

# Veritas™ Operations Manager 4.0 Release Notes



# Veritas™ Operations Manager Release Notes

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# Overview of this release

This chapter includes the following topics:

- [About Veritas Operations Manager](#)
- [What's new in Veritas Operations Manager 4.0?](#)
- [Issues fixed in the Veritas Operations Manager 4.0 release](#)

## About Veritas Operations Manager

Veritas Operations Manager by Symantec gives you a single, centralized management console for the Veritas Storage Foundation and High Availability products. You can use it to monitor, visualize, and manage storage and cluster resources, and generate reports about them. Veritas Operations Manager lets administrators centrally manage diverse datacenter environments.

In Veritas Operations Manager, you can establish user credentials such that authorized users can access the product to perform sensitive management tasks, and other users can perform only a more basic set of functions.

A typical Veritas Operations Manager deployment consists of the following:

- Management Server  
See "[Management Server](#)" on page 14.
- Managed hosts  
See "[Managed host](#)" on page 14.

For more information on managing security roles and users accounts, see the *Veritas Operations Manager Administrator's Guide*.

## Management Server

In a centrally managed deployment, you must configure one host as Management Server. Management Server receives information about all the resources in its domain. When you log on to Management Server, you can gain access to the resources on different hosts within the centrally-managed deployment.

When you install Management Server, the Web Server component is installed automatically.

You can use the Web Server on Management Server to access the managed hosts in the centrally managed deployment. You log on to the Management Server URL and Web Server port 14161 (for example, <https://myhost.example.com:14161>).

## Managed host

A managed host runs at least one Storage Foundation and High Availability product, and belongs to a central management domain controlled by Management Server.

Managed hosts include the following:

- Hosts with Storage Foundation 4.x, or later, on all supported platforms
- Hosts with Storage Foundation and High Availability 3.5 on HP-UX
- Hosts with Storage Foundation and High Availability 4.x, or later, on all supported platforms

Typically, a managed host is a production server on which you install and run Storage Foundation and High Availability product components. A typical site can have thousands of hosts using some or all of the Storage Foundation and High Availability products. In Veritas Operations Manager, Management Server is also configured as a managed host. You can manage Management Server itself as part of a central management domain.

In a centrally managed deployment, managed hosts relay information about storage network resources and applications to Management Server. Management Server coalesces the data it receives from the managed hosts within its database. Using this coalesced data, the Veritas Operations Manager Console can present centralized views and reports.

## Standalone (unmanaged) host

A standalone (unmanaged) host is a Storage Foundation host that has been configured so it does not belong to a central management domain.

To manage individual Storage Foundation hosts, you can install and use the Java-based Veritas Enterprise Administrator. This console lets you manage hosts using the Storage Foundation products installed on them.

If you want a standalone host to participate in the central management domain, you must update it by installing the Veritas Operations Manager host management package.

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**Note:** You can convert any standalone host to a managed host. However, because Management Server is also a managed host, you cannot configure it to be a standalone host.

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## What's new in Veritas Operations Manager 4.0?

This release of Veritas Operations Manager includes the following new features and enhancements.

### Server virtualization and storage discovery

This release of Veritas Operations Manager provides you an efficient way of discovering and managing your virtual storage and infrastructure assets.

Veritas Operations Manager helps you view the following relationships:

- Applications in your datacenter that Veritas Operations Manager manages and the virtual hosts on which they are running.
- Physical storage in your datacenter that is exported to the virtual machines.

Veritas Operations Manager supports the following virtualization technologies:

**Table 1-1** Virtualization technology discovery methods

Virtualization technology	Discovery by Veritas Operations Manager
VMware virtualization technology	<p>A designated Control Host discovers the VirtualCenter servers in the datacenter. This discovery displays the ESX servers that the VirtualCenter server manages and the virtual machines that are configured on the ESX servers.</p> <p><b>Note:</b> You must install the Control Host Add-on on the hosts that you want to designate as Control Hosts.</p>

**Table 1-1** Virtualization technology discovery methods (*continued*)

Virtualization technology	Discovery by Veritas Operations Manager
Solaris Zones	The Zones agentlet that is present in the <code>VRTSsfmh</code> package, which is installed on a Solaris managed host, discovers the Global Zone as well as the non-Global Zones that are configured on the Global Zone.
Logical Domains (LDom)	The LDom agentlet that is present in the <code>VRTSsfmh</code> package, which is installed on a Solaris managed host discovers the LDom Server that is configured on the host. This discovery displays the LDom that are configured on the LDom Server.

