## Overview

# HPE StoreFabric Enterprise Package

Cisco's NX-OS is the underlying system software that powers the award winning Cisco MDS 9000 Family of multilayer switches. The standard NX-OS software package is bundled at no charge with HPE's StoreFabric C-series MDS 9000 series switches and includes a base set of features. Cisco Systems believes the standard features are required by most customers to build storage area networks (SAN). The C-series MDS switch also has a set of additional advanced traffic engineering and advanced security features recommended for all Enterprise SANs. The additional features are bundled together in HPE's StoreFabric Enterprise Package.

### **Feature List**

- Port security
- Switch-switch and host-switch authentication
- Inter-VSAN routing (IVR) over Fibre Channel
- VSAN-based access control
- Fibre Channel Security Protocol (FC-SP) authentication
- Advanced traffic engineering-quality of service (QoS)
- Fabric binding for open systems
- IKE and SSH digital certificates
- Some features are not supported on StoreFabric SN6000C (MDS 9100 series) switches, such as:
  - o IP security (IPsec) protocol for iSCSI and FCIP for MDS9222i and SN6500C (MDS9250i) switches
  - o SCSI flow statistics
  - o Extended credits
  - o Cisco TrustSec Fibre Channel Link Encryption

# **Customer Benefits**

- Inter-VSAN Routing enables sharing of resources across VSANs without compromising the VSAN benefits of scalability, reliability, availability and security.
- Inter-VSAN Routing can be used in conjunction with FCIP to create more efficient business continuity and disaster recovery solutions.
- The QoS feature in Cisco NX-OS allows for data traffic to be classified into distinct levels for service differentiation.
- Switch to switch and host to switch authentication helps to eliminate disruptions that may occur due to unauthorized devices connecting to a large enterprise fabric.
- Individual port security locks mappings of entities to switch ports which assures SAN security is not compromised due to unauthorized devices connecting to a switch port.
- VSAN-based access control adds a layer of security where only administrators can configure switches within specified VSANs.



Inter VSAN Routing	Inter-VSAN routing enables selective transfer of data traffic between specific initiators and targets on different virtual SANs (VSANs) without merging VSANs into a single logical fabric. Fibre Channel control traffic does not flow between VSANs, nor can initiators access resources except for the ones designated with Inter-VSAN Routing.				
Quality of Service (QoS)	The QoS feature allows for data traffic to be classified into distinct levels for service differentiation.				
Switch-Switch and Host-Switch Authentication	Fibre Channel Security Protocol (FC-SP) capabilities in Cisco NX-OS provide switch-switch and host- switch authentication.				
Port Security	Locks down the mapping of an entity to a switch port. The entity can be a host, target, or switch and is identified by its Worldwide Number (WWN).				
VSAN Based Access Control	Enables customers to define roles where the scope of the roles is limited to certain VSANs. For example, a network administrator role can be set up to allow configuration of all platform-specific capabilities, while VSAN-administrator roles can be set up to only allow configuration and management of specific VSANs.				
Electronic Licenses	HPE StoreFabric SN6	A7515AAE			
	HPE StoreFabric SN6500C Enterprise Package E-LTU				
	HPE StoreFabric SN8000C Enterprise Package E-LTU (for 1 Cisco MDS 9500 series A7517AAE				
	switch, SN8000C) HPE StoreFabric SN8500C Enterprise Package E-LTU (for MDS 9700 series directors, TC459AAB SN8500C)				
Software Prerequisites	Cisco Prime Data Center Network Manager	Refer to Cisco Prime Data Center Network Manager release notes http://www.cisco.com/c/en/us/support/cloud-systems-manage data-center-network-manager/products-release-notes-list.htm	-		
	Java Virtual Machine	Refer to Cisco Enterprise Package release notes http://www.cisco.com/en/US/products/ps5989/prod_release_n	otes_list.html		
	Windows®	Refer to Cisco Enterprise Package release notes http://www.cisco.com/en/US/products/ps5989/prod_release_n	otes_list.html		
	Solaris   Refer to Cisco Enterprise Package release notes     http://www.cisco.com/en/US/products/ps5989/prod_release_notes_list.html				
	Red Hat Linux Refer to Cisco Enterprise Package release notes   http://www.cisco.com/en/US/products/ps5989/prod_release_notes_list.html				
Hardware Prerequisites	Refer to Cisco Enterprise Package Release Notes http://www.cisco.com/en/US/products/ps5989/prod_release_notes_list.html				
Distribution Media	Cisco MDS 9000 Enterprise Package is a firmware resident Java based application within an MDS 9000 series switch.				
Software Licensing	Cisco MDS 9000 Enterprise package and the StoreFabric C-series Enterprise Licenses are licensed per MDS 9000 series switch.				

# Features/Functionality

### Service and Support, HPE Care Pack and Warranty Information

# **Software Warranty** Hewlett Packard Enterprise warrants that the software media will be free of physical defects for a period of 90 days from delivery.

