

Hewlett-Packard			Release: 9.6.0	Doc Version: V34.3
OS	Version	File System	Comments	
HP-UX - 11iv1 (11.11) 11iv2 (11.23) PA-Risc, Itanium 11iv3 (11.31) PA-Risc, Itanium	OE, EOE, MCOE, MT, TC	HFS, VxFS	<p>The following platform/OS combinations are supported:</p> <ul style="list-style-type: none"> - RISC platform and 32 bit OS - RISC platform and 64 bit OS - IA64 platform and (IA)64 bit OS <p>CIM Extension Minimum Requirements:</p> <ul style="list-style-type: none"> - 2GB physical memory - 512MB disk space <p>We deploy a 32 bit agent to run against 32 bit or 64 bit OS versions. Before installing the CIME on HP-UX 11.11 you must install the HP-UX patch "PHSS_30049. Auto-discovery of HP-UX cluster is supported. Look at "Clusters" section at the bottom of this page for supported configurations.</p> <p>Remote agent deploy to HP-UX 11.11 qualified using SSH: SSH-2.0-OpenSSH_3.6.1p2 OpenSSH_3.9 (OpenSSL 0.9.7d 17 Mar 2004)</p> <p>Remote agent deploy to HP-UX 11.23 IA64 qualified using SSH: OpenSSH_3.7 (OpenSSL 0.9.7c 30 Sep 2003) SSH-2.0-OpenSSH_3.1p1 SSH-2.0-OpenSSH_3.8 HP-UX Secure Shell-A.04.00.001</p> <p>Remote agent deploy to HP-UX 11.23 PA-RISC qualified using SSH: HP-UX_Secure_Shell-A.03.71.006 Remote agent deploy to HP-UX 11.31 (IA64 & PA-RISC) supported with Secure Shell that comes with OS. IPv6 Support: HP-UX hosts with IPv6 address are supported.</p>	

OpenVMS - Alpha [DEPRECATED]	V7.3-2, 8.2. 8.3	Supports all File Systems including Files11 File System	<p>The following patches need to be installed in the order specified</p> <p>OVMS alpha 7.3-2: VMS732_PCSI-V0300 VMS732_UPDATE-V0600 VMS732_SYS-V1000 VMS732_FIBRE_SCSI-V0900</p> <p>OVMS alpha 8.2 VMS82A_PCSI-V0100 VMS82A_UPDATE-V0300 VMS82A_SYS-V0400 VMS82A_FIBRE_SCSI-V0200</p> <p>CIM Extension Minimum Requirements: - 2GB physical memory - 512MB disk space</p> <p>Cluster awareness/visualization is supported through Cluster Manager. CIM/CXWS agents can coexist on clustered hosts. Look at "Clusters" section at the bottom of this page for more details.</p> <p>On Alpha systems with multiple processors, the processor performance data that the CIME provider gathers is the sum of performance data for all active CPUs. This is due to the limitation with the system call that is used which returns the data for all active CPUs and not the individual processor performance metric.</p>
OpenVMS - IA64 [DEPRECATED]	8.2-1, 8.3, 8.3-1H1		<p>The following patches need to be installed in the order specified</p> <p>OVMS IA64 8.2-1 VMS821I_PCSI-V0100 VMS821I_UPDATE-V0300 VMS821I_SYS-V0200 VMS821I_FIBRE_SCSI-V0200</p> <p>CIM Extension Minimum Requirements: - 2GB physical memory - 512MB disk space</p> <p>Cluster awareness/visualization is supported through Cluster Manager. CIM/CXWS agents can coexist on clustered hosts. Look at "Clusters" section at the bottom of this page for more details.</p>
Subsystems	Model	Software Requirement	Comments

