU form factor. The S4148U-ON model can support up to 28 8/16G fibre channel ports, or 16 ports of 32G* fibre channel ports. The S4112-ON is a half-rack width model that supports up to 12 ports of 10GbE or 12 ports 10GBaseT, and 3 ports of 100GbE.

Using industry-leading hardware and a choice of Dell EMC's OS10 or select 3rd party network operating systems and tools, the S4100-ON Series offers flexibility by provision of configuration profiles and delivers non-blocking performance for workloads sensitive to packet loss. The compact S4100-ON models provide multirate speed, enabling denser footprints and simplifying migration to 100Gbps.

Also unique to the S4100-ON series is the ability to meet the demands of converged and virtualized data centers by offering unified ports (S4148U) and hardware support for L2 and L3 VXLAN Gateway. Priority-based flow control (PFC), data center bridge exchange (DCBX) and enhanced transmission selection (ETS) make the S4100-ON ideally suited for DCB environments.

Dell Networking S4100-ON switches support the open source Open Network Install Environment (ONIE) for zero touch installation of Dell EMC's OS10 networking operating system, as well as of alternative network operating systems.

Maximum performance and functionality

The S4100-ON series are high-performance, multi-function, 1/10/25/40/50/100 GbE and 8/16/32G FC Top-of-Rack (ToR) switches purpose-built for applications in high-performance data center, cloud and computing environments.

Architectural features to optimize data center network flexibility, efficiency and availability include IO panel to PSU airflow or PSU to IO panel airflow for hot/cold aisle environments and redundant, hot-swappable power supplies and fans.

Key applications

- Organizations looking to enter the software-defined data center era with a choice of networking technologies designed to maximize flexibility

- Multi-functional 1/10/25/40/50/100 GbE switching in High Performance Computing Clusters or other business-sensitive deployments requiring the highest bandwidth. High-density 1/10 GbE ToR server access in high-performance data center environments

- iSCSI and FC storage deployment, including DCB converged lossless transactions

- Small-scale data center fabric implementation via the S4100-ON switch in leaf and spine along with S-Series 1/10GbE ToR switches

- VXLAN layer 2/layer 3 gateway support (available in hardware only)

Key features

- 1RU high-density 10/40/100 GbE ToR switches with up to 48 ports of 10 GbE (SFP+) or up to 48 ports of 10GBaseT ports, or up to 28 ports of 8/16 fibre channel, two ports of 40 GbE (QSFP+), and up to four ports of 100GbE (QSFP28) or four ports of 8/16/32G fibre channel

- The S4112 is a 1RU, half-rack width 10/100GbE ToR switch with up to 12 ports of 10GbE (SFP+) or up to 12 ports of 10GBaseT ports, and up to three ports of 100GbE (QSFP28).

- Multi-rate 100GbE ports support 10/25/40/50 GbE. 40GbE ports support 10GbE. 10GbE ports support 1GbE. Up to four different simultaneous speeds are possible in a given profile.

- Supports dynamic reconfiguration of unified ports on S4148U product as 10GbE or 8/16G FC on SFP+ ports, and 25GbE or 16/32Gb FC on QSFP28 ports

* Not line rate

- 1.76Tbps (full-duplex) non-blocking, cut-through switching fabric delivers line-rate performance under full load on S4148F-ON, S4148FE-ON, S4148T-ON and S4148U-ON.

- 960Gbps (full-duplex) non-blocking, cut-through switching fabric delivers line-rate performance under full load on S4128F-ON and S4128T-ON.

- 840Gbps (full-duplex) non-blocking, cut-through switching fabric delivers line-rate performance under full load on S4112F-ON and S4112T-ON.

- VXLAN gateway functionality support for bridging and routing the non-virtualized and the virtualized overlay networks with line rate performance

- Converged Network support with DCB

- IO panel to PSU air ow or PSU to IO panel air ow

- Redundant, hot-swappable power supplies and fans (S4112-ON has redundant, xed power supplies and fans)

- Support for 10GBASE-LRM optics over OM1/OM2 ber on S4148FE-ON product (not supported on other products in S4100 product family)

- IEEE 1588v2 supported (hardware only) on 48 port models

Key Features with Dell EMC Networking OS10

- Consistent DevOps framework across compute, storage and networking elements

- Standard networking features, interfaces and scripting functions for legacy network operations integration

- Standards-based switching hardware abstraction via Switch Abstraction Interface (SAI)

- Pervasive, unrestricted developer environment via Control Plane Services (CPS)

- OS10 Enterprise Edition software enables Dell EMC layer 2 and 3 switching and routing protocols with integrated IP services, quality of service, manageability and automation features

- Leverage common open source tools and best practices (data models, commit rollbacks)

- Increase VM Mobility region by stretching L2 VLAN within or across two DCs with unique VLT capabilities

- Scalable L2 and L3 Ethernet Switching with QoS, ACL and a full complement of standards based IPv4 and IPv6 features including OSPF, BGP and PBR

- Enhanced mirroring capabilities including local mirroring, Remote Port Mirroring (RPM), and Encapsulated Remote Port Mirroring (ERPM).