Also, you can generate the following reports that displays the details of the server virtual environment that Veritas Operations Manager discovers:

- **All Virtual Machines**
- **All Virtualization Servers**
- **All Datastores**

## Windows Management Server in high availability environment

This release of Veritas Operations Manager lets you configure Windows Management Server in the high availability environment. You can configure Windows Management Server with versions Windows 2008 (64-bit) and Windows 2008 R2 (64-bit) in the high availability environment. Also, you must use a two-node VCS cluster in which Storage Foundation for Windows HA 5.x is installed. You can perform this configuration only in the failover mode. However, you cannot enable the disaster recovery feature on the Windows Management Server-HA setup .

## Storage provisioning and volume migration support for Windows operating system

The Veritas Storage Foundation Add-on for Storage Provisioning supports creation of volumes and file systems based on certain specifications. These specifications such as LUN type, volume layouts, and disk space are stored in the templates. These templates can be created from scratch, or by pointing at an existing golden image of a volume or a file system. With Veritas Operations Manager 4.0, this



add-on can be used to create volumes and NTFS file systems based on a template on the hosts running Windows operating system. To perform these operations, you need Management Server version 4.0, or later. For 3.1 managed hosts, synchronous approach is followed for storage provisioning. For 4.0 managed hosts, the storage provisioning takes place asynchronously. This is applicable for Windows and UNIX managed hosts.

## Server capacity management

Veritas Operations Manager further extends its capabilities in virtual infrastructure management by introducing support for Solaris Logical Domains (LDMs). The Veritas Operations Manager LDM Capacity Management Add-on lets you manage the activities that are related to LDMs space allocation and management. It lets you manage physical and virtual servers in the environment that contains pools of physical servers. Using the LDM Capacity Management Add-on, you can reserve space for LDMs on servers (cluster nodes). Veritas Operations Manager discovers the LDMs, and correlates them with the reserved entries.

## Package anomalies

The Veritas Operations Manager Package Anomaly Add-on compares a set of servers against a set of packages in an attempt to find the systems that are non-standard, or have installations different than other similar or related systems in the datacenter. The results are displayed on a graphical report that facilitates spotting anomalies.

## Cluster server password management for Veritas Operations Manager users

The Veritas Operations Manager Add-on for Veritas Cluster Server User Password Management lets Veritas Operations Manager administrator change a user's cluster authentication password collectively for multiple clusters. Using the Veritas Operations Manager console, you can select clusters, and enter the desired user's name on the **Cluster** page. You can enter a new cluster authentication password meeting the password complexities requirements for one or more clusters for the selected user. The add-on eliminates the need to manually change a user's password for all clusters, thereby resulting in reduced administrative efforts and time.

## Centralized management of the Storage Foundation operations

Using the new prebundled Veritas Operations Manager Add-on for Storage Foundation Administration, you can perform some of the important Storage Foundation operations from the centralized console of Veritas Operations Manager without using the **Administer** link. These operations are also supported from the business entity level, which lets you perform these operations across the hosts in your datacenter, in contrast to the features available through the Veritas Enterprise Administrator console and the Veritas Operations Manager Add-on for Storage Foundation Administration and the Windows Admin Add-on earlier. The Veritas Operations Manager Add-on for Storage Foundation Administration provides you a uniform experience across Windows and UNIX hosts.

## Support for discovery of Windows Logical Disk Manager

This release of Veritas Operations Manager supports the discovery of Windows LDM, the native volume manager for Windows 2003 and 2008 environments, that does not have Storage Foundation for Windows installed. Veritas Operations Manager 4.0 discovers Windows LDM partitions, dynamic volumes, and file systems with end-to-end correlation from file systems to volumes and partitions to underlying disks. Veritas Operations Manager also discovers correlation of MS-SQL databases to file systems mounted on LDM volumes or partitions that contain the files used by MS-SQL databases. However, Veritas Operations Manager does not discover any Microsoft Cluster Server (MSCS) resources and their correlation to Windows LDM volumes and file systems.