P9000 (XP)	XP-model: 128, 1024, 10000, 12000, 20000, 24000, P9500	<p>HP XP may be managed with CV AE or with the included XP Provider.</p> <p>P9500: CVAE v7.0, 7.1, 7.2 HP SE built-in RMI provider also supported. Either provider requires firmware version Firmware 70-00-53/00 or later , 70-05-02</p> <p>XP24000: CVAE v7.0, 7.1, 7.2 HP SE built-in XP Provider requires firmware version 60-01-31-00/00 or greater</p> <p>XP20000: CVAE v7.0,7.1 HP SE built-in XP Provider requires firmware version 60-01-68-00/00 or greater</p> <p>XP12000/10000: CVAE v7.0, 7.1 HP SE built-in XP Provider requires firmware version 50-04-06/00 or greater</p> <p>XP1024/128: CVAE v7.0, 7.1 HP SE built-in XP Provider requires firmware version 21-10-05/00 or greater</p>	<p>CommandView Advanced Edition (CVAE): All XP models using CommandView Advanced Edition supports SE provisioning capabilities and array alerts. Note: Does not support use of CommandView Advanced Edition's SMI-S provider.</p> <p>The built-in XP Provider: - Allows to connect directly to the XP SVP RMI interface to discover and manage XP arrays and the SVS200 appliance. - Only covers SE specific functionality (i.e., discovery, basic/path provisioning, DKC/DKU status events)... avoiding the dependence on CVAE HiCommand APIs, or, legacy CVXP SMI-S interfaces. - Native XP setup, configuration, etc. capabilities exposed only in CVAE or via the XP Remote Web Console - Does not support other vendors' arrays based OEM Hitachi arrays like HDS TagmaStore or Lightning</p> <p>Note for XP12K/XP20K/24K only: It is not recommended to create LUSEs from LDEVs in different LPARs.</p> <p>Note for XP20K/24K only: - Not supported with FICON ports IPv6 Support: P9000 (XP) configured in IPv6 address is supported with CV-AE and the built-in XP provider. Minimum supported CV-AE version is 7.2. For further details, please refer to P9000 (XP) documentation.</p>
P6000 (EVA)	EVA model: 4000, 6000, 8000 4100, 6100, 8100 4400, 6400, 8400 P6300, P6500	<p>Refer the EVA Compatibility Matrix. EVA compatibility matrix can be obtained by logging to hp.com and searching for "EVA Compatibility matrix" or by navigating to the following link: http://h20000.www2.hp.com/bizsupport/TechSupport/DocumentIndex.jsp?contentType=SupportManual&lang=en&cc=us&docIndexId=64179&taskId=101&prodTypeId=12169&prodSeriesId=5061965</p>	<p>Supported: - CommandView EVA 9.3, 9.4, 10.00, 10.1, 10.2</p> <p>- In an Active/Passive CV EVA configuration, the product UI will associate an EVA with only the CV EVA server that is actively managing the EVA, and will not associate an EVA with any CV EVA servers that are passively managing the EVA. See the product User's Guide for additional details</p> <p>- Array Based management (ABM) is not supported</p> <p>- CV on VMWare is supported (VM direct path should be enabled on the guest OS).</p> <p>- CV-EVA and CV-TL can coexist on the same machine.</p> <p>- CV-EVA with IPv6 address is supported and minimum supported CV-EVA version is 10.1 in IPv6 environment. For further details, please refer P6000 (EVA) documentation.</p>
P2000 (MSA)	MSA2300 G2 FC Array	<p>Firmware: MSA 2312fc MSA 2324fc M110R21 firmware recommended</p>	<p>The SMI-S provider runs on Windows 2003 or Windows 2008 only, and must be installed on a SAN-connected host that acts as a management proxy. providers support alert indications. SMI-S provider does not support provisioning .</p> <p>SMIS-S provider recommended: v1.1.2.0</p>