- Converged network support for Data Center Bridging, with priority ow control (802.1Qbb), ETS (802.1Qaz), DCBx and iSCSI TLV

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	S4112F-ON	S4112T-ON	S4128F-ON	S4128T-ON	S4148F-ON	S4148FE-ON	S4148T-ON	S4148U-ON
Ports	12xSFP+ 3xQSFP28	12x10GbT 3xQSFP28	28xSFP+ 2xQSFP28	28x10GbT 2x QSFP28	48xSFP+ 2xQSFP+ 4xQSFP28	48xSFP+ 2xQSFP+ 4xQSFP28	48x10GbT 2xQSFP+ 4xQSFP28	48xSFP+ 2xQSFP+ 4xQSFP28
Uni ed port								●
Max 10GbE density	24	24 (12 10GbT and 12 SFP+)	36	36 (28 10GbT and 8 SFP+)	72	72	72 (48 10GbT and 24 SFP+)	72
Max 25GbE density	12	12	8	8	16	16	16	16
Max 40GbE density	3	3	2	2	6	6	6	6
Max 50GbE density	6	6	4	4	8	8	8	8
Max 100GbE density	3	3	2	2	4	4	4	4
Max FC 8G/16G ports (over-subscribed)	0	0	0	0	0	0	0	40
Max FC 16G line rate	0	0	0	0	0	0	0	28
Max FC 32G ports (over-subscribed)	0	0	0	0	0	0	0	16
Max FC 32G line rate	0	0	0	0	0	0	0	8
Switching capacity	840Gbps	840Gbps	960Gbps	960Gbps	1.76Tbps	1.76Tbps	1.76Tbps	1.76Tbps
Throughput	630Mpps	630Mpps	720Mpps	720Mpps	1320Mpps	1320Mpps	1320Mpps	1320Mpps
Latency (nano sec)	800	2500	800	2500	800	850	2500	800
LRM optics support						●		
1588v2 PTP timing					●	●	●	●
Maximum power consumption	180W	200W	260W	300W	370W	400W	440W	460W
Typical operating power	90W	120W	160W	250W	200W	240W	320W	300W
Number of fan trays	Fixed	Fixed	4	4	4	4	4	4
Fans per fan tray	3	3	1	1	1	1	2	2
Weight	8.30lbs	8.45lbs	19.66 lbs (8.92 kg)	20.67 lbs (9.38 kg)	20.15 lbs (9.14 kg)	20.85 lbs (9.46 kg)	22.37 lbs (10.15 kg)	20.52 lbs (9.31 kg)
Max thermal output	614 BTU/ hour	682 BTU/ hour	886 BTU/h	1,023 BTU/h	1261 BTU/h	1,364 BTU/h	1,500 BTU/h	1,568 BTU/h