## Improved Management Server upgrade

The procedure to upgrade Veritas Operations Manager has been improved in version 4.0. When you launch the installer to upgrade to version 4.0, the installer first attempts to upgrade the database. If the database upgrade fails, the installer rolls back the changes and ensures that the previous version of the product is restored, and is operational. It also stores the required information that can help investigate the cause of the upgrade failure.

## Support for backup and restore of the Veritas Operations Manager database

Veritas Operations Manager 4.0 includes the `vom_bkup.pl` backup script. It can be used along with your existing backup tools to take periodic backups of the Veritas Operations Manager database, and its configuration.

In this release, you can use the backup script to do the following:

- Back up and restore the Veritas Operations Manager database in a non-high availability configuration on UNIX and Windows.
- Back up the Veritas Operations Manager database in a high availability configuration on UNIX.

## Elaborate information on the product licenses through the enhanced console

In this release, the Veritas Operations Manager console displays a more elaborate information on the licenses that are deployed for the products that are installed on your hosts. The newly introduced **VOM Management Entitlement Report** lets you view the details of the licenses that are required to report to Veritas Operations Manager Enterprise Server.

In addition to the various licenses views available in the previous releases of Veritas Operations Manager, the enhanced console provides you the information on the accountable deployments in your datacenter that are tracked by the presence of the highest version of the corresponding package if licenses are deployed for multiple versions of a product on a host.

## Composite Business Entities

This release of Veritas Operations Manager also introduces composite business entities. With composite business entities, the administrator can group one or more business entities of similar type, and treat them as a single object. This mechanism lets you perform various tasks collectively on the added business entities. A composite business entity can have only single level of business entities hierarchy. Note that a composite business entity cannot contain other composite business entities.

## Solutions to create scripts

The Veritas Operations Manager Scripting Add-on lets you create a script solution with scripts, schedule it, and run it on the specified hosts from the Management Server console. The add-on renders the output of the executed scripts.

## Fault and fault definition suppression management

The users can suppress faults and the fault definitions using Veritas Operations Manager user interface. The following features are provided for the fault suppression management:

- Ability to temporarily hide one or more faults.

- Ability to disable the selected faults for the affected fault sources.
- Ability to disable all the faults for the affected fault sources.
- Ability to disable the fault definition itself.

## Issues fixed in the Veritas Operations Manager 4.0 release

[Table 1-2](#) lists the Management Server issues that have been fixed in the Veritas Operations Manager 4.0 release.

**Table 1-2** Management Server issues fixed in Veritas Operations Manager 4.0

Incident	Description
2169880	The Veritas Operations Manager database does not start on Management Server on Linux because the default locale setting is set to <code>en_US.iso88591</code> .
2211219	Hosts that are included in a business entity cannot be administered using the Add-on for Storage Foundation Administration on UNIX.
2250601	On Management Server on Windows, the <code>perl.bin</code> process consumes large amounts of memory when the server is down for some time.
2275610	The LDAP configuration wizard does not ask for a group name.
2279189	Management Server configuration fails on CentOS 5.5 due to missing <code>libstdc++.so.5</code> .
2302317	The resource dependency configuration fails if there is a dash (-) in the resource name.
2331797	Two different enclosures are displayed (by in-band and out-of-band discovery) for USP-V R600 arrays.
2337052	The Veritas Operations Manager install hangs on Windows due to incorrect environment variable settings.
2340557	The Storage Insight Add-on does not discover enclosures after Management Server failover.
2340562	The special characters that are used in an LDAP password can cause Veritas Operations Manager login failures.
2347862	Users cannot log in to Management Server on Windows after upgrade from Veritas Operations Manager 3.0 due to left over lock files.

**Table 1-2** Management Server issues fixed in Veritas Operations Manager 4.0  
*(continued)*

Incident	Description
2349041	The VVR Behind By Time is displayed in incorrect format for managed hosts on Windows.

