

HP StorageWorks EVA software compatibility reference

This series of tables describes the compatible hardware, operating system, and software for all HP StorageWorks Enterprise Virtual Array (EVA) software:

- HP StorageWorks Business Copy EVA
- HP StorageWorks Command View EVA
- HP StorageWorks Continuous Access EVA
- HP StorageWorks Replication Solutions Manager (RSM)

Note: Use of HP Business Copy EVA and HP Continuous Access EVA is described with and without HP Replication Solutions Manager, where noted.

EVA software version compatibility

This table shows the compatibility of EVA software versions (controller, management, and replication). A bullet (*) indicates compatibility and a blank cell indicates no compatibility.

	EVA3000/5000				EVA4000/6000/8000		HP Command View EVA			HP Business Copy EVA		HP Replication Solutions Manager		
	VCS 3.020	VCS 3.025	VCS 3.028	VCS 4.00x	XCS 5.02x	XCS 5.03x	3.3.x	4.0.x	4.1.x	2.3	2.3.1	1.0	1.1	1.2
HP Command View EVA														
3.3.x ¹ (SMI-S EVA 3.3) (SSSU Build 7 for 3.2)	•	•									•	•	•	•
4.0.x (EVAPerf 1.0) (SMI-S EVA 4.0) (SSSU 4.0.18)	•	•			•								•	
4.1.x ¹ (EVAPerf 1.0.x) (SMI-S EVA 4.1) (SSSU 4.1)	•	•	•	•	•	•					•			•
HP Replication software versions														
HP Business Copy EVA 2.3	•	•					•					•	•	•
HP Business Copy EVA 2.3.1	•	•	•				•		•			•	•	•
HP Replication Solutions Manager 1.0	•	•					•			•	•			
HP Replication Solutions Manager 1.1	•	•			•		•	•		•	•			
HP Replication Solutions Manager 1.2 ²		•	•	•	•	•			•	•	•			
HP Replication media kit and software compatibility														
HP Business Copy EVA 2.3.1	•	•	•				•		•		•			
HP Business Copy EVA 3.0 (05/05)	•	•					•	•					•	
HP Business Copy EVA 3.0 (09/05)		•	•		•	•			•					•
HP Business Copy EVA 3.1			•	•	•	•			•					•
HP Continuous Access EVA 2.0	•	•					•					•		
HP Continuous Access EVA 2.1 (05/05)	• ³	• ³					•	•					•	
HP Continuous Access EVA 2.1 (09/05)		• ³	•		•	•			•					•
HP Continuous Access EVA 2.2			•	•	•	•			•					•
Storage Management Appliance software														
Storage Management Appliance 2.1	•	•	•	•	•	•	•	•	•	•	•	•	•	•

¹Certified by SNIA's Conformance Test Program (CTP) .

²The RSM server software version is 1.2. The RSM host agent software version remains at 1.1.

³Replication between EVA3000/5000 arrays and EVA4000/6000/8000 arrays requires that the former have a minimum VCS version of 3.025.

HP StorageWorks EVA software deployment options

You can install HP StorageWorks EVA management and replication software on a management server. The management server types are:

General-purpose server: A server other than the HP OpenView Storage Management Appliance that runs customer applications, such as file and print services

HP OpenView Storage Management Appliance (SMA): A centralized, dedicated monitoring and management hardware-software solution for the storage area network (SAN)

Dedicated management server: A Windows host that is intended solely for HP storage software, such as HP OpenView Storage Node Manager, HP OpenView Storage Area Manager add-on software modules, or HP StorageWorks EVA software

HP ProLiant Storage Server: Specifically, the HP ProLiant DL380 G4 Storage Server (formerly the HP NAS 4000) and the HP ProLiant DL585 Storage Server (formerly the HP NAS 9000)

Required hardware

General-purpose server Dedicated management server	Recommended servers: HP ProLiant DL145, DL360 G4, and DL560 Processor: 1.26 GHz (minimum) Memory: 2 GB (minimum) Disk space requirements: <ul style="list-style-type: none">— 120 MB for Command View EVA installation— 10 MB for each managed array— 350 MB for HP Replication Solutions Manager installation— Additional 300–400 MB for HP Replication Solutions Manager installation to accommodate log and database growth— 10/100 Mps for RSM server to RSM host agent connectivity
Storage Management Appliance	G1, G2, G3
HP ProLiant Storage Server	HP ProLiant DL380 G4 Storage Server (base model) HP ProLiant DL380 G4 Storage Server (SAN model) HP ProLiant DL585 Storage Server HP ProLiant DL585 Dual Core Storage Server Note: In most configurations, the HP ProLiant DL380 SAN model is preferred.

