

```
.feedback_submit { transform: translateX(280px) translateY(0px); font-weight: bold; } #tofeedback{ margin-top: 2px !important; color:#0057B8 !important; font-weight:600 !important; }
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Installation and Upgrade Checklist Report for Storage Foundation Cluster File System HA 5.0, Red Hat Enterprise Linux 4 , x86-64

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<p>Note: You have not selected the latest product version. Consider installing or upgrading to the latest version; otherwise, you may encounter issues that have already been fixed. To run a new report for the latest product version, select it from the Veritas product drop-down list.</p> <p>Array Support Libraries (ASLs)</p> <p>When installing Veritas products, please be aware that ASLs updates are not included in the patches update bundle. Please go to the Array Support Libraries (ASLs) to get the latest updates for your disk arrays.</p>											
▼ System requirements	Back to top										
Required number of CPUs: 2											
Recommended speed of CPUs: 1 GHz											
Required memory: 2 GB											
Required disk space:											
<table><tr><th>Partitions</th><th>Required disk space</th></tr><tr><td>/opt</td><td>701 MB</td></tr><tr><td>/root</td><td>55 MB</td></tr><tr><td>/usr</td><td>45 MB</td></tr><tr><td>/var</td><td>1 MB</td></tr></table>		Partitions	Required disk space	/opt	701 MB	/root	55 MB	/usr	45 MB	/var	1 MB
Partitions	Required disk space										
/opt	701 MB										
/root	55 MB										
/usr	45 MB										
/var	1 MB										
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The features in the list are enabled in this release.

Feature	Storage Foundation CFS
1-256 TB File System	✓
CFS Multi-transaction server	✓
Cluster File System	✓
Cluster Volume Manager	✓
Data management application programming interface (DMAPI)	✓
Database Dynamic Storage Tiering	✓
Database storage checkpoints & rollback	✓
Direct I/O	✓
Dirty region logging	✓
Dynamic LUN expansion	✓
Dynamic Multi-pathing	✓
Dynamic Storage Tiering	✓
Enclosure based naming	✓
File Change Log	✓
File system snapshots	✓
File system storage checkpoints	✓
FlashSnap: Database	✓
Flashsnap: Disk group split & join	✓
Flashsnap: Fast resynchronization	✓
Full size instant snapshots	✓
Hardware assisted copy	✓
Hot-relocation	✓
Import cloned LUN	✓
Named data streams	✓
Online file system defragmentation	✓
Online file system grow & shrink	✓
Online relay out	✓
Online volume grow & shrink	✓
Operations Manager	✓
Portable Data Containers (formerly known as Cross-Platform Data Sharing (CDS))	✓
Remote mirrors for campus clusters	✓
SCSI-3 based I/O fencing	✓
Site awareness with remote mirrors	✓
Space-optimized instant snapshot	✓
Split-mirror snapshot	✓
User & group quotas	✓

Volume Replicator option	Optional
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Product documentation		Back to top
Product guides		
Release Notes	 	Storage Foundation Cluster File System Release Notes - English
File System Guides	 	File System Administrator's Guide - English
	 	File System Programmer's Reference Guide - English
		Veritas File System Administrator's Guide - English
Storage Foundation Cluster File System Guides	 	Storage Foundation 5.0 Cluster File System Installation Guide - English
	 	Storage Foundation 5.0 Cluster File System Administrator's Guide - English
		Veritas Storage Foundation for Cluster File System Administrator's Guide - English
Manual pages		
Manual Pages		Storage Foundation Cluster File System Manual Pages - English
		File System Manual Pages - English

Patches for Storage Foundation Cluster File System HA and Platform			Back to top
Product (recommended)			
Patch	Date	Size	
sfha-rhel4_x86_64-5.0MP4	2010-04-11	1.67 GB	
5.0 MP2a	2007-07-05	3.2 GB	
5.0 MP1c	2007-02-25	1.29 GB	
Platform (required)			
No patches required.			

Platform configuration	Back to top
Unless otherwise stated, the specified Veritas product supports all platform kernel versions.	

Supported platform version

Product versionPlatform version5.0 Red Hat Enterprise Linux 4

Required platform packages:

- bash-3.0-19.3
- glibc-2.3.4-2.25
- compat-libstdc++-33-3.2.3-47.3
- libgcc-3.4.6-3
- db4-4.2.52-7.1
- pdcksh-5.2.14-30.3
- libstdc++-3.4.6-3
- parted-1.6.19-4.EL
- findutils-4.1.20-7.el4.1
- coreutils-5.2.1-31.4
- grep-2.5.1-32.2
- libacl-2.2.23-5.i386
- util-linux-2.12a-16.EL4.20
- ed-0.2-36
- module-init-tools-3.1-0.pre5.3.2

Related documentation

[Red Hat Enterprise Linux 4](#)

▼ Host bus adapter (HBA) parameters and switch parameters [Back to top](#)

Unless otherwise stated, the specified Veritas product supports all HBAs (except iSCSI HBAs) and fibre channel switches supported by the platform and storage array manufacturers listed in the hardware compatibility list (HCL). For more details, click the link to the [HCL](#).

▼ Operations Manager [Back to top](#)

Veritas InfoScale Operations Manager gives you a single, centralized management console for the InfoScale products. You can use it to monitor, visualize, and manage storage and cluster resources, and generate reports about these components in the Management Server domain. It can also help administrators centrally manage diverse data center environments. This section lists the documents for Veritas InfoScale Operations Manager 8.0.2.

Documentation

▼ Array Support Libraries (ASLs) [Back to top](#)

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Array family (model)	Documentation	Libraries	
3PAR E-Class, S-Class		libvx3par	See TechNote
Dell Compellent Storage Center 4		libvxcompellent	See TechNote
Dell EqualLogic PS3000 series		libvxeqlogic	See TechNote
Dell EqualLogic PS4000 series		libvxeqlogic	See TechNote
Dell EqualLogic PS5000 series		libvxeqlogic	See TechNote
Dell EqualLogic PS6000 series		libvxeqlogic	See TechNote
EMC CLARiiON AX series		libvxpp	The required ASL is already embedded in the install media
		libvxCLARiiON	The required ASL is already embedded in the install media
EMC CLARiiON CX series with PowerPath	CLARiiON CX Series	libvxpp	The required ASL is already embedded in the install media
EMC CLARiiON CX series	CLARiiON CX Series	libvxpp	The required ASL is already embedded in the install media
		libvxCLARiiON	The required ASL is already embedded in the install media
EMC CLARiiON CX3 series with PowerPath		libvxpp	The required ASL is already embedded in the install media
EMC CLARiiON CX3 series		libvxCLARiiON	The required ASL is already embedded in the install media
		libvxpp	The required ASL is already embedded in the install media
EMC CLARiiON CX4 series		libvxpp	The required ASL is already embedded in the install media
		libvxCLARiiON	The required ASL is already embedded in the install media
EMC CLARiiON CX4 series with PowerPath		libvxpp	The required ASL is already embedded in the install media
EMC Symmetrix 8000 series	EMC Symmetrix 8000 Series	libvxpp	The required ASL is already embedded in the install media
		libvxemc	The required ASL is already embedded in the install media
EMC Symmetrix DMX series	EMC Symmetrix DMX Architecture	libvxemc	The required ASL is already embedded in the install media
		libvxpp	The required ASL is already embedded in the install media
EMC Symmetrix VMAX series		libvxemc	The required ASL is already embedded in the install media
EMC VNX series		libvxCLARiiON	The required ASL is already embedded in the install media
Fujitsu ETERNUS DX400/DX500 /DX600 series		libvxFJTSYe8k	See TechNote
Fujitsu ETERNUS DX8000 series		libvxFJTSYe8k	See TechNote
Fujitsu ETERNUS2000 series	ETERNUS2000 Disk Storage Systems	libvxfjtsye2k	See TechNote
Fujitsu ETERNUS4000 series	ETERNUS4000 Disk Storage Systems	libvxFJTSYe8k	See TechNote
Fujitsu ETERNUS8000 series	ETERNUS8000 Disk Storage Systems	libvxFJTSYe8k	See TechNote
Fujitsu ETERNUS DX60		libvxfjtsye2k	See TechNote
Fujitsu ETERNUS DX80		libvxfjtsye2k	See TechNote
Fujitsu ETERNUS DX90		libvxfjtsye2k	See TechNote

Fujitsu ETERNUS VS850		libvxibmsvc	
Hewlett Packard Enterprise 2000 G2 series		libvxmsa2kfc_sa	
Hewlett Packard Enterprise EVA4400 /6400/8400		libvxhpeva	
Hewlett Packard Enterprise MSA2000fc series		libvxmsa2k	See TechNote
Hewlett Packard Enterprise P2000 G3 MSA series		libvxmsa2kfc_sa	
Hewlett Packard Enterprise P6000 EVA series		libvxhpeva	
Hewlett Packard Enterprise 3PAR F200 Storage		libvx3par	See TechNote
Hewlett Packard Enterprise 3PAR F400 Storage		libvx3par	See TechNote
Hewlett Packard Enterprise 3PAR StoreServ 10400 Storage		libvx3par	See TechNote
Hewlett Packard Enterprise 3PAR StoreServ 10800 Storage		libvx3par	See TechNote
Hewlett Packard Enterprise 3PAR StoreServ 7200 Storage		libvx3par	See TechNote
Hewlett Packard Enterprise 3PAR StoreServ 7400 Storage		libvx3par	See TechNote
Hewlett Packard Enterprise 3PAR StoreServ 7450 Storage		libvx3par	See TechNote
Hewlett Packard Enterprise 3PAR T400 Storage		libvx3par	See TechNote
Hewlett Packard Enterprise 3PAR T800 Storage		libvx3par	See TechNote
Hewlett Packard Enterprise EVA4000		libvxhpalua	The required ASL is already embedded in the install media
Hewlett Packard Enterprise EVA4100		libvxhpalua	The required ASL is already embedded in the install media
Hewlett Packard Enterprise EVA6000		libvxhpalua	The required ASL is already embedded in the install media
Hewlett Packard Enterprise EVA6100		libvxhpalua	The required ASL is already embedded in the install media
Hewlett Packard Enterprise EVA8000		libvxhpalua	The required ASL is already embedded in the install media
Hewlett Packard Enterprise EVA8100		libvxhpalua	The required ASL is already embedded in the install media
Hewlett Packard Enterprise MSA1500		libvxhpsa	See TechNote
Hewlett Packard Enterprise MSA2012sa		libvxmsa2kfc_sa	
Hewlett Packard Enterprise P9500		libvxpx12k	The required ASL is already embedded in the install media

Hewlett Packard Enterprise XP10000		libvxxp12k	The required ASL is already embedded in the install media
Hewlett Packard Enterprise XP12000		libvxxp12k	The required ASL is already embedded in the install media
Hewlett Packard Enterprise XP20000		libvxxp12k	The required ASL is already embedded in the install media
Hewlett Packard Enterprise XP24000		libvxxp12k	The required ASL is already embedded in the install media
Hitachi AMS/WMS series		libvxhdsalua	See TechNote
		libvxhdsalua	The required ASL is already embedded in the install media
Hitachi HUS 100 series	Hitachi Unified Storage 100 Family	libvxhdsalua	The required ASL is already embedded in the install media
		libvxhdsalua	See TechNote
Hitachi Lightning 9900V series	Lightning 9900V Series Enterprise Storage Systems	libvxhds9980	The required ASL is already embedded in the install media
Hitachi SMS/AMS2000 series		libvxhdsalua	See TechNote
		libvxhdsalua	The required ASL is already embedded in the install media
Hitachi Thunder 9500V series	Thunder 9500V Series Modular Storage Systems	libvxhdsalua	See TechNote
		libvxhdsalua	The required ASL is already embedded in the install media
Hitachi USP/NSC series		libvxhdsusp	The required ASL is already embedded in the install media
Hitachi USP/USPVM		libvxhdsusp	The required ASL is already embedded in the install media
Hitachi TMS1000		libvxhdsalua	See TechNote
		libvxhdsalua	The required ASL is already embedded in the install media
Hitachi VSP		libvxhdsusp	The required ASL is already embedded in the install media
IBM Storwize series		libvxibmsvc	
IBM System Storage DS6000 series	IBM System Storage DS6000 Series	libvxibmds6k	The required ASL is already embedded in the install media
IBM System Storage DS8000 series	IBM System Storage DS8000 series	libvxibmds8k	The required ASL is already embedded in the install media
IBM System Storage N series	IBM System Storage N series IBM System Storage N7000 Modular Disk Storage System	libvxnetapp	See TechNote
IBM System Storage XIV series		libvxxiv	See TechNote
NEC Symmetrix DMX-4		libvxpp	The required ASL is already embedded in the install media
		libvxemc	The required ASL is already embedded in the install media
NEC Symmetrix VMAX		libvxemc	The required ASL is already embedded in the install media
NetApp FAS2000/FAS900/FAS200 series		libvxnetapp	See TechNote
NetApp FAS3000/V3000 series		libvxnetapp	See TechNote
NetApp FAS6000/V6000 series		libvxnetapp	See TechNote
Oracle StorageTek 9900 series		libvxhds9980	The required ASL is already embedded in the install media
Oracle StorageTek 9985/9990 series		libvxhds9980	The required ASL is already embedded in the install media
Oracle StorageTek 6140 array		libsun61x0asl	See TechNote

Oracle StorageTek 9985V system		libvxhds9980	The required ASL is already embedded in the install media
Oracle StorageTek 9990V system		libvxhds9980	The required ASL is already embedded in the install media
Sun StorEdge 3510/3511		libvxsunse3k	See TechNote