**Table 1-3** lists the managed host issues that have been fixed in the Veritas Operations Manager 4.0 release.

**Table 1-3** Managed host issues fixed in Veritas Operations Manager 4.0

Incident	Description
2085735	The Veritas Operations Manager managed host discovery can hang due to an invalid search path that is built into the discovery commands.
2167009	Veritas Operations Manager shows that an AIX host is down due to incorrect discovery of MAC address.
2181419	A memory leak occurs in the <code>vxdclid</code> daemon on hosts with Storage Foundation versions before version 5.0 MP3.
2188779	Volumes that are mirrored across enclosures are incorrectly shown to be on one enclosure.
2218878	Veritas Operations Manager does not discover encapsulated root file systems.
2244301	Veritas Operations Manager installation incorrectly removes the <code>/etc/vx/bin</code> link on AIX.
2252838	The <code>vxdclid</code> daemon core dumps when <code>vxlist</code> is run after Veritas Operations Manager upgrade on HP-UX 11.23.
2279349	JumpStart install on Solaris 10 hosts can hang because of a Solaris SMF multi-user dependency.
2282366	Veritas Operations Manager shows the count of the active DMP paths incorrectly.
2293546	Veritas Operations Manager incorrectly shows the cluster type as RAC if a cluster contains a failover service group for Oracle.
2343143	The <code>vxdclid</code> daemon core dumps on AIX hosts with Storage Foundation 4.0 MP4.
2349005	The <code>xprt1c</code> process on a managed host consumes large amount of memory and CPU when Management Server is down for some time.

**Table 1-3** Managed host issues fixed in Veritas Operations Manager 4.0  
(continued)

Incident	Description
2350685	An <code>xprtld</code> down fault is incorrectly reported when a managed host reports to multiple Management Servers, and one Management Server is down.

# System requirements

This chapter includes the following topics:

- [Operating system requirements](#)
- [Third-party required libraries](#)
- [System resource requirements](#)
- [Supported hardware](#)
- [Web browser requirements](#)
- [Network and firewall requirements](#)
- [About the consumption of the managed host components](#)

## Operating system requirements

[Table 2-1](#) provides an overview of Veritas Operations Manager operating system requirements for Management Server:

**Table 2-1** Veritas Operations Manager operating system requirements for Management Server

Operating system supported	Notes
Red Hat Enterprise Linux 4.0 Update 3 Red Hat Enterprise Linux 5.0 Red Hat Enterprise Linux 5.1 Update 1 Red Hat Enterprise Linux 5.2 Red Hat Enterprise Linux 5.3 Red Hat Enterprise Linux 5.4 Red Hat Enterprise Linux 5.5 Red Hat Enterprise Linux 6	x86 64-bit is the supported architecture.
SUSE Linux Enterprise Server 9 SUSE Linux Enterprise Server 10 SUSE Linux Enterprise Server 11	x86 64-bit is the supported architecture.
Solaris 10	SPARC is the supported architecture.
Windows 2003 Windows 2008 Windows 2008 R2	x86 64-bit is the supported architecture.

[Table 2-2](#) provides an overview of Veritas Operations Manager operating system requirements for managed hosts:

**Table 2-2** Veritas Operations Manager operating system requirements for managed hosts

Operating system supported	Notes
AIX 5.2 AIX 5.3 AIX 6.1 (only for hosts with Storage Foundation 5.0 MP3, or later) AIX 7.1 (only for Storage Foundation 5.1 SP1 PR1 hosts)	On AIX hosts, the xIC runtime environment must be version 8.0, or later. Use the <code>lsllpp -lc   grep xIC.rte</code> command to verify the version of the xIC runtime environment.
HP-UX 11.11 (only for Storage Foundation 3.5 hosts)	PA RISC is the supported architecture.



