

HP StorageWorks

4000/6000/8000 Enterprise Virtual Array connectivity 5.1A for Tru64 UNIX release notes

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About this document

This section describes the content reflected in this document, including:

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Release notes information

These release notes describe the following topics:

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Intended audience

These release notes are intended for:

- Customers who purchased the HP StorageWorks 4000/6000/8000 Enterprise Virtual Array (EVA4000/6000/8000) storage system to use with the Tru64 UNIX® operating system
- HP customer service personnel responsible for installing and maintaining devices connected to an EVA4000/6000/8000 storage system

Accessing future product updates

HP strongly recommends that customers sign up online using the Subscriber's choice web site: <http://www.hp.com/go/e-updates>.

- Subscribing to this service provides you with e-mail updates on the latest product enhancements, newest versions of drivers, and firmware documentation updates, as well as instant access to numerous other product resources.
- After signing up, you can quickly locate your products by selecting **Business support** and then **Storage** under Product Category.

Enhancements

This release includes the following enhancements:

- Support for EVA4000/6000/8000 controller software 5.100
- Support for Storage Management Appliance
- Support for a 4 Gb front end controller
- Support for RoHS-compliant hardware

EVA storage system

These release notes contain the latest product information at the time of this release.

The latest product support information and downloads for storage products are available on the HP storage web site:

<http://h18006.www1.hp.com/storage/index.html>

EVA documentation

A complete library of EVA4000/6000/8000 and related documentation is available on the following HP web sites:

<http://www.hp.com/go/eva4000>

<http://www.hp.com/go/eva6000>

<http://www.hp.com/go/eva8000>

Supported configurations

Supported configurations are described in the Enterprise Virtual Array QuickSpecs, available on the HP storage web site:

<http://h18006.www1.hp.com/storage/arrayssystems.html>

EVA configuration best practices

Although the EVA4000/6000/8000 is designed to work in a wide range of configurations, some of the configuration options can influence performance, capacity, or availability. If you have the necessary information, you can manage the configuration to optimize its attributes for a specific application. The configuration options include:

- Number of disk groups
- Type of disk group
- Type and number of disks in a disk group
- Vraid levels (0, 1, and 5)
- Disk failure protection level (none, single, and double)
- Cache settings

For more information on the configuration options, see the *HP StorageWorks Enterprise Virtual Array configuration best practices — white paper*:

<http://h20000.www2.hp.com/bc/docs/support/SupportManual/lpg29448/lpg29448.pdf>

EVA compatibility

This section lists the specifications at the time of this release. Some component versions may change due to revision. For the latest information, see the HP storage web site:

<http://h18006.www1.hp.com/storage/index.html>

Operating system specifications

Table 1 lists the operating system specifications.

Table 1 Operating system specifications

Tru64 UNIX version
5.1B-2 or later

 **NOTE:**

For the current Fibre Channel SCSI ECO kit for Tru64 UNIX, see the HP IT Resource Center web site: <http://www.itrc.hp.com>.

FCA support

Table 2 lists the supported Fibre Channel adapters (FCAs) and the required firmware versions.

Table 2 FCA support

FCA	Driver	Adapter firmware (minimum)
HP StorageWorks FCA2354 2 Gb, 64-bit/66MHz PCI PN DS-KGPSA-DA	Native	3.93a0
HP StorageWorks FCA2384 2 Gb, 64-bit/133MHz PCI-X PN DS-KGPSA-EA	Native	1.91x6
HP StorageWorks FCA2684 2 Gb, 64-bit/133MHz PCI-X PN DS-A5132-AA	Native	1.91x6
HP StorageWorks FCA2684DC 2 Gb, 64-bit/133MHz PCI-X Dual PN DS-A5134-AA	Native	1.91x6

Switch support

This release supports the Fibre Channel (FC) switches and firmware versions listed in the *HP StorageWorks SAN design reference guide*, which you can download from the HP StorageWorks web site:

<http://h18004.www1.hp.com/products/storageworks/san/documentation.html>



NOTE:

HP recommends that you *not* mix switch firmware versions in a SAN. It is a best practice to uniformly upgrade all switches in the SAN.

AlphaServer support

Table 3 lists the EVA-compatible AlphaServers.

Table 3 EVA-compatible AlphaServers

AlphaServer	DS-KGPSA-DA support	DS-KGPSA-EA support	DS-A5132-AA support	DS-A5134-AA support
DS10	Yes	Yes	No	No
DS15	Yes	Yes	Yes	Yes
DS20E	Yes	Yes	Yes	No
DS25	Yes	Yes	Yes	Yes
ES40	Yes	Yes	Yes	No
ES45	Yes	Yes	Yes	Yes
ES47	Yes	Yes	Yes	Yes
ES80	Yes	Yes	Yes	Yes
GS80	Yes	Yes	Yes	No
GS160	Yes	Yes	Yes	No
GS320	Yes	Yes	Yes	No
GS1280	Yes	Yes	Yes	Yes

 **NOTE:**

In order for the AlphaServer console to recognize all eight boot paths to the EVA8000 storage system, you must upgrade the console firmware to release 7.0 or later.

Multiple-path support

The Tru64 UNIX operating system includes multiple-path support. No additional software is required to achieve high-availability, multipath capability.

Single-path support

A Tru64 UNIX server requires a single FC adapter to support single-path mode.

 **NOTE:**

Do not use single-path mode in mission-critical environments.

Operating constraints

For information about operating constraints for the EVA4000/6000/8000 hardware and HP StorageWorks Command View EVA, see their release notes.

Failover/failback

Failback preference settings for the HSV controllers are specific to the operating system. See the *HP StorageWorks Tru64 UNIX connectivity for the Enterprise Virtual Array installation and reference guide* for more information.

Command View EVA and SSSU

Command View EVA 5.0 or later supports controller software 5.100.

The latest version of the Command View EVA and the Storage System Scripting Utility (SSSU) is available on the HP storage web site:

<http://h18006.www1.hp.com/products/storage/software/cmdvieweva/index.html>

Recommendations

This section contains HP recommendations to ensure proper operation of the EVA4000/6000/8000 storage system.

Controller code load usage

When a system with a maximum configuration is running at full capacity, it may experience a time-out condition before HSV code load is complete. HP recommends that you always upgrade multipathing software at an off-peak time.