	P2000 G3 FC Array P2000 G3 FC/iSCSI Array	Firmware: TS201R013 TS250R021	SMI-S Provider is built-in. Supported: FC stitching (topology) Not Supported: SAS iSCSI stitching (topology) Provisioning Performance monitoring
HP 3PAR StoreServ	F200/F400, T400/T800, V400/V800	3PAR OS 2.3.1 MU5, 3.1.1 MU2, 3.1.2 P01, 3.1.2 MU1	No provisioning support or event support SMI-S provider (cimserver) is required for discovery IPv6 Support: HP 3Par Storage System configured with IPv6 address is supported. For further details, please refer to HP 3Par Storage System documentation.
	StoreServ 10400/10800	3PAR OS 2.3.1 MU5, 3.1.1 MU2, 3.1.2 P01, 3.1.2 MU1	
	StoreServ 7200/7400	3PAR OS 3.1.2 P01, 3.1.2 MU1	
P4000	P4000 VSA, P4300, P4500, P4300 G2, P4500 G2	SAN/iQ 8.5, 9.0, 9.5, 10.0	Supported: iSCSI topology (Windows & VMware ESX clients) Local replication Not supported: Provisioning Performance monitoring Events Remote replication Note: For cluster nodes with more than one IP address, the subsequent Ethernet adapters will have a simulated MAC address. SmartClones are not supported. SmartClone volumes are indistinguishable from regular volumes.
X9000 (IBRIX)	All models that supports the software versions mentioned	Fusion Manager: 5.4.1047, 5.5.93, 5.5.265, 5.6, 6.0 and 6.1.252 Client Versions 5.4.x	Not supported: - Provisioning - Performance monitoring - Events
HP Windows NAS	Proliant ML and DL Storage Servers	Windows Based OS (qualified using Storage Server Service 5.5)	SAN stitching (topology) supported Supported by File System Viewer/FSRM and NAS Manager modules
HP All in One NAS	AiO 400 and AiO 600	Windows 2003 Storage Server R2 (HP version 6.2, Standard Edition)	SAN stitching (topology) supported Supported by File System Viewer/FSRM and NAS Manager modules
HP ESL E-Series Tape Library	712e, 630e, 322e, 286e, 9xxx	Window 2008	CommandView Tape Library (CVTL) 2.8, 3.0, 3.0.1, 3.1, 3.5, 3.6 No event support CV-TL and CV-EVA and their SMI-S providers can co-exist on the same server. See the CommandView Guides for required installation and configuraton steps on a shared server.
HP EML E-Series Tape Library	71e, 103e, 245e. 348e, 375e, 442e, 469e, and 505e		
HP 9000 Virtual Library System [DEPRECATED]	HP 9000 Virtual Library System	VLS SMI-S Patch version: hp_3.4.1.1_reboot_3044 Firmware Version: 3.4.1.1	No event support. Contact SE support representative for access to the controlled release patch mentioned here.
Performance Pack			

Licensing:
 HP Storage Essentials Standard Performance Pack licenses are required to support HP EVA P6000 & HP 3PAR StoreServ 7000, F-Series, S-Series & T-Series performance collection capabilities.
 HP Storage Essentials Enterprise Performance Pack licenses are required to support HP XP P9000 and HP 3PAR P10000 V-Series performance collection capabilities.

For more details, including discovery, configuration steps and a comprehensive listing of supported metrics, please refer to the HP Storage Essentials User & Storage Performance Management Guides located at <http://support.openview.hp.com/selfsolve/manuals>. Search under the product name "storage essential srm" and version "9.5.1" for the latest web release of the product documentation.