● Supported

Product	Description
S4100-ON	S4112F, 12x 10GbE SFP+, 3x 100GbE QSFP28, 2x AC Fixed PSU, 3x Fixed Fan, I/O Panel to PSU Air ow S4112F, 12x 10GbE SFP+, 3x 100GbE QSFP28, 2x AC Fixed PSU, 3x Fixed Fan, I/O PSU to I/O Panel Air ow S4112T, 12x 10GBASE-T, 3x 100GbE QSFP28, 2x AC Fixed PSU, 3x Fixed Fan, I/O Panel to PSU Air ow S4112T, 12x 10GBASE-T, 3x 100GbE QSFP28, 2x AC Fixed PSU, 3x Fixed Fan, I/O PSU to I/O Panel Air ow S4112F, 12x 10GbE SFP+, 3x 100GbE QSFP28, 2x DC Fixed PSU, 3x Fixed Fan, I/O Panel to PSU Air ow S4112F, 12x 10GbE SFP+, 3x 100GbE QSFP28, 2x DC Fixed PSU, 3x Fixed Fan, I/O PSU to I/O Panel Air ow S4112T, 12x 10GBASE-T, 3x 100GbE QSFP28, 2x DC Fixed PSU, 3x Fixed Fan, I/O Panel to PSU Air ow S4112T, 12x 10GBASE-T, 3x 100GbE QSFP28, 2x DC Fixed PSU, 3x Fixed Fan, I/O PSU to I/O Panel Air ow S4128F, 28x 10GbE SFP+, 2x 100GbE QSFP28, 2x AC PSU, 4x Fan module, I/O Panel to PSU Air ow S4128F, 28x 10GbE SFP+, 2x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Air ow S4128T, 28x 10GBASE-T, 2x 100GbE QSFP28, 2x AC PSU, 4x Fan module, I/O Panel to PSU Air ow S4128T, 28x 10GBASE-T, 2x 100GbE QSFP28, 2x AC PSU, 4x Fan module , PSU to I/O Panel Air ow S4148F, 48x 10GbE SFP+, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, I/O Panel to PSU Air ow S4148F, 48x 10GbE SFP+, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Air ow S4148FE, 48x 10GbE SFP+, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fans, I/O Panel to PSU Air ow S4148FE, 48x 10GbE SFP+, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Air ow S4148T, 48x 10GBASE-T, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, I/O Panel to PSU Air ow S4148T, 48x 10GBASE-T, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Air ow S4148U, 24x Uni ed port SFP+, 24x 10GbE SFP+, 2x QSFP+, 4x Uni ed port QSFP28, 2x AC PSU, 4x Fan module, I/O Panel to PSU Air ow S4148U, 24x Uni ed port SFP+, 24x 10GbE SFP+, 2x QSFP+, 4x Uni ed port QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Air ow
Redundant power supplies (not applicable to S4112)	S4100, AC Power Supply, IO Panel to PSU Air ow S4100, AC Power Supply, PSU to IO Panel Air ow S4100, DC Power Supply, IO Panel to PSU Air ow (available as custom kit) S4100, DC Power Supply, PSU to IO Panel Air ow (available as custom kit) S4100, HV DC Power Supply, IO Panel to PSU Air ow S4100, HV DC Power Supply, PSU to IO Panel Air ow
Fans (not applicable to S4112)	S4100 fan module, IO Panel to PSU Air ow S4100 fan module, PSU to IO Panel Air ow
Optics	Transceiver, 10GbE, SR SFP+, short reach Transceiver, 10GbE, LR SFP+, long reach Transceiver, 10GbE, ER SFP+, extended reach Transceiver, 10GbE, ZR SFP+ extra extended reach 10G, Transceiver, 10GbE, USR, SFP+ Transceiver, 10GbE, LRM, SFP+ (for S4148FE only) Transceiver, 10GBASE-T use with QSA in QSFP+ port, 30m reach on CAT6a/7 Transceiver, 40GbE, SR4 optic QSFP+ Transceiver, 40GbE, eSR4 optic QSFP+ Transceiver, 40GbE, LR4 optic QSFP+ Transceiver, 40GbE, ER4 optics QSFP+ Transceiver, 40GbE, PSM4-LR MPO 10Km QSFP+ to LC Transceiver, 40GbE, LM4 / SM4 Duplex QSFP+ Transceiver, 100GbE, SR4 QSFP28 Transceiver, 100GbE, LR4 QSFP28 Transceiver, 100GbE, LR4Lite QSFP28 Transceiver, 100GbE, CWDM4 2Km QSFP28 Transceiver, 100GbE, PSM4 500m QSFP28 Transceiver, 100GbE, PSM4-IR, QSFP28 Transceiver, SFP+, 16Gbps Fibre Channel, SWL, 850nm, LC Duplex (S4148U model only) Transceiver, SFP+, 16Gbps Fibre Channel, LWL, 1310nm, LC SMF (S4148U model only) Transceiver, QSFP+, 4x16Gbps Fibre Channel, SW4, 850nm, MPO MMF (S4148U model only) Transceiver, QSFP28, 4x32Gbps Fibre Channel, SW4, 850nm, MPO MMF (S4148U model only)
Cables	40GbE, QSFP+ to QSFP+, active optical 40GbE, QSFP+ to QSFP+, passive DAC 40GbE, MTP to 4xLC optical breakout 40GbE, 4x10GbE, QSFP+ to 4xSFP+, passive DAC 100GbE, 4x25GbE, QSFP28 to 4xSFP28, passive DAC 100GbE, QSFP28 to QSFP28, active optical 100GbE, QSFP28 to QSFP28, passive DAC 100GbE, 2x50GbE, QSFP28 to 2xQSFP28, passive DAC, breakout (*)