Supported software for management server types

This table lists the software that is supported on each management server type. A bullet (•) indicates compatibility, a blank cell indicates no compatibility, and "N/A" indicates the software is not applicable to the management server type.

	General-purpose server	Storage Management Appliance	Dedicated management server	ProLiant Storage Server
Microsoft Cluster Server support ¹	•		•	•
HP StorageWorks Business Copy EVA 2.3 and later	•	•	•	•
HP StorageWorks Replication Solutions Manager 1.0 and later ²	•	•	•	•
HP StorageWorks Command View EVA 3.3 and later ³	•	•	•	•
HP StorageWorks Secure Path (required for multipath configurations)	•	N/A	N/A	•
HP StorageWorks Secure Path Manager	•	•	•	•
HP OpenView Storage Area Manager		•	•	
HSG Element Manager 1.0f	N/A	•	N/A	N/A
ISEE Remote Support (HP platforms only)	•	•	•	•
Number of HP StorageWorks Enterprise Virtual Arrays supported	16	16 ⁴	16	16
Operating system connectivity 3.0e OR Storport Driver	•	N/A	N/A	•
Operating systems ²	Microsoft Windows Server 2003 Standard and Enterprise Editions SP1 (32-bit) Microsoft Windows 2000 Server or Advanced Server SP3, SP4 (32-bit)	HP Storage Management Appliance software 2.1 (based on Microsoft Windows 2000)	Microsoft Windows Server 2003 Standard and Enterprise Editions SP1 (32-bit) Microsoft Windows 2000 Server or Advanced Server SP3, SP4 (32-bit)	Microsoft Windows Storage Server 2003 ³
WEBES (HP Services obligation required)	•	•	•	•

¹HP Command View EVA is not cluster aware on Microsoft Windows 2000 Advanced Server, Microsoft Windows Server 2003 Enterprise Edition, and Microsoft Windows Storage Server 2003 operating systems.

²Do not install HP StorageWorks Command View SDM 1.09 and HP Replication Solutions Manager 1.1 or 1.2 on the same management server.

³Software must be installed on the C:\ drive.

⁴When running HP Replication Solutions Manager or HP Business Copy EVA 2.3 on the SMA G1, the maximum number of EVAs supported is four.

Supported EVA software operating environments

This table lists the supported operating systems and environments for EVA software. A bullet (*) indicates support on all EVA models, an EVA model indicates support with that EVA model only, and a blank cell indicates no support. The environments are:
HP Business Copy EVA Basic I/O—The ability for HP Business Copy EVA (independent of HP Replication Solutions Manager) to work with this operating system. There may or may not be support through HP RSM on that operating system, as indicated in this table.

HP Continuous Access EVA Basic I/O—The ability for HP Continuous Access EVA (independent of HP Replication Solutions Manager) to work with this operating system. There may or may not be support through HP RSM on that operating system, as indicated in this table.

HP Replication Solutions Manager host agent—The HP RSM host agent is installed on servers running this operating system. The CLUI client is also supported on this operating system if the HP RSM host agent is installed.

HP StorageWorks DButil—The command line utility that facilitates application-consistent replication of Microsoft SQL Server 2000 databases. HP DButil is installed automatically with the HP RSM host agent on Windows servers.

HP Command View EVA and HP RSM Server—The ability for HP Command View EVA and HP RSM Server to work with this operating system.

HP SSSU—The ability for HP StorageWorks Storage Scripting Utility to be installed on and work with this operating system.