#### Service and Support Software Technical Support and Update Service

HPE StoreFabric Enterprise software products include one year of 9x5 HPE Software Technical Support and Update Service. This service is available 9 hours per day between 8:00 a.m. and 5:00 p.m. local time, Monday through Friday excluding HPE holidays. The service provides access to HPE technical resources for assistance in resolving software operations issues, and, also provides access to software updates and reference manuals in electronic form.

# Protect your business beyond warranty, and included software support, with additional HPE Support Services

HPE Pointnext provides a comprehensive portfolio including Advisory and Transformational, Professional, and Operational Services to help accelerate your digital transformation. From the onset of your transformation journey, Advisory and Transformational Services focus on designing the transformation and creating a solution roadmap. Professional Services specializes in creative configurations with flawless and on-time implementation, and on-budget execution. Finally, operational services provides innovative new approaches like Flexible Capacity and Datacenter Care, to keep your business at peak performance. HPE is ready to bring together all the pieces of the puzzle for you, with an eye on the future, and make the complex simple.

#### HPE Foundation Care Support Service

HPE Foundation Care connects you to HPE 24 hours a day, seven days a week for assistance on resolving issues –This service includes available hardware response times of next business day, 4 hour response or 6 hour to repair, and, with answers to software questions within two hours. Simplify your support experience and make HPE your first call to help resolve hardware or software problems.

#### http://www.hpe.com/services/foundationcare

#### **HPE Proactive Care Support Service**

HPE Proactive Care gives customers an enhanced call experience. When your products are connected to HPE, Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice. This service includes available hardware response times of next business day, 4 hour response or 6 hour to repair, and, with answers to software questions within two hours.

#### http://www.hpe.com/services/proactivecare

#### **HPE Datacenter Care service**

HPE Datacenter Care helps improve IT stability and security, increase the value of IT, and enable agility and innovation. It is a structured framework of repeatable, tested, and globally available services "building blocks." You can deploy, operate, and evolve your datacenter wherever you are on your IT journey. With HPE Datacenter Care, you benefit from a personalized relationship with HPE via a single point of accountability for HPE and others' products. For more information, visit http://www.hpe.com/services/datacentercare

#### Service and Support, HPE Care Pack and Warranty Information

**HPE Flexible Capacity,** With Flexible Capacity, you get the speed, scalability, and economics of the public cloud in the privacy of your data center. Gain the advantages of the public cloud—consumption-based payment, rapid scalability without worrying about capacity constraints. Reduce the "heavy lifting" needed to operate a data center. And retain the advantages that IT provides the business (i.e., control, security). Deliver the right user experience, choose the right technology for the business, manage privacy and compliance, and manage the cost of IT. And, you have the option to use the public cloud when needed.

#### For more information <u>http://www.hpe.com/services</u>

#### https://www.hpe.com/us/en/services/operational.html

To learn more on HPE Storage Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner.

Contact information for a representative in your area can be found at "Contact HPE" <u>https://www.hpe.com/us/en/contact-hpe.html</u>

HPE Support Services are sold by HPE and Hewlett Packard Enterprise Authorized Service Partners:

• Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.

Customers purchasing from a commercial reseller can find HPE Support Services at <a href="https://ssc.hpe.com/portal/site/ssc/">https://ssc.hpe.com/portal/site/ssc/</a>

# **Summary of Changes**

Date	Version History	Action	Description of Change
06-Nov-2017	From Version 10 to 11	Added	Added new electronic licenses.
		Changed	Note the title was changed from Cisco MDS 9000
			Enterprise Package to HPE StoreFabric Enterprise
			Package.
14-Oct-2016	From Version 9 to 10	Changed	Rebranding edition
10-Apr-2015	From Version 8 to 9	Removed	Removed part # TC317A (OBS)
31-Oct-2014	From Version 7 to 8	Changed	The Service and support sections was modified.
			The Features section was updated.
			SKUs descriptions was updated.
09-May-2014	From Version 6 to 7	Changed	Change was made to Service and Support, HPE Care Pack and Warranty Information section.
05-Oct-2012	From Version 5 to 6	Changed	Change was made to URL in Service and Support, HPE
			Care Pack and Warranty Information section.
08-Jun-2011	From Version 4 to 5	Removed	Removed "StorageWorks" from the document.
15-Nov-2010	From Version 3 to 4	Changed	SAN-OS was changed to NX-OS in the Overview
			Features List and Service and Support, HPE Care Pack and Warranty Information were completely revised
			MDS Enterprise Package license for 1 MDS series switch for HPE BladeSystem c-Class and MDS Fabric Manager Server and Enterprise Package license bundle for 1 MDS series switch for HPE BladeSystem c-Class were added to Ordering Information
			Refer to Cisco Enterprise Package Release Notes was added to Software and Hardware Prerequisites
08-Jun-2007	From Version 2 to 3	Added	Added EMEA version.
09-Jun-2004	From Version 1 to 2	Changed	The Customer Benefits section was modified.



Hewlett Packard Enterprise © Copyright 2017 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Windows is a US registered trademark of Microsoft Corporation.

c04164585 - 11950 - Worldwide - V11 - 06-November-2017