

Specification Sheet



Dell EMC PowerSwitch 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, midmarket 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 EMC PowerSwitch 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, multifunction, 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)

^{*} Not line rate

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
- 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 airflow or PSU to IO panel airflow
- Redundant, hot-swappable power supplies and fans (S4112-ON has redundant, fixed power supplies and fans)

- Support for 10GBASE-LRM optics over OM1/OM2 fiber 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 flow control (802.1Qbb), ETS (802.1Qaz), DCBx and iSCSLTLV

	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
Unified 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

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Product	Description					
S4100-ON	S4112F, 12x 10GbE SFP+, 3x 100GbE QSFP28, 2x AC Fixed PSU, 3x Fixed Fan, I/O Panel to PSU Airflow S4112F, 12x 10GbE SFP+, 3x 100GbE QSFP28, 2x AC Fixed PSU, 3x Fixed Fan, I/O PSU to I/O Panel Airflow S4112T, 12x 10GBASE-T, 3x 100GbE QSFP28, 2x AC Fixed PSU, 3x Fixed Fan, I/O Panel to PSU Airflow S4112T, 12x 10GBASE-T, 3x 100GbE QSFP28, 2x AC Fixed PSU, 3x Fixed Fan, I/O PSU to I/O Panel Airflow S4112F, 12x 10GbE SFP+, 3x 100GbE QSFP28, 2x DC Fixed PSU, 3x Fixed Fan, I/O Panel to PSU Airflow S4112F, 12x 10GbE SFP+, 3x 100GbE QSFP28, 2x DC Fixed PSU, 3x Fixed Fan, I/O PSU to I/O Panel Airflow S4112T, 12x 10GBASE-T, 3x 100GbE QSFP28, 2x DC Fixed PSU, 3x Fixed Fan, I/O Panel to PSU Airflow S4112T, 12x 10GBASE-T, 3x 100GbE QSFP28, 2x DC Fixed PSU, 3x Fixed Fan, I/O Panel to PSU Airflow S412F, 28x 10GbE SFP+, 2x 100GbE QSFP28, 2x AC PSU, 4x Fan module, I/O Panel for PSU Airflow S4128F, 28x 10GbE SFP+, 2x 100GbE QSFP28, 2x AC PSU, 4x Fan module, I/O Panel Airflow S4128T, 28x 10GBASE-T, 2x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Airflow S4128T, 28x 10GBASE-T, 2x 100GbE QSFP28, 2x AC PSU, 4x Fan module, I/O Panel for PSU Airflow S4148F, 48x 10GbE SFP+, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Airflow S4148F, 48x 10GbE SFP+, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Airflow S4148F, 48x 10GbE SFP+, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Airflow S4148F, 48x 10GbE SFP+, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Airflow S4148F, 48x 10GbE SFP+, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Airflow S4148F, 48x 10GbE SFP+, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Airflow S4148F, 48x 10GbE SFP+, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Airflow S4148F, 48x 10GbBASE-T, 2x QSFP+, 4x 100GbE QSFP28, 2x AC PSU, 4x Fan module, PSU to I/O Panel Airflow S4148U, 24x Unified port SFP+, 24x 10GbE SFP+, 2x QSFP+, 4x Unifie					
Redundant power supplies (not applicable to S4112)	S4100, AC Power Supply, IO Panel to PSU Airflow S4100, AC Power Supply, PSU to IO Panel Airflow S4100, DC Power Supply, IO Panel to PSU Airflow (available as custom kit) S4100, DC Power Supply, PSU to IO Panel Airflow (available as custom kit) S4100, HV DC Power Supply, IO Panel to PSU Airflow S4100, HV DC Power Supply, PSU to IO Panel Airflow					
Fans (not applicable to S4112)	S4100 fan module, IO Panel to PSU Airflow S4100 fan module, PSU to IO Panel Airflow					
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, LR4 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, SR4 QSFP28 Transceiver, 100GbE, LR4Lite QSFP28 Transceiver, 100GbE, CWDM4 2Km QSFP28 Transceiver, 100GbE, PSM4-500m QSFP28 Transceiver, 100GbE, PSM4-1R, QSFP28 Transceiver, 100GbE, PSM4-1R, QSFP28 Transceiver, SFP+, 16Gbps Fibre Channel, SWL, 850nm, LC Duplex (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)					