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Physical
1 RJ45 console/management port with RS232 signaling
1 RJ45 micro-USB-B console port
1 RJ45 10/100/1000Base-T management Ethernet port
Size: 1 RU, 1.75"(h) x 17"(w) x 18"(d)
(4.4cm (h) x 43.1cm (w) x 45.7cm (d))
S4112: 1.7"(h) x 8.28"(w) x 18"(d)
(4.125cm (h) x 20.9cm (w) x 45cm (d)
Power supply: 100–240 VAC 50/60 Hz
Power supply (DC), applicable to S4412: rated -40 to -72 VDC
Max. current draw per system: 6A/5A at 100/120V AC; 3A/2.5A at 200/240V AC
S4112: 2A/1.7A at 100/120V AC; 1A/0.8A at 200/240V AC
S4112 (DC): -40V/5A, -48V/4.2A, -72V/2.8A
Max. operating specications:
Operating temperature: 41° to 104° F (5° to 40° C)
Operating humidity: 5 to 85% (RH), non-condensing
Max. non-operating specications:
Storage temperature: -40° to 149°F (-40° C to 65° C)
Storage humidity: 5 to 95% (RH), non-condensing
Redundancy
Hot swappable redundant power (not applicable to S4112)
Hot swappable redundant fans (not applicable to S4112)
Fixed, redundant power supply and fan for S4112
Performance
Packet buer memory   12MB
CPU memory: 4GB
MAC addresses: 272K (in Scaled L2 mode)
PVST: 128 instances
ARP table   200K (in Scaled L3 host mode)
IPv4 routes: 200K (in Scaled L3 routes mode)
IPv6 hosts: 64K
IPv6 routes: 130K (in Scaled L3 routes mode)
Multicast hosts: 8K
Link aggregation: 32 links per group, 128 groups
Layer 2 VLANs: 4K
Layer3 VLANs: 500
MSTP: 32 instances
LAG load balancing: Based on layer 2, IPv4 or IPv6 headers
L2 Ingress ACL: 6K
L2 Egress ACL: 1K
IPv4 Ingress ACL: 6K
IPv4 Egress ACL: 1K
IPv6 Ingress ACL: 3K
IPv6 Egress ACL: 500
Storage performance parameters
iSCSI Sessions: 255
iSCSI Target: 16
F-Port: Max F-Port Sessions: 526
F-Port: Max members in a zone: 526

Dell EMC Networking OS10.3 Enterprise Edition Software Specications
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)
802.1D   Bridging, STP
802.1p   L2 Prioritization
802.1Q   VLAN Tagging, GVRP
802.1Qbb PFC
802.1Qaz ETS
802.1s   MSTP
802.1w   RSTP
PVST+
802.1X   Network Access Control
802.3ab   Gigabit Ethernet (1000BASE-T) or breakout
802.3ac   Frame Extensions for VLAN Tagging
802.3ad   Link Aggregation with LACP
802.3ae   10 Gigabit Ethernet (10GBase-X)
802.3ba   40 Gigabit Ethernet (40GBase-SR4, 40GBase-CR4, 40GBase-LR4, 100GBase-SR10, 100GBase-LR4, 100GBase-ER4) on optical ports
802.3bj   100 Gigabit Ethernet
802.3u   Fast Ethernet (100Base-TX) on mgmt ports
802.3x   Flow Control
802.3z   Gigabit Ethernet (1000Base-X) with QSA
ANSI/TIA-1057   LLDP-MED
Jumbo MTU support 9,416 bytes
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)
VLT Enhancements
Minloss Upgrades
VLT Proxy Gateway
RVPST over VLT
DCB, FSB, iSCSI over VLT
RSPAN over VLT
RFC Compliance
768   UDP
793   TCP
854   Telnet
959   FTP
1321   MD5
1350   TFTP
2474   Dierentiated 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)
5798   VRRP
3021   31-bit Prexes
3046   DHCP Option 82 (Relay)
1812   Requirements for IPv4 Routers
1918   Address Allocation for Private