P9000 (XP)	XP128, XP1024, XP10000, XP12000, XP20000, XP24000, P9500	<p>Required Software: HP branded "RAID Manager Library" (RMLib) For HP XP: Versions 01.12.04 & 01.15.03 "32 bit RMLIB only" is supported For HP XP P9500: Version 01.17.01</p> <p>Host Proxy for running RMLIB: Prerequisite operating system and hardware - HP-UX 11.11 or higher on the HP XP P9000 Series - Windows 2008 on the Pentium/EM64T/Itanium or Compatible processor - Linux RHEL 5 Update 9 (64-bit), Linux RHEL 6 Update 3(64-bit) on the Pentium/EM64T or Compatible processor. 32-bit CIM extension is required.</p> <p>- Microcode for the RAID - HP XP128, XP1024: 21-10-00 or higher - HP XP10000, XP12000: 50-04-20 or higher - HP XP20000, XP24000: 60-01-00 or higher - HP XP P9500: 70-00-5X or higher, 70-05-02</p>	<p>Discovery: Built-in XP Provider (recommended): - Allows discovery of arrays directly from the Service Processor (SVP) via RMI-API. - Avoids the dependency on a CVAE server - Does not support discovery other vendor's Hitachi OEM arrays such as HDS.</p> <p>HP XP CommandView Advanced Edition (CVAE) server (optional): - Allows discovery of multiple arrays from a single proxy host</p> <p>Note: Storage Essentials does not communicate with either the SVP or CVAE via SMI-S.</p> <p>Note for XP12K/XP20K/24K only: It is not recommended to create LUSEs from LDEVs in different LPARs.</p> <p>Note for XP20K/24K only: - Not supported with FICON ports</p>
P6000 (EVA)	EVA model: 4000, 6000, 8000 4100, 6100, 8100 4400, 6400, 8400 P6300, P6500	Based on the supported versions of CommandView to the right, the firmware versions are determined by what is supported by CV EVA. See CV EVA product details.	<p>Prerequisites: - CV EVA 9.3, 9.4, 10.00, 10.1, 10.2 - HP Performance Data Collector (formerly EVAperf) must be installed on the same server as CV EVA - Refer to product user guide for full description of capabilities and limitations</p>
HP 3PAR StoreServ	All	HP 3PAR InForm OS 2.3.1 MU5, 3.1.1 MU2, 3.1.2 P01, 3.1.2 MU1	<p>SE Standard Performance Pack Licenses are required for 3PAR StoreServ 7000, F-Series, S-Series, T-Series. SE Enterprise Performance Pack Licenses are required for 3PAR V-Series. SMI-S provider (cimservr) needs to be running to allow for discovery</p>

Storage Virtualization			
P9000 (XP)	HP XP Storage Array Platforms supporting Virtualization (External Storage)		<p>Validated back-end storage devices supported by the HP XP P9000 Storage Array Platform: - XP24000 Array using the following External attached backend Storage in Direct and switched configurations: - HP EVA4000 arrays - HP XP128 arrays</p> <p>HP XP P9000 back-end virtualization topology display requires discovery via the Service Processor (SVP) RMI-API, external storage mapping is not supported when the virtualization engine is discovered via CommandView Advanced Edition (CVAE) XML-API.</p>

Replication Awareness	
P9000 (XP)	Local: Business Copy – BC, Snapshots, SnapClones Remote: Continuous Access - CA
P6000 (EVA)	Local: Business Copy – BC, Snapshots, Vsnaps, SnapClones, MirrorClones Remote: Continuous Access -CA, Data Replication Groups
P4000	Local: Snapshots
HP 3PAR StoreServ	Local: Supports both physical and virtual copy types. Physical copies are full snapshots that consume storage capacity equal to the original volume size. Virtual copy provides pointers to data and doesn't require disk space until the volume is changed. SE supports both types Remote replication: V, F, T-class, EOS 7x00 - require FW 3.1.2 P01

Switches

For more detail, see Brocade, Cisco tabs
Check HP's website for all supported f/w versions
For Brocade switches only, trunking is supported

NPIV is supported on all the supported switches in which the vendor supports the NPIV option.
IPv6 Support:
Storage Essentials supports Brocade SMI-A or BNA configured on a server with IPv4 and/or IPv6 address which manage switches with IPv4 address or IPv6 address.
Cisco switch with IPv6 address can be discovered via SNMP v3.