F	Product	Description				
С	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, QSFP28 to QSFP28, passive DAC 100GbE, 2x50GbE, QSFP28 to 2xQSFP28, passive DAC, breakout (*)				

32 instances

Layer2 Protocols

MSTP:

Technical specifications

Physical

	Physical		MSTP:		32 instai	nces	Layer2 I	Protocols
	1 RJ45 console/management	port with RS232	LAG load	d balancing:	Based o	n layer 2,	802.1D	Compatible
	signaling		IPv4 c	r IPv6 headers		•	802.1p	L2 Prioritization
1 RJ45 micro-USB-B console port		L2 Ingress ACL:		6K		802.1Q	VLAN Tagging	
1 RJ45 10/100/1000Base-T management		L2 Egress ACL:		1K		802.1s	MSTP	
	Ethernet port	ianagomone	0	ess ACL:	6K		802.1w	RSTP
	Size: 1 RU, 1.75"(h) x 17"(w)	v 10"(d) (4 4cm (h)		ess ACL:	1K		802.1W	RPVST+
	x 43.1cm (w) x 45.7cm (d))		IPv6 Ingress ACL:		3K			Link Aggregation with LACP
	S4112: 1.7"(h) x 8.28"(w) x		IPv6 Egress ACL:		500			tual Link Trunking)
	(h) x 20.9cm (w) x 45cm (d)					VLT Enh	ancements
	Power supply: 100-240 VAC	50/60 Hz	Storage	performance parai	meters		Minloss	Upgrades
	Power supply (DC), applicable	e to S4412: rated	iSCSI Se			255	VLT Prox	xy Gateway
	-40 to -72 VDC		iSCSI Ta			16		over VLT
	Max. current draw per system	n: 6A/5A at	F-Port: Max F-Port Sessions: 526					SB, iSCSI over VLT
	100/120V	0, 00, (at		lax nembers in a zo		526		over VLT
			I -F OIL. IV	lax illellibels III a 20	nie.	320	TOT AIV	OVCI VEI
	AC; 3A/2.5A at 200/240V A						DE0.0	
	S4112: 2A/1.7A at 100/120	V AC; 1A/0.8A at		C Networking OS10		rise		mpliance
	200/240V AC		Edition 9	Software Specifica	tions		768	UDP
	S4112 (DC): -40V/5A, -48V		IEEE Co	mpliance			793	TCP
	Max. operating specifications:	•	802.1AB	LLDP			854	Telnet
	Operating temperature: 41°	° to 104° F		LLDP-MED			959	FTP
	(5° to 40° C)		802.1s	MSTP			1321	MD5
	Operating humidity: 5 to 85	5% (RH)	802.1s				1350	TETP
	non-condensing	,,,			1000D	T \	2474	Differentiated Services
	Max. non-operating specificat	ione:		Gigabit Ethernet (1		1)	2698	
				2.3ad Link Aggregation with LACP				Two Rate Three Color Marker
	Storage temperature: -40°	10 149 F	802.3ae 10 Gigabit Ethernet (10GBase-X) 802.3ba 40 Gigabit Ethernet (40GBase-X)			3164	Syslog	