Operating system or server type	Environment						HP RSM host agent resource requirements							
	HP Business Copy EVA Basic I/O	HP Continuous Access EVA Basic I/O	HP RSM host agent ³	HP DButil	HP Command View EVA and HP RSM Server	HP SSSU	Processor	Memory	Disk Space					
									/opt	/etc	/var			
Storage Management Appliance					•									
Storage Management Appliance with HP OpenView Storage Area Manager					•									
Dedicated management server					•									
General-purpose server	•		•		•									
ProLiant Storage Server	•		•		•									
VMware ESX Server 2.5, 3.0		EVA3000/5000												
VMware ESX Server 2.5.1		• ¹												
Windows 2000 Server ²		EVA3000/5000	•			•	600 MHz	512 MB	150 MB					
Windows 2000 Advanced Server SP4 (32-bit) ²		•	•	•	•									
Windows Server 2003 Standard Edition ²		•	•	•	•									
Windows Server 2003 Enterprise Edition SP1 (32-bit) ²		•	•	•	•									
Windows Server 2003 Enterprise Edition SP1 (64-bit Itanium) ²		•	•	•			633 MHz	1 GB	250 MB					
Windows Server 2003 Datacenter Edition (64-bit Itanium)		•												
Windows Server 2003 Extended Systems Standard and Enterprise Editions (64-bit)		•		•										
HP-UX 11.0 PA-RISC		•				•	256 Mhz	256MB	385	2	82			
HP-UX PA-RISC 11.11 / 11iv1 (64b)		•	•			•	256 Mhz	256MB	385	2	82			
HP-UX 11.23 PI / 11iv2 (PA-RISC)		•				•	1 Ghz	512 MB	501	2	120			
HP-UX 11.23 PI / 11iv2 (Intel)		•	•			•								
Solaris 8		EVA3000/5000				•	250 Mhz	256 MB	315	2	116			
Solaris 9		•	• ⁴			•								
Solaris 10		EVA3000/5000				•								
HP OpenVMS 7.2.2		EVA3000/5000												
HP OpenVMS 7.3-1		EVA3000/5000												
HP OpenVMS 7.3-2		•				•								
HP OpenVMS 8.2 on Alpha servers		•				•								
Tru64 5.1a		EVA3000/5000												
Tru64 5.1b		•				•								
NetWare 5.1						•								
NetWare 6.0		EVA3000/5000												
Netware 6.5		EVA3000/5000				•								

All HP Business Copy EVA functions are supported on all EVA-supported operating systems.

AIX 5.1	All HP Business Copy EVA functions are supported on all EVA-supported operating systems.	EVA3000/5000											
AIX 5.2		•	• ⁵			•	340 MHz	256 MB	460	7	115		
AIX 5.3		EVA3000/5000				•							
SuSE 8 (32-bit) SP3		•	• ⁶			•	600 MHz	512 MB	320	5	120		
SuSE 8 (64-bit)		•				•							
SuSE SLES 9.0 (32-bit AMD)		•				•							
SuSE SLES 9.0 (32-bit Intel)		•				•							
SuSE SLES 9.0 (64-bit AMD)		•				•							
SuSE SLES 9.0 (64-bit Itanium)		•				•							
Red Hat AS 2.1 (32-bit) Update 5, 6		•				•							
Red Hat AS 3.0 (32-bit) Update 4		•	•			•							
Red Hat AS 2.1 (64-bit) Update 5, 6		•				•							
Red Hat AS 3.0 (64-bit) Update 4		•				•							
Red Hat AS 4.0 (32- and 64-bit)		•				•							

¹On EVA3000/5000, VMware ESX Server 2.5.1 is supported with VCS 3.028 only.

²This host agent on this operating system depends on SNIA libraries that are delivered with HP's SAN Infrastructure offerings. If you have not already done so, go to the Fibre Channel Host Bus Adapters section on the following web site and download the software for your HBA: <http://h18006.www1.hp.com/storage/saninfrastructure.html>.

³See the "Mounting host volumes" table for host volume mounting restrictions.

⁴The host agent on this operating system does not support VERITAS DMP when accessing an EVA4000, EVA6000, or EVA8000.

⁵The AIX host agent requires Maintenance Level 4 or later.