**Table 2-2** Veritas Operations Manager operating system requirements for managed hosts (*continued*)

Operating system supported	Notes
HP-UX 11.23 HP-UX 11.31	
Red Hat Enterprise Linux 4.0 Red Hat Enterprise Linux 5.0 Update 2 (only for hosts with Storage Foundation 5.0 MP3, or later) Red Hat Enterprise Linux 6	On Red Hat Enterprise Linux 4.0, Storage Foundation 5.0 is supported on 64-bit Xeon, x86, and PowerPC; Storage Foundation 4.1 is supported on x86 and Xeon (32- and 64-bit).
SUSE Linux Enterprise Server 9 SUSE Linux Enterprise Server 10 (only for hosts with Storage Foundation 5.0 MP3, or later) SUSE Linux Enterprise Server 11 (only for hosts with Storage Foundation 5.0 MP3, or later)	On SUSE Linux Enterprise Server 9, Storage Foundation 5.0 is supported on 64-bit Xeon, x86, and PowerPC; Storage Foundation 4.1 is supported on x86 and Xeon (32- and 64-bit).
Solaris 8 Solaris 9 Solaris 10 SPARC Solaris 10 x86	
Windows Server 2003 Windows Server 2008 Windows 2008 R2	Supported on x86, x64, and IA64.

For the most complete, up-to-date platform support documentation for Storage Foundation (UNIX) and Storage Foundation HA for Windows, visit the Symantec Technical Support Web site :

[www.symantec.com/techsupp/](http://www.symantec.com/techsupp/)

## Third-party required libraries

This section lists third-party libraries required to run Veritas Operations Manager:

- [32-bit SNIA Common HBA API on Windows hosts](#)

## 32-bit SNIA Common HBA API on Windows hosts

For proper discovery of Fibre Channel attached devices—including discovery of HBA and its target ports—Veritas Operations Manager requires installation of the 32-bit SNIA Common HBA API on all Windows managed hosts running HBA controllers.

The Common HBA API would be typically available as part of your HBA vendor's driver kit, or you can download it from your HBA vendor's site.

Follow these steps to determine if the SNIA Common HBA API is already present on your Windows host.

**To verify that the 32-bit SNIA Common HBA API is installed on a Windows host**

- 1 Open the registry editor on the managed host using the `regedit` command.
- 2 Check the following location to get the SNIA library information:

```
HKEY_LOCAL_MACHINE\SOFTWARE\SNIA\HBA\hba_model
```

On 64-bit platforms, Veritas Operations Manager requires 32-bit libraries installed as a pre-requisite. For more information, see your HBA vendor documentation.

## System resource requirements

The amount of memory and disk space that Veritas Operations Manager requires are listed in this section. The requirements are in addition to the resources that are already consumed by other software applications running on the host.

For Management Server:

- CPU required: Dual processor for every 1000 managed hosts.
- Memory required:
  - 4GB for every 1000 managed hosts.
  - Add 4GB of memory if Management Server is used for the deep discovery of enclosures using the Storage Insight Add-on.
  - Add 4GB of memory if Management Server is used for the discovery of VMware virtualization infrastructure.
- Disk space required: 15GB of disk space for every 1000 managed hosts.

For a managed host:

- CPU required: See Veritas Storage Foundation documentation.
- Memory required: See Veritas Storage Foundation documentation.
- Disk space required:

- On UNIX hosts: 50MB to 200MB in `/var/opt` for discovery state files; 100MB in `/opt`.
- On Windows hosts: 50MB to 200MB in `Install_path\Veritas\VRTSsfmh`; 100MB in `%COMMONAPPDATA\FOLDER%\Symantec`.

Read the following Symantec Technical Support TechNotes for the latest information on updates, patches, and software issues regarding this release:

<http://www.symantec.com/docs/TECH157641>

The following table describes the frequency of the managed host information updates in the Management Server database. The discovery on each managed host is divided into families to focus on a particular functional area:

Family	Frequency in minutes	Discovered information
Host	1440	The operating system, licenses, packages, and networking for the host.  Typically, most of the information that is related to this family do not change frequently.
Storage Foundation	30	Volume Manager, File Systems, and the related storage network.
Veritas Cluster Server	60	Veritas Cluster Server and the related information
Databases	60	Oracle, DB2, MSSQL, and Sybase databases and their storage dependencies.
NR	5	Configuration status and external faults.
Native	360	Third Party Volume Management information.
Zones	120	Oracle Solaris zones and their storage dependencies.
LDoms	120	Oracle Solaris LDoms, and related CPU and memory information.