	(-40° C to 65° C)	(51.1)				4254	SSHv2	
	Storage humidity: 5 to 95%	(RH),	802.3i	Ethernet (10Base-	T)			
	non-condensing		802.3u	Fast Ethernet (100	Base-TX)		General	IPv4 Protocols
			802.3z	Gigabit Ethernet (1			791	IPv4
	Redundancy		802.1D	Bridging, STP		-/	792	ICMP
	Hot swappable redundant pov	wer (not applicable	802.1p	L2 Prioritization			826	ARP
	to S4112)	wor (not applicable			/DD		1027	Proxy ARP
	,	a (not applicable		VLAN Tagging, GV	RP		1027	
	Hot swappable redundant fan	is (flot applicable	802.1Qb					DNS (client)
	to S4112)		802.1Qa				1042	Ethernet Transmission
	Fixed, redundant power suppl	ly and fan for	802.1s	MSTP			1191	Path MTU Discovery
	S4112		802.1w	RSTP			1305	NTPv4
			PVST+				1519	CIDR
	Performance		802.1X	Network Access C	ontrol		1812	Routers
	Packet buffer memory	12MB		Gigabit Ethernet (1		-T) or	1858	IP Fragment Filtering
	CPU memory:	4GB	002.000	breakout		,	2131	DHCP (server and relay)
	MAC addresses:	272K (in Scaled	802 320	Frame Extensions	for V/L AN	Tagging	5798	VRRP
	Wir to addicesses.	L2 mode)				ragging	3021	31-bit Prefixes
	PVST:	,		Link Aggregation v			3046	
		128 instances		10 Gigabit Etherne				DHCP Option 82 (Relay)
	ARP table	200K (in Scaled	802.3ba	40 Gigabit Etherne			1812	Requirements for IPv4 Routers
		L3 host mode)		40GBase-CR4, 40	GBase-LR	₹4,	1918	Address Allocation for Private
	IPv4 routes:	200K (in Scaled		100GBase-SR10,	100GBase	e-LR4,		Internets
		L3 routes mode)		100GBase-ER4) o	n optical p	orts	2474	Diffserv Field in IPv4 and Ipv6
	IPv6 hosts:	64K	802.3bj	100 Gigabit Etherr				Headers
	IPv6 routes:	130K (in Scaled	802.3u	Fast Ethernet (100		on mamt	2597	Assured Forwarding PHB Group
		L3 routes mode)	302.00	ports	2000 17()	o mgmt	3195	Reliable Delivery for Syslog
	Multicast hosts:	8K	902.24				3246	Expedited Forwarding PHB
			802.3x	Flow Control	10000	V)!#!-	4364	
	Link aggregation:	32 links per	802.3z	Gigabit Ethernet (1	iuuusase-	ス) WITN	4304	VRF-lite (IPv4 VRF with OSPF and
		group, 128		QSA			0055	BGP)*
		groups	ANSI/TI/	\-1057 LLDP-M	ED			Control Plane Policing
	Layer 2 VLANs:	4K	Jumbo N	ITU support 9,416 b	ytes		Policy Ba	ased Routing
	Laver3 VLANs:	500			-		-	