Switches	Software/Firmware	Comments
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<p>HP StorageWorks 4/8 and 4/16 SAN Switch (Silkworm 200E) HP SW SAN Switch 2/32 (Brocade 3900) HP SW SAN Switch 4/32 (Brocade 4100) HP SW SAN Switch 4/64 (Brocade 4900) HP SW SAN Switch 4/32B (Brocade 5000) HP SW 8/8 SAN Switch (Brocade 300) HP SW 8/24 SAN Switch (Brocade 300) HP SW 8/40 SAN Switch (Brocade 5100) HP SW 8/80 SAN Switch (Brocade 5300) HP SW SAN Core Switch 2/64 (Brocade 12000) HP SW SAN Director 2/128 (Brocade 24000) HP SW SAN Director 4/256 (Brocade 48000) HP SW 4/256 SAN Director 4/48 Blade HP SW DC SAN Backbone Director (Brocade DCX Backbone) HP SW DC04 SAN Director Switch (Brocade DCX-4S) HP SW MSA SAN Switch 2/8 HP SW MPR 400 HP SW Multi-Protocol Router Blade (FR4-18i) Brocade 4Gb SAN Switch for HP c-Class BladeSystem Brocade 8Gb SAN Switch for HP BladeSystem c-Class Brocade 4GB SAN Switch for HP p-class Blade (Brocade 4012) HP StorageWorks DC Switch Encryption FC Blade HP StorageWorks Encryption SAN Switch</p>	<p>Minimum: 120.10.0 Recommended: 120.11.0 Older SMIA versions are not supported</p>	<p>For supported Brocade SMIA, go to "http://www.brocade.com" and search for SMI Agent Virtual Fabric (VF), LSA and FCIP supported. Brocade Access Gateway is supported via BNA.</p>
<p>Cisco MDS 9216A, 9216i, 9222i Cisco MDS 9120, 9124, 9134, 9140, 9216 Cisco MDS 9506, 9509, 9513 Cisco MDS 9124e Fabric Switch for c-Class BladeSystem</p>	<p>Using SMI-S: Required: NS-OS 3.3(4), 3.3(5), 3.3(5a), 3.3(5b) Using SNMP: NS-OS 3.2(3a), 3.3(3), 3.3(4), 3.3(5), 3.3(5a), 3.3(5b)</p>	<p>NPIV, FCIP and IVR is supported by SMI-S and SNMP on all the supported switches in which the vendor supports the NPIV option. Cisco N-Port Virtualizer (NPV) is not supported. When a server is connected to an edge switch via Cisco N-Port Virtualizer (NPV), Storage Essentials depicts that as the server directly connected to the edge switch and the Cisco N-Port Virtualizer (NPV) details are not shown. iSCSI and FICON cards are not supported.</p>
<p>Cisco MDS 9216i, 9222i Cisco MDS 9506, 9509, 9513 Cisco MDS 9000 8Gb FC Module</p>	<p>Using SMI-S: NX-OS 4.2(1a), NX-OS 4.2(3), 4.2(3a), 4.2(7e), 4.2(9) NX-OS 5.0 (1a), NX-OS 5.0(4), NX-OS 5.0 (4b) Using SNMP: NX-OS 4.1(1c), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7e), 4.2(9) NX-OS 5.0 (1a), NX-OS 5.0(4), NX-OS 5.0 (4b), NX-OS 5.0 (4d) NX-OS 5.2(1), NX-OS 5.2(2)</p>	