Internets
2474   Diserv Field in IPv4 and Ipv6 Headers
2597   Assured Forwarding PHB Group
3195   Reliable Delivery for Syslog
3246   Expedited Forwarding PHB
4364   VRF-lite (IPv4 VRF with OSPF and BGP)*
COPP: Control Plane Policing
Policy Based Routing
General IPv6 Protocols
1981   Path MTU Discovery*
2460   IPv6
2461   Neighbor Discovery*
2462   Stateless Address AutoCong
2463   ICMPv6
2464   Ethernet Transmission
2675   Jumbo grams
3587   Global Unicast Address Format
4291   IPv6 Addressing
2464   Transmission of IPv6 Packets over Ethernet Networks
2711   IPv6 Router Alert Option
4007   IPv6 Scoped Address Architecture
4213   Basic Transition Mechanisms for IPv6 Hosts and Routers
4291   IPv6 Addressing Architecture
5095   Deprecation of Type 0 Routing Headers in IPv6
IPv6   Management support (telnet, FTP, TACACS, RADIUS, SSH, NTP)

OSPF
1587   NSSA
1745   OSPF/BGP interaction
1765   OSPF Database over ow
2154   MD5
2328   OSPFv2
2370   Opaque LSA
3101   OSPF NSSA
3623   OSPF Graceful Restart (Helper mode)*
Security
2865   RADIUS
3162   Radius and IPv6
4250, 4251, 4252, 4253, 4254 SSHv2
4301   Security Architecture for IPSec*
4302   IPSec Authentication Header*
4303   ESP Protocol*
BGP
1997   Communities
2385   MD5
2439   Route Flap Damping
2796   Route Reection
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

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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)
Netconf APIs
XML Schema
CLI Commit (Scratchpad)
sFlow
Automation
Control Plane Services APIs
Linux Utilities and Scripting Tools
Quality of Service
Access Control Lists
Pre x List
Route-Map
Rate Shaping (Egress)
Rate Policing (Ingress)
Scheduling Algorithms
    Round Robin
    Weighted Round Robin
    De cit Round Robin
    Strict Priority
Weighted Random Early Detect
Data center bridging
802.1Qbb Priority-Based Flow Control
802.1Qaz Enhanced Transmission Selection (ETS)*
Data Center Bridging eXchange (DCBx)
DCBx Application TLV (iSCSI, FCoE*)
Fibre Channel (applicable only to S4148U-ON)
FCF F-Port
FC Zoning

Regulatory compliance
Safety
UL/CSA 60950-1, Second Edition
EN 60950-1, Second Edition
IEC 60950-1, Second Edition Including All National
Deviations and Group Di erences
EN 60825-1 Safety of Laser Products Part 1:
   Equipment
Classi cation Requirements and User's Guide
EN 60825-2 Safety of Laser Products Part 2:
   Safety of Optical Fibre Communication Systems
FDA Regulation 21 CFR 1040.10 and 1040.11
Emissions
Australia/New Zealand: AS/NZS CISPR 32: Class A
Canada: ICES-003, Issue-4, Class A

  * Roadmap

Europe: EN 55032: 2015+A1:2007 (CISPR 32),
Class A Japan: VCCI V3/2009 Class A
USA: FCC CFR 47 Part 15, Subpart B:2009, Class A
Immunity
EN 300 386 V1.4.1:2008 EMC for Network
   Equipment
EN 55024: 1998 + A1: 2001 + A2: 2003
EN 61000-3-2: Harmonic Current Emissions
EN 61000-3-3: Voltage Fluctuations and Flicker
EN 61000-4-2: ESD
EN 61000-4-3: Radiated Immunity
EN 61000-4-4: EFT
EN 61000-4-5: Surge
EN 61000-4-6: Low Frequency Conducted
   Immunity
RoHS
All S-Series components are EU RoHS compliant.
Certi cations
Japan: VCCI V3/2009 Class A
USA: FCC CFR 47 Part 15, Subpart B:2009, Class A
Warranty
1 Year Return to Depot

IT Lifecycle Services for Networking

Experts, insights and ease
Our highly trained experts, with innovative tools and proven processes, help you transform your IT investments into strategic advantages.

Plan & Design
Let us analyze your multivendor environment and deliver a comprehensive report and action plan to build upon the existing network and improve performance.

Deploy & Integrate
Get new wired or wireless network technology installed and con gured with ProDeploy. Reduce costs, save time, and get up and running fast.

Educate
Ensure your sta builds the right skills for long-term success. Get certi ed on Dell EMC Networking technology and learn how to increase performance and optimize infrastructure.

Manage & Support
Gain access to technical experts and quickly resolve multivendor networking challenges with ProSupport. Spend less time resolving network issues and more time innovating.

Optimize
Maximize performance for dynamic IT environments with Dell EMC Optimize. Bene t from in-depth predictive analysis, remote monitoring and a dedicated systems analyst for your network.

Retire
We can help you resell or retire excess hardware while meeting local regulatory guidelines and acting in an environmentally responsible way.

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Learn more at Dell.com/Networking

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