⁶The host agent for this operating system does not support Secure Path when accessing an EVA3000 or EVA5000.

RSM host agent support

This table describes RSM host agent 1.1 support for:

- Volume Manager
- Mounting host volume copies on the same host
- Multipath solutions
- Cluster software

Host operating system	Supported Volume Manager	Mounting a host volume copy on the same host as the source	Compatible multipath solution		Supported cluster software
			EVA3000/5000	EVA4000/6000/8000	
AIX	Native Logical Volume	Y (EVA3000/5000 only)	Secure Path 2.0D, SP2	MPIO 1.0.0.2 (Antemeta basic HP BC EVA support only, no host agent support)	
HP-UX	Native Logical Volume ²	Y	Secure Path 3.0F	Secure Path 3.0F, PVlinks (no VERITAS DMP)	Serviceguard
Linux Red Hat AS 3.0, Update 4	Sistina 1.08-2	N	QLogic failover driver 7.05.00 (no Secure Path)	QLogic failover driver 7.05.00	Serviceguard
Linux SuSE SLES 8.0	Sistina 1.08				
Solaris ¹	VERITAS Volume Manager	Y, except copies of Solaris disk groups	Secure Path 3.0D	MPxIO (no VERITAS DMP)	
Windows	Replication of Windows dynamic disks and VERITAS Volume Manager are not supported	Y, except copies of Windows Cluster Quorum disks in the same cluster	Secure Path 4.0C SP2-1 MPIO Basic Failover 1.01	Full featured MPIO DSM for EVA 1.00.02	Microsoft Cluster Server

¹The host agent on the Solaris 9 operating system does not support VERITAS Volume Manager when accessing an EVA4000, EVA6000, or EVA8000.

²Replication manager host volume job commands are supported only on HP-UX disks with Logical Volume Manager.

Browser support

This table lists the supported browsers and JRE versions you can use to access HP StorageWorks EVA software and Storage Management Appliance user interfaces from the corresponding operating system. The shaded rows indicate that you can browse only to a general-purpose server or dedicated management server, but not to the Storage Management Appliance.

Operating system	Required browser	Supported JRE
Windows 2000 Server	Internet Explorer 6.0 SP1	1.5.0_04 and later
Windows 2000 Advanced Server SP4 (32-bit)	Internet Explorer 6.0 SP1	1.5.0_04 and later
Windows 2000 Professional	Internet Explorer 6.0 SP1	1.5.0_04 and later
Windows Server 2003 Standard Edition	Internet Explorer 6.0 SP1	1.5.0_04 and later
Windows Server 2003 Enterprise Edition SP1 (32-bit)	Internet Explorer 6.0 SP1	1.5.0_04 and later
Windows XP Professional	Internet Explorer 6.0 SP1	1.5.0_04 and later
HP-UX PA-RISC 11.11/11iv1 (64-bit)	Mozilla 1.7.3	1.5.0_04 and later
HP-UX 11.23 PI 64	Mozilla 1.7.3	1.5.0_04 and later
Solaris 8	Mozilla 1.7.3	1.5.0_04 and later
Solaris 9	Mozilla 1.7.3	1.5.0_04 and later
HP OpenVMS 7.3-2	Mozilla 1.7	1.4.2 and later
HP OpenVMS 8.2	Mozilla 1.7	1.4.2_02 and later
Tru64 5.1b	Mozilla 1.7.5	1.4.2_02 and later
AIX 5.2 ¹	Mozilla 1.7.3	1.5.0_04 and later
AIX 5.3 ¹	Mozilla 1.7.3	1.4.2_02 and later
Red Hat AS 3.0 (32-bit)	Mozilla 1.7.3	1.5.0_04 and later

¹Browsing to HP Replication Solutions Manager on this operating system is not supported.

EVA host connectivity

For the supported operating systems of hosts accessing EVA storage, see the OS-specific connectivity installation guides and connectivity release notes.

1. Go to the array web site at <http://h18006.www1.hp.com/storage/arrayssystems.html>.
2. Select the virtual array system.
3. Click **Technical documentation**.
4. Select the connectivity guide for your operating system and EVA model.

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