Family	Frequency in minutes	Discovered information
VMware	360	ESX servers, virtual machines, and their storage dependencies  <b>Note:</b> This information is discovered only when the Control Host Add-on is installed on a managed host that is designated as the control host.

## Supported hardware

The following TechNotes contain the Hardware Compatibility List (HCL) for Veritas Operations Manager 4.0 and Storage Foundation products on UNIX:

- Storage Foundation 5.0 for UNIX:  
<http://www.symantec.com/business/support/index?page=content&id=TECH47620>
- Storage Foundation 5.1 for UNIX:  
<http://www.symantec.com/business/support/index?page=content&id=TECH74012>

The following TechNotes contain the Hardware Compatibility List (HCL) for Veritas Operations Manager 4.0 and Storage Foundation products on Windows:

- Storage Foundation 5.0 for Windows:  
<http://www.symantec.com/business/support/index?page=content&id=TECH50141>
- Storage Foundation 5.1 for Windows:  
<http://www.symantec.com/business/support/index?page=content&id=TECH59118>

## Web browser requirements

The Veritas Operations Manager console is a graphical user interface that displays reports and other information for users of the Storage Foundation products through a standard Web browser.

The Web browsers that the Veritas Operations Manager console supports are:

- Internet Explorer versions 6.x to 8.x
- Firefox 3.x

Additional considerations for supported Web browsers:

- Your browser must support JavaScript 1.2.

- If you use pop-up blockers (including Yahoo Toolbar or Google Toolbar), either disable them or configure them to accept pop-ups from the Web server to which you connect.
- For Internet Explorer 6.0 on Windows 2003 (Server and Advanced Server), set the default intranet zone security level to MEDIUM or lower.
- For Internet Explorer, when popup-blocker is turned on, make sure that the filter level is set to Medium or lower.
- You must install Adobe Flash plug-in version 10 or above.

Use the following criteria to identify the kind of system you need to run the Web console:

- The Web console host must be able to access Veritas Operations Manager.
- Veritas Operations Manager must support the Web browser.

## Network and firewall requirements

If you are managing hosts within multiple domains, you will need to update the `resolve.conf` file on the Management Server host. This file resides by default in the `/etc` directory.

For example:

```
search my.domain1.example.com my.domain2.example.com
```

Veritas Operations Manager uses the default ports as shown in [Table 2-3](#) to transfer information.

**Table 2-3** Default ports in a Veritas Operations Manager installation

Port	Protocol	Initiator	Purpose	Impact if blocked
5634	TCP	Management Server	Management Server communications with the managed hosts	Managed host will not be added to the Management Server domain

**Table 2-3** Default ports in a Veritas Operations Manager installation  
*(continued)*

Port	Protocol	Initiator	Purpose	Impact if blocked
		managed hosts	Managed host to send heartbeats; also used to upload the data from the managed host to Management Server.	Managed host will not be added to the Management Server domain
14161	TCP	Web console	Run Veritas Operations Manager console	Users will not be able to access the Web console

## About the consumption of the managed host components

The managed host components of Veritas Operations Manager consume certain amount of CPU, Memory, and Network bandwidth for various functioning.

Various processes and services in Veritas Operations Manager impose different amount of load on the managed hosts. The processes and services and their consumption on the managed host are as follows:

- UNIX - Uses the XPRTLD, VXDCLID, sfmh-discovery.pl daemons. The CPU and the memory consumption for these daemons are minimal in a managed host.
- Windows - Uses the XPRTLD daemon. The CPU and the memory consumption for this daemon is minimal in a managed host.
- Discovery - The discovery in Veritas Operations Manager is ephemeral. Therefore, the CPU and the memory consumption for the discovery is minimal in a managed host.