500

Layer3 VLANs:

Tec	hnical specifications		
General	IPv6 Protocols	Linux Distribution	Fibre Channel (applicable only to S4148U-ON)
1981	Path MTU Discovery*	Debian Linux version 8.4	FCF F-Port
2460	IPv6	Linux Kernel 3.16	FC Zoning
2461	Neighbor Discovery*		
2462	Stateless Address AutoConfig	MIBS	Regulatory compliance
2463	ICMPv6	IP MIB– Net SNMP	Safety
2464	Ethernet Transmission	IP Forward MIB– Net SNMP	UL/CSA 60950-1, Second Edition
2675	Jumbo grams	Host Resources MIB- Net SNMP	EN 60950-1, Second Edition
3587	Global Unicast Address Format	IF MIB – Net SNMP	IEC 60950-1, Second Edition Including All
4291	IPv6 Addressing	LLDP MIB	National Deviations and Group Differences
2464	Transmission of IPv6 Packets over	Entity MIB	EN 60825-1 Safety of Laser Products Part 1:
2711	Ethernet Networks	LAG MIB	Equipment
4007	IPv6 Router Alert Option IPv6 Scoped Address Architecture	Dell-Vendor MIB TCP MIB – Net SNMP	Classification Requirements and User's Guide
4213	Basic Transition Mechanisms for IPv6	UDP MIB – Net SNMP	EN 60825-2 Safety of Laser Products Part 2:
7213	Hosts and Routers	SNMPv2 MIB – Net SNMP	Safety of Optical Fibre Communication Systems
4291	IPv6 Addressing Architecture	SINIVII VZ IVIID — INCL SINIVII	FDA Regulation 21 CFR 1040.10 and 1040.11
5095	Deprecation of Type 0 Routing	Network Management	1 DA Regulation 21 CFR 1040.10 and 1040.11
0000	Headers in IPv6	SNMPv1/2	Emissions
IPv6	Management support (telnet, FTP,	SSHv2	Australia/New Zealand: AS/NZS CISPR 32:
	TACACS, RADIUS, SSH, NTP)	FTP, TFTP, SCP	Class A
	, , ,	Syslog	Canada: ICES-003, Issue-4, Class A
OSPF		Port Mirroring	Europe: EN 55032: 2015+A1:2007 (CISPR 32),
1587	NSSA	RADIUS	Class A
1745	OSPF/BGP interaction	802.1X	Japan: VCCI V3/2009 Class A
1765	OSPF Database overflow	Support Assist (Phone Home)	USA: FCC CFR 47 Part 15, Subpart B:2009,
2154	MD5	Netconf APIs	Class A
2328	OSPFv2	XML Schema	
2370	Opaque LSA	CLI Commit (Scratchpad)	Immunity
3101	OSPF NSSA	sFlow	EN 300 386 V1.4.1:2008 EMC for Network
3623	OSPF Graceful Restart (Helper		Equipment
	mode)*	Automation	EN 55024: 1998 + A1: 2001 + A2: 2003
Coourit		Control Plane Services APIs	EN 61000-3-2: Harmonic Current Emissions
Security 2865	RADIUS	Linux Utilities and Scripting Tools	EN 61000-3-3: Voltage Fluctuations and Flicker
3162	Radius and IPv6	Overlifty of Compiles	EN 61000-4-2: ESD
	251, 4252, 4253, 4254 SSHv2	Quality of Service Access Control Lists	EN 61000-4-3: Radiated Immunity
4301	Security Architecture for IPSec*	Prefix List	EN 61000-4-4: EFT
4302	IPSec Authentication Header*	Route-Map	EN 61000-4-5: Surge EN 61000-4-6: Low Frequency Conducted
4303	ESP Protocol*	Rate Shaping (Egress)	Immunity
		Rate Policing (Ingress)	minutarity
BGP		Scheduling Algorithms	RoHS
1997	Communities	Round Robin	All S-Series components are EU RoHS
2385	MD5	Weighted Round Robin	compliant.
2439	Route Flap Damping	Deficit Round Robin	55p.i.a.i.u
2796	Route Reflection	Strict Priority	Certifications
2842	Capabilities	Weighted Random Early Detect	Japan: VCCI V3/2009 Class A
2918	Route Refresh		USA: FCC CFR 47 Part 15, Subpart B:2009,
3065	Confederations	Data center bridging	Class A
4271	BGP-4	802.1Qbb Priority-Based Flow Control	
4360	Extended Communities	802.1Qaz Enhanced Transmission Selection	Warranty
4893	4-byte ASN Parragentation	(ETS)*	1 Year Return to Depot
5396 5492	4-byte ASN Representation	Data Center Bridging eXchange (DCBx)	
3492	Capabilities Advertisement	DCBx Application TLV (iSCSI, FCoE*)	

^{*} Roadmap

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 configured with ProDeploy. Reduce costs, save time, and get up and running fast.



Educate

Ensure your staff builds the right skills for long-term success. Get certified 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. Benefit 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.

Learn More at **bcdvideo.com/dell-networking** or by contacting **sales@bcdinc.com**