<p>Cisco MDS 9124, 9134 Cisco MDS 9124e Fabric Switch for c-Class BladeSystem</p>	<p>Using SMI-S: NX-OS 4.2(1a), NX-OS 4.2(3), 4.2(3a), 4.2(7e), 4.2(9) NX-OS 5.0 (1a), NX-OS 5.0(4), NX-OS 5.0 (4b)</p> <p>Using SNMP: NX-OS 4.1(1c), 4.1(3a), 4.2(1a), 4.2(3), 4.2(3a), 4.2(7e), 4.2(9) NX-OS 5.0 (1a), NX-OS 5.0(4), NX-OS 5.0 (4b), NX-OS 5.0 (4d), NX-OS 5.2(2)</p>	
<p>HP SN6000C Fibre Channel Switch</p>	<p>Using SMI-S: Required:NX-OS 5.0 (1a)</p> <p>Using SNMP: NX-OS 5.0 (1a), NX-OS 5.2(1), NX-OS 5.2(2)</p>	
<p>Cisco MDS 8Gb Fabric Switch for HP BladeSystem c-Class</p>	<p>Using SMI-S: Required: NX-OS 5.0 (4), NX-OS 5.0 (4b),NX-OS 5.0 (4d) Using SNMP: Required: NX-OS 5.0 (4), NX-OS 5.0 (4b), NX-OS 5.0 (4d), NX-OS 5.2(1), NX-OS 5.2(2)</p>	
<p>HP SN6000B 16Gb FC Switch HP SN3000B 16Gb FC Switch</p>	<p>HP B-Series Network Advisor: 11.1, 11.1.1, 11.1.2, 11.1.3, 11.1.4, 11.1.5, 12.0</p>	
<p>HP SN8000B SAN Director Switch HP SN8000B 8Gb FC Blade</p>	<p>HP B-Series Network Advisor: 11.1, 11.1.1, 11.1.2, 11.1.3, 11.1.4, 11.1.5, 12.0</p>	
<p>M4400, M4700, HP edge switch 2/32, HP edge switch 2/24, HP director 2/140 , HP director 2/64</p>	<p>SMI Agent: 2.2.1, 2.5, 2.6.2, 2.7 EFCM: 9.5, 9.6, 9.7, 9.7.4</p>	<p>Limited hardware event indications supported starting with SMI Agent 2.5.</p> <p>Refer to HP's product release notes for the latest version of switch's firmware and compatible SMI-S.</p>
<p>McDATA 4Gb SAN Switch for HP p-Class BladeSystem</p>	<p>minimum recommended: 5.2.2.15.00 recommended: 6.4.0.11.0</p>	<p>Through the embedded SMI-S provider, switch is supported as long as it is not ISL'ed to other McData switches. Support includes active management of zones using a direct connection to the switch (by specifying its IP address during discovery). There is an option to modify an existing zone but existing provisioning limitations are:</p> <ul style="list-style-type: none"> - activate or deactivate zoneset fails with the message "Illegal character ':' in zone set name - no aliases in potential member list in zone creation menu - no zonesets in "Zones not in this Zone Set" list in zoneset creation menu
<p>HP 4Gb Virtual Connect Fibre Channel Module for c-Class BladeSystem (VC-FC)</p>		<p>1.15b minimum recommended firmware</p> <p>See HP's documentation on configuring the VC-FC and for Brocade, McData, Cisco, and Qlogic Firmware restrictions.</p> <p>Virtual WWNs configured through the VC-FC manager supported. Refer to HP's website for information regarding required firmware needed.</p>

HP Virtual Connect 8Gb 24-port Fibre Channel Module for C-Class Bladesystem 466482-B21		See HP documentation - connectivity stream and quickspecs for support details
HP 8/20q Fibre Channel Switch HP SN6000 Fibre Channel Switch	Minimum: 7.4.0.16	FCIP ports will not be discovered Provisioning is not supported SNMP is not supported Port speed does not report correctly for 20G interconnects
16G Brocade DCX 8510 Brocade 6510 (16 Gb 48 port FC) fabric switch	HP B-Series Network Advisor: 11.1, 11.1.1, 11.1.2, 11.1.3, 11.1.4, 11.1.5, 12.0	

HBA

HBA drivers were tested with recent firmware and drivers, as of this writing. Contact your management server software representative for additional firmware and driver details.

HBA drivers used must be SNIA HBA API compliant.