The following table describes the frequency of the managed host information updates in the Management Server database. The discovery on each managed host is divided into families to focus on a particular functional area:

Family	Frequency in minutes	Discovered information
Host	1440	The operating system, licenses, packages, and networking for the host.  Typically, most of the information that is related to this family do not change frequently.
Storage Foundation	30	Volume Manager, File Systems, and the related storage network.
Veritas Cluster Server	60	Veritas Cluster Server and the related information
Databases	60	Oracle, DB2, MSSQL, and Sybase databases and their storage dependencies.
NR	5	Configuration status and external faults.
Native	360	Third Party Volume Management information.

---

**Note:** The discovery for the Storage Foundation and Veritas Cluster Server families are event driven and scheduled. This means that the discovery is triggered when configuration changes occur in the managed hosts. As a result, this information must be updated in the Veritas Operations Manager database in the following update. If configuration changes are not detected on the managed hosts, the communication between the managed host and Management Server is restricted to the heartbeat communication that occurs every five minutes. You can connect a managed host to multiple Management Servers. The performance of a managed host is not affected in this scenario because the discovery happens only once. Reporting of the state as per the host configuration is done based on the number of Management Servers to which the managed host reports.

---

The network bandwidth consumption for the managed hosts is primarily related to the heart beating which happens every five minutes. The heart beating operation sends data that has a size of less than 1 KB to the Management Server. The data reporting occurs only if there is a configuration change on the storage objects that are associated to the managed host. Certain amount of network bandwidth is also used for the data replication.





# Software limitations

This chapter includes the following topics:

- No coexistence of managed host and CommandCentral Storage Management Server
- Live statistics for initiators are not supported on HP-UX (2001078)
- Performance charts are not supported in certain cases for multiple objects that belong to different hosts (2023666)
- Performance graphs cannot be viewed for Windows managed hosts
- Volume layout not discovered for LDM-managed volumes mounted without a drive letter
- Backup and restore limitations in Veritas Operations Manager 4.0
- Veritas Operations Manager does not support the discovery of LDOMs and Zones together on the same host (2281088)
- Veritas Operations Manager Add-on for Storage Foundation Administration limitations
- Deployment-related limitations
- Coexistence-related limitation during uninstall of Management Server on Windows
- Windows Management Server HA configuration
- VMware virtualization support
- Solaris Zones virtualization support
- Logical Domain (LDom) virtualization support

- While creating the storage template, the file system is created with default setting when template indicates no file system needs to be created (2335583)
- Log on to console fails on Internet Explorer if Management Server host name has the underscore ( \_ ) character
- VCS configuration check reports violations only if at least one node in the cluster is running Veritas Cluster Server (2117417)

## **No coexistence of managed host and CommandCentral Storage Management Server**

Do not install Veritas Operations Manager managed host on a host that has CommandCentral Storage Management Server installed on it. Even if the installation succeeds, the operation to add the host to the Management Server domain fails.

## **Live statistics for initiators are not supported on HP-UX (2001078)**

You cannot view live statistics for initiators in the performance charts on the HP-UX hosts that have Veritas Volume Manager 5.0 or earlier releases.

There is no workaround for this issue.

## **Performance charts are not supported in certain cases for multiple objects that belong to different hosts (2023666)**

Performance charts are not supported for multiple disks, volumes, or file systems that belong to different hosts that are not shared as part of a CVM/CFS configuration. However, you can view performance charts for multiple disks, volumes, or file systems from different hosts that are shared as part of a CVM/CFS configuration.

Performance charts are also not supported for multiple initiators that belong to different hosts. However, you can view performance charts for multiple initiators from the same host.

## Performance graphs cannot be viewed for Windows managed hosts

In Veritas Operations Manager 4.0, performance graphs cannot be viewed for Windows managed hosts.

## Volume layout not discovered for LDM-managed volumes mounted without a drive letter

Veritas Operations Manager does not discover the layout for the volumes that are mounted without a drive letter on a Windows host (that does not have Storage Foundation for Windows installed on it) when the volume manager type is Microsoft LDM. As a result, the **Layout** column for this volume is displayed as **Unknown** on the Veritas Operations Manager console.

## Backup and restore limitations in Veritas Operations Manager 4.0

On UNIX, the `vom_bkup.pl` backup script can back up an existing Management Server in high-availability configuration. However, you cannot use the backup script to restore the high-availