.feedback_submit { transform: translateX(280px) translateY(0px); font-weight: bold; } #tofeedback{ margin-top: 2px !important; color:#0057B8 !important; font-weight:600 ! important; }

Installation and Upgrade Checklist Report for Storage Foundation Cluster File System HA 6.0, SUSE Linux Enterprise Server 11, x86-64

Index

Back to top

Important Notes

System requirements

Product features

Product documentation

Patches for Storage Foundation Cluster File System HA and Platform

End of Support Life information

Platform configuration

Host bus adapter (HBA) parameters and switch parameters

Operations Manager

Array Support Libraries (ASLs)

Important Notes

Back to top

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.

In the VxFS 6.0 release, you can create and mount only file systems with disk layout Version 7, Version 8 and Version 9. VxFS 6.0 does not support disk layout version 4 and version 6. You can upgrade these unsupported layout versions online using the vxupgrade utility before installing VxFS 6.0. Or after installing VxFS 6.0, you can convert version 4 offline using vxfsconvert or upgrade version 6 online using vxupgrade utility.

It is recommended to upgrade VxFS disk layouts to a supported version prior to installing VxFS 6.0. However, VxFS 6.0 can mount disk layout version 6 locally only to perform an online upgrade. Cluster mount for disk layout version 6 is not supported in VxFS 6.0.

Array Support Libraries (ASLs)

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.

• (

System requirements

Back to top

Required number of CPUs: 2

Recommended speed of CPUs: 1 GHz

Required memory: 2 GB Required disk space:

Partitions Minimum space required

Maximum space required

Recommended space



| /opt | 330 MB | 643 MB | 622 MB |
|-------|--------|--------|--------|
| /root | 60 MB | 61 MB | 61 MB |
| /usr | 77 MB | 78 MB | 78 MB |

Supported architectures:

AMD Opteron architecture [1]

Intel EM64T architecture [1]

1. Supports only the 64-bit versions of the software stacks.

| Product features | | Back to top |
|---|--------------------------|-------------|
| The features in the list are enabled in this release. | | |
| Feature | Storage Foundation CFSHA | |
| 1-256 TB File System | ✓ | |
| CFS Multi-transaction server | ✓ | |
| Cluster File System | ✓ | |
| Cluster Volume Manager | ✓ | |
| Compression | ✓ | |
| Concurrent I/O | ✓ | |
| Data management application programming interface (DMAPI) | ✓ | |
| Deduplication | ✓ | |
| Device names consistent across cluster nodes | ✓ | |
| Device names using Array Volume IDs | ✓ | |
| Direct I/O | ✓ | |
| Dirty region logging | ✓ | |
| Dynamic LUN expansion | ✓ | |
| Dynamic Multi-pathing | ✓ | |
| Enclosure based naming | ✓ | |
| File Change Log | ✓ | |
| File system snapshots | ✓ | |
| File system storage checkpoints | ✓ | |
| Flashsnap: Disk group split & join | ✓ | |
| Flashsnap: Fast resynchronization | ✓ | |
| Full size instant snapshots | ✓ | |
| Hardware assisted copy | ✓ | |
| Hot-relocation | ✓ | |
| Import cloned LUN | ✓ | |
| Keyless licensing | ✓ | |