We do not support multiple OEMs of HBAs in the same server.

Dual-ported HBAs differ in how they appear to the management server software and is dependent on how the vendor implements their API. Some dual-ported HBAs appear as two separate adapters.

Depending on the HBA Firmware and the api versions that are used to retrieve the information, SE may report the HBA type differently from what it actually is on the HBA.

HBA	Driver	Platform	Comments
HP-UX Adapters: A6795A 2Gb/s A6826A 2Gb/s A9784A 2Gb/s AB465A 2Gb/s AB378B/AB379B 4Gb/s AD193A/AD194A 4Gb/s	See Comments to right	11.11 11.23 PA-RISC, 11.31 PA-RISC	The HP FC SNIA HBA API is a part of the driver software and is loaded when you install the driver. This driver Bundle is automatically selected for installation with the HP-UX 11i Operating Environments. Please refer to HP's release notes for any driver\OS version restrictions.
HP-UX Adapters: A6795A 2Gb/s A6826A 2Gb/s A9782A/A9784A 2Gb/s AB378A/AB379A 4Gb/s AB465A 2GB/s AB378B/AB379B 4Gb/s AD193A/AD194A 4Gb/s AD300A 4Gb/s AD299A/AD355A 4Gb/s AJ763A (AH403A) 8Gb/s AJ764A (AH401A) 8Gb/s 403619-B21 451871-B21 AD222	See Comments to right	11.23 IPF, 11.31 IPF	The HP FC SNIA HBA API is a part of the driver software and is loaded when you install the driver. This driver Bundle is automatically selected for installation with the HP-UX 11i Operating Environments. Please refer to HP's release notes for any driver\OS version restrictions.

OpenVMS Adapters: FCA2354 FCA2384 FCA2684	See Comments to right	OpenVMS V7.3-2 Alpha OpenVMS V8.2 Alpha OpenVMS V8.3 Alpha	For OpenVMS v7.3-2 & v8.2, the SNIA HBA API needs to be installed separately and details are mentioned in install guide. For OpenVMS v8.3, the SNIA HBA API is part of base OS and gets automatically selected for installation with the OpenVMS Operating Systems. [FCA2354 - 2Gb/s] - For v7.3-2, v8.2 & v8.3, driver that comes with base OS will suffice. [FCA2384 - 2Gb/s] - For OpenVMS v7.3-2, VMS732_FIBRE_SCSI-V0400 or higher is required. - For OpenVMS v8.2 & v8.3, driver that comes with base OS will suffice. [FCA2684 - 2Gb/s] - For OpenVMS 7.3-2, VMS732_FIBRE_SCSI-V0400 or higher is required. - For OpenVMS v8.2 & v8.3, driver that comes with base OS will suffice.
OpenVMS Adapters: A6826A	See Comments to right	OpenVMS V8.2-1 IA64 OpenVMS V8.3 IA64 OpenVMS V8.3-1H1 IA64	For OpenVMS v8.2-1, the SNIA HBA API needs to be installed separately and details are mentioned in Install Guide. For OpenVMS v8.3, the SNIA HBA API is part of base OS and gets automatically selected for installation with the OpenVMS Operating Systems. [A6826A - 2Gb/s] - Driver that comes with base OS will suffice.
HPUX - Multipathing, Volume Managers, File Systems	Version	Platform	Comments
HP-UX PV Links		11iv1, 11iv2, 11iv3	HP-UX 11.11 11.23 PA-RISC & Itanium 11.31 PA-RISC & Itanium
Veritas DMP	3.5, 4.1, 5.0, 5.1		HP-UX 11.11 - 3.5 only 11.23 PA-RISC & Itanium - 4.1, 5.0 11.31 PA-RISC & Itanium - 4.1, 5.0, 5.1 Deprecated: Veritas DMP v3.5
HDLM	v5.9.4, 6.0, 6.1		HDS arrays only HDLM is not supported with HP-UX 11iv3. See HDLM's support matrix for version support on each OS When using HGLAM 5.6 and HDLM 6.0 on unix based clients, the load balancing at lun level option is not supported. The UI does not show the multipathing path status properly.
PowerPath	5.0.0, 5.1		Symmetrix, CLARiiON, DMX 11iv1 PA-RISC 11iv2 PA-RISC and IA64
SecurePath	3.0F SP1 3.0F SP2 3.0F SP2 Patch 2 3.0F SP3		HP-UX 11.11 , 11.23 PA-RISC & Itanium HP XP and EVA arrays
HP-UX Native Multipath			HP-UX 11.31 PA-RISC and Itanium
Native LVM (L1)		11iv1, 11iv2, 11iv3	HP-UX 11.11 11.23 PA-RISC & Itanium 11.31 PA-RISC & Itanium
Native LVM (L2)			HP-UX 11.31 0803 & later [PA-RISC and Itanium]
Mirror Disk			Requires HP-UX EOE at least or MirrorDisk-UX software separately installed.

VxVM	3.5, 4.1, 5.0, 5.1		<p>VxVM with Securepath is supported, but VxVM/DMP in combination with any other multipathing software is not supported</p> <p>HP-UX native disk partition (idisk) does not work with VxVM.</p> <p>VxVM v3.5 for HP-UX 11.11 - Deprecated VxVM v4.1, 5.0 for HP-UX 11.23, 11.31 (PA-RISC and Itanium) VxVM v5.1 support on HP-UX 11.31</p> <p>(note: the version of VxVM reported internally may differ from the marketing/sold version)</p>
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OVMS - Multipathing, Volume Managers, File Systems	Version	Platform	Comments
OVMS Native Multipath		OVMS - Alpha, Integrity (Itanium)	
OVMS Native Volume Manager		OVMS	Support native volume manager and shadow set volumes

Clusters

It is "cluster aware" with the use of the Cluster Builder capability in which the user manually assigns a cluster node to a cluster name or cluster virtual IP address.

Where noted below, product supports "clustering" in which the product provides automatic agent-based cluster discovery.

There are 2 ways of supporting clusters:

- "Cluster Builder" - with the use of the Cluster Builder capability , the user can manually assign a cluster node to a cluster (host) name or cluster virtual IP address. This is "Cluster Aware."
- "Automatic Cluster Discovery" - by installing a CIM extension on a host, the product supports automatic cluster discovery (see table below for supported environments).

In both cases, cluster topology, capacity and properties are represented.

Clusters	Version	Platform	Comment
HPTC		HPUX	
MC Service Guard	see comment	see comment	Supported configurations for automatic cluster discovery - - HP-UX 11.11 with ServiceGuard 11.16 - HP-UX 11.23 IA & PA with ServiceGuard 11.18 and 11.19 - HP-UX 11.31 IA & PA with ServiceGuard 11.17.01, 11.18 and 11.19 - HP-UX 11.31 IA with ServiceGuard 11.20 Refer "Apps" tab for supported applications. IPv6 Support: MC SG Cluster configured in an IPv6 environment is supported.
Veritas Cluster Server	3.5	HP-UX 11.11	Automatic cluster discovery is supported. Refer "Apps" tab for supported applications.
Veritas Cluster Server	4.1	HP-UX 11.23 PA, IA64	Veritas software Storage Foundation for Oracle RAC (aka SFRAC), Storage Foundation for Oracle & Storage Foundation for Cluster File System are supported.
Veritas Cluster Server	5.0	HP-UX 11.23 & 11.31 PA, IA64	
Veritas Cluster Server	5.1	HP-UX 11.31 PA, IA64	IPv6 Support: Veritas Cluster Server configured in an IPv6 environment is supported.
OpenVMS cluster		Alpha, IA64	Cluster Safe -- requires Cluster Builder capability (cluster is not auto discovered) Refer "Apps" tab for supported applications.