| Mount lock | J |
|--|-------------|
| | * |
| Named data streams | Y |
| Online coordinator disk replacement | ✓ |
| Online file system defragmentation | ✓ |
| Online file system grow & shrink | ✓ |
| Online relay out | ✓ |
| Online volume grow & shrink | ✓ |
| Operations Manager | ✓ |
| Oracle Disk Manager (ODM) and Cached ODM (CODM) | ✓ |
| Partitioned directories | ✓ |
| Portable Data Containers (formerly known as Cross-Platform Data Sharing (CDS)) | ✓ |
| Remote mirrors for campus clusters | ✓ |
| Rolling upgrade | ✓ |
| SCSI-3 based I/O fencing | ✓ |
| SSD device exploitation | ✓ |
| Site awareness with remote mirrors | ✓ |
| SmartMove | ✓ |
| SmartTier (formerly Dynamic Storage Tiering) | ✓ |
| Space-optimized instant snapshot | ✓ |
| Split-mirror snapshot | ✓ |
| Thin storage reclamation | ✓ |
| User & group quotas | ✓ |
| iSCSI device support | ✓ |
| File Replicator option | Optional |
| Replicator option (formerly Volume Replicator) | Optional |
| Database storage checkpoints & rollback | Oracle only |
| FlashSnap: Database | Oracle only |
| SmartTier for Oracle (formerly Database DST) | Oracle only |
| | |

| ▼ Product documentation | Back to top |
|---------------------------|--|
| Product guides | |
| Release Notes | Veritas Storage Foundation Cluster File System High Availability Release Notes - English |
| Storage Foundation Guides | Veritas File System Programmer's Reference Guide - English |
| | Veritas Storage Foundation Cluster File System High Availability Administrator's |



Storage Foundation Cluster File System High Availability Guides

Guide - English

📆 📆 Veritas Storage Foundation Cluster File System High Availability Installation Guide -

English

Patches for Storage Foundation Cluster File System HA and Platform

Back to top

| Product (recommended) | | | |
|---------------------------|------------|-----------|--|
| Patch | Date | Size | |
| cpi-6.0P3 | 2014-06-26 | 9.59 KB | |
| cpi-6.0RP1P2 | 2012-06-19 | 2.82 KB | |
| sfha-sles11_x86_64-6.0RP1 | 2012-03-22 | 204.52 MB | |

Platform (required)

No patches required.

End of Support Life information

Back to top

Last updated on 2024-03-25. Refer to support fundamental for more information about support.

Release Date(GA) **Extended Support Starts Sustaining Support Starts** End of Support Life Date(EOSL)

2011-12-18 2026-12-30 2018-12-01 2020-12-30

Platform configuration

Back to top

Unless otherwise stated, the specified Veritas product supports all platform kernel versions.

Supported platform version. Last updated on 2018-06-12

Product versionPlatform version6.0SP1

Required platform packages:

parted-1.8.8-102.21.8.x86_64

glibc-32bit-2.11.1-0.17.4.x86_64

pam-32bit-1.0.4-0.5.12.x86_64

libgcc43-32bit-4.3.4_20091019-0.7.35.x86_64

libstdc++43-32bit-4.3.4_20091019-0.7.35.x86_64

glibc-2.11.1-0.17.4.x86_64

libacl-32bit-2.2.47-30.34.29.x86_64

findutils-4.4.0-38.24.11.x86_64

ed-0.2-1001.22.x86_64



coreutils-6.12-32.17.x86_64 module-init-tools-3.11.1-1.3.5.x86_64 libgcc43-4.3.4_20091019-0.7.35.x86_64 libacl-2.2.47-30.34.29.x86_64 libstdc++43-4.3.4_20091019-0.7.35.x86_64 ksh-93t-9.9.8.x86_64

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

| Array family (model) | Documentation | Libraries | |
|-----------------------------|---------------|--|---|
| 3PAR E-Class, S-Class | | libvx3par (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| Dell EMC CLARiiON AX series | | libvxCLARiiON (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxCLARiiON (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dell EMC CLARiiON CX series | | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxCLARiiON (embedded in the | |



| | package VRTSaslapm) | See TechNote |
|------------------------------------|--|---|
| | libvxCLARiiON (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dell EMC CLARiiON CX3 series | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| | libvxCLARiiON (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dell EMC CLARiiON CX4 series | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| Dell EMC EqualLogic PS3000 series | libvxeqlogic (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dell EMC EqualLogic PS4000 series | libvxeqlogic (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dell EMC EqualLogic PS5000 series | libvxeqlogic (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dell EMC EqualLogic PS6000 series | libvxeqlogic (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dell FMC Symmetric 2000 paries | libvxemc (embedded in the package VRTSaslapm) | See TechNote |
| Dell EMC Symmetrix 8000 series | libvxemc (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dell FMC Symmetric DMV paries | libvxemc (embedded in the package VRTSaslapm) | See TechNote |
| Dell EMC Symmetrix DMX series | libvxemc (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dell EMC Symmetrix DMX series with | libvxemc (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| PowerPath | libvxemc (embedded in the package VRTSaslapm) | See TechNote |
| Dell EMC Symmetric VMAY sories | libvxemc (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dell EMC Symmetrix VMAX series | libvxemc (embedded in the package VRTSaslapm) | See TechNote |
| Dell EMC Symmetrix VMAX series | libvxemc (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Son Emo Symmotific vitil at conco | | |



| with PowerPath | | libvxemc (embedded in the package VRTSaslapm) | See TechNote |
|-------------------------------|---|--|---|
| | ell EMC Unity series | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| Dell EMC Unity series | | libvxCLARiiON (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| Dell EMC VMAX3/VMAX All Flash | | libvxemc (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Family series | | libvxemc (embedded in the package VRTSaslapm) | See TechNote |
| Dell EMC VMAX3/VMAX All Flash | | libvxemc (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Family series with PowerPath | | libvxemc (embedded in the package VRTSaslapm) | See TechNote |
| | ell EMC VNX series | libvxCLARiiON (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dell EMC VNX series | | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| Dell EMC VNX2 series | | libvxCLARiiON (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxCLARiiON (embedded in the package VRTSaslapm) | embedded in the install media See TechNote The required ASL is already embedded in the install media See TechNote The required ASL is already embedded in the install media See TechNote The required ASL is already embedded in the install media See TechNote See TechNote See TechNote See TechNote The required ASL is already |
| | | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| Dell EMC VNX2e series | | libvxCLARiiON (embedded in the package VRTSaslapm) | |
| | | libvxCLARiiON (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxInvista (embedded in the package VRTSaslapm) | See TechNote |
| ell EMC VPLEX | libvxInvista (embedded in the package VRTSaslapm) | See TechNote | |
| | | libvxInvista (embedded in the package | The required ASL is already |



| | | VRTSaslapm) | embedded in the install media |
|---|----------------------------------|--|---|
| Fujitsu ETERNUS DX400/DX500 /DX600 series | | libvxFJTSYe8k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Fujitsu ETERNUS DX60/DX80/DX90 /DX100/DX200 series | | libvxfjtsye2k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Fujitsu ETERNUS DX8000 series | | libvxFJTSYe8k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Fujitsu ETERNUS2000 series | ETERNUS2000 Disk Storage Systems | libvxfjtsye2k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Fujitsu ETERNUS4000 series | ETERNUS4000 Disk Storage Systems | libvxFJTSYe8k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Fujitsu ETERNUS8000 series | ETERNUS8000 Disk Storage Systems | libvxFJTSYe8k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Fujitsu FibreCAT SX80/100 series | | libvxfsc (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxibmsvc (embedded in the package VRTSaslapm) | See TechNote |
| Fujitsu ETERNUS VS850 | | libvxibmsvc (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxibmsvc (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hewlett Packard Enterprise 2000 G2 series | | libvxmsa2kfc_sa (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hewlett Packard Enterprise 3PAR F/T- Class, StoreServ 7000/8000/9000 /10000/20000 Storage | | libvx3par (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hewlett Packard Enterprise EVA4000 | | libvxhpalua (embedded in the package VRTSaslapm) | See TechNote |
| (6000/8000 | | libvxhpalua (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hewlett Packard Enterprise EVA4100 | | libvxhpalua (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| · /6100/8100 | | libvxhpalua (embedded in the package VRTSaslapm) | See TechNote |
| Hewlett Packard Enterprise EVA4400 | | libvxhpalua (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| /6400/8400 series | | libvxhpalua (embedded in the package VRTSaslapm) | See TechNote |
| Hewlett Packard Enterprise | | libvxmsa2k (embedded in the package | The required ASL is already |



| MSA2000fc series | VRTSaslapm) | embedded in the install media |
|--|--|---|
| Hewlett Packard Enterprise P2000 G3 MSA series | libvxmsa2kfc_sa (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hewlett Packard Enterprise P6000 | libvxhpalua (embedded in the package VRTSaslapm) | See TechNote |
| EVA series | libvxhpalua (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxxp256 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hewlett Packard Enterprise XP10000 /12000 | libvxxp1281024 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxxp12k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxxp1281024 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hewlett Packard Enterprise XP20000 /24000 | libvxxp12k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxxp256 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxxp1281024 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hewlett Packard Enterprise P9500 | libvxxp12k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxxp256 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxxp256 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hewlett Packard Enterprise XP7 | libvxxp1281024 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxxp12k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxhdsalua (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hitachi AMS/WMS series | libvxhdsalua (embedded in the package VRTSaslapm) | See TechNote |
| | libvxhdsalua (embedded in the package VRTSaslapm) | See TechNote |
| | libvxhdsalua (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |



| Hitachi HUS 100 series | Hitachi Unified Storage 100 Family | libvxhdsalua (embedded in the package VRTSaslapm) | See TechNote |
|------------------------------|--|---|---|
| | | libvxhdsalua (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxhdsalua (embedded in the package VRTSaslapm) | See TechNote |
| Hitachi SMS/AMS2000 series | | libvxhdsalua (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxhdsalua (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxhdsalua (embedded in the package VRTSaslapm) | See TechNote |
| Hitachi Thunder 9500V series | Thunder 9500V Series Modular Storage Systems | libvxhdsalua (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxhdsalua (embedded in the package VRTSaslapm) | • |
| | | libvxhdsusp (embedded in the package VRTSaslapm) | , |
| Like alsi HODAIOO aasiaa | | libvxhdsusp (embedded in the package VRTSaslapm) | See TechNote |
| Hitachi USP/NSC series | | libvxhds9980 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxhds (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxhds (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxhdsusp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hitachi USPV/USPVM | | libvxhdsusp (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxhds9980 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxhds (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxhdsusp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hitachi VSP G series | | libvxhdsusp (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxhds9980 (embedded in the | The required ASL is already |



| | | package VRTSaslapm) | embedded in the install media |
|------------------------------|---|---|---|
| | | libvxhds9980 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hitachi VSP Gx00/Fx00 series | libvxhds (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media | |
| | libvxhdsusp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media | |
| | | libvxhdsusp (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxhdsusp (embedded in the package VRTSaslapm) | See TechNote |
| Lita shi 0070\/ | | libvxhds9980 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Tillaciii 9970V | | libvxhds (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxhdsusp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | Hitachi 9980 | libvxhdsusp (embedded in the package VRTSaslapm) | See TechNote |
| Lita shi 0000 | | libvxhds9980 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Hitaciii 9960 | | libvxhds (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| itachi 9980 | libvxhdsusp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media | |
| | achi 9970V achi 9980 achi TMS1000 | libvxhdsalua (embedded in the package VRTSaslapm) | See TechNote |
| Hitachi TMS1000 | | libvxhdsalua (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxhdsalua (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxhds (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Llitachi VCD | Hitachi VSP | libvxhdsusp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| milachi VSP | | libvxhdsusp (embedded in the package VRTSaslapm) | See TechNote |
| | libvxhds9980 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media | |
| | | | |



| Huawei OceanStor Series | | libvxhuawei (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
|----------------------------------|--|--|---|
| | | libvxhuawei (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxhuawei (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxhuawei (embedded in the package VRTSaslapm) | See TechNote |
| Huawei S5000 series | | libvxhuawei (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxhuawei (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxhuawei (embedded in the package VRTSaslapm) | See TechNote |
| Huawei VIS series | | libvxhuawei (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxhuawei (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxhuawei (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxhuawei (embedded in the package VRTSaslapm) | See TechNote |
| IBM Spectrum Virtualize series | | libvxibmsvc (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxibmsvc (embedded in the package VRTSaslapm) | See TechNote |
| | libvxibmsvc (embedded in the package VRTSaslapm) | See TechNote | |
| IBM Storwize series | | libvxibmsvc (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxibmsvc (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxibmsvc (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxlsiall (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| IBM System Storage DS3000 series | | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxlsiall (embedded in the package | |



| | | VRTSaslapm) | See TechNote |
|---|--|---|---|
| IBM System Storage DS5000 series | | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxlsiall (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| BM System Storage DS6000 series | IBM System Storage DS6000 Series | libvxibmds6k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| IBM System Storage DS8000 series IBM System Storage DS8000 series package VRTSaslapm package VRTSaslapm libvxibmds8k (embedden) | IDM 0 | libvxibmds8k (embedded in the package VRTSaslapm) | See TechNote |
| | libvxibmds8k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media | |
| BM System Storage N series | IBM System Storage N series IBM System Storage N7000 Modular Disk Storage System | libvxnetapp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| BM System Storage XIV series | | libvxxiv (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| IBM LotalStorage DS4000 series | | libvxlsiall (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | IBM DS4000 series: Overview - IBM TotalStorage Disk Storage Systems | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| | | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| BM DS3950 | | libvxxiv (embedded in the package VRTSaslapm) libvxlsiall (embedded in the package VRTSaslapm) ge libvxlsiall (embedded in the package VRTSaslapm) See TechNote VRTSaslapm) libvxlsiall (embedded in the package VRTSaslapm) See TechNote VRTSaslapm) See TechNote See TechNote VRTSaslapm) | The required ASL is already embedded in the install media |
| | | | See TechNote |
| IBM DS5020 | | | See TechNote |
| | | | See TechNote |
| | | libvxlsiall (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| NetApp AFF Series | | libvxnetapp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | libvxnetapp (embedded in the | The required ASL is already |



| NetApp E_SERIES | package VRTSaslapm) | embedded in the install media |
|--|---|---|
| NetApp FAS2000/FAS900/FAS200 series | libvxnetapp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| NetApp FAS3000/V3000 series | libvxnetapp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| NetApp FAS6000/V6000 series | libvxnetapp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| NetApp FAS8000/FAS9000 Series | libvxnetapp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxlsiall (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Oracle Storage 6580/6780 series | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| | libvxlsiall (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Oracle StorageTek 2500 series | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| | libvxhdsusp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Oroglo Storogo Toly 0000 goring | libvxhdsusp (embedded in the package VRTSaslapm) | See TechNote |
| Oracle StorageTek 9900 series | libvxhds9980 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxhds (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxhdsusp (embedded in the package VRTSaslapm) | See TechNote |
| Oracle Otavara Tale 0005 (0000 paris- | libvxhds9980 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Oracle StorageTek 9985/9990 series | libvxhds (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxhdsusp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxlsiall (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | | |



| Oracle StorageTek 6140 array | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
|---------------------------------------|--|---|
| | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| | libvxhds (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Ornala Otana na Tala 0005) / arratana | libvxhdsusp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Oracle StorageTek 9985V system | libvxhdsusp (embedded in the package VRTSaslapm) | See TechNote |
| | libvxhds9980 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxhds (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| 2 | libvxhdsusp (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Oracle StorageTek 9990V system | libvxhdsusp (embedded in the package VRTSaslapm) | See TechNote |
| | libvxhds9980 (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| | libvxlsiall (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |
| Dracle Sun Storage 6180 array | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| | libvxlsiall (embedded in the package VRTSaslapm) | See TechNote |
| (-IO ISE2400 | libvxxiotechE5k (embedded in the package VRTSaslapm) | The required ASL is already embedded in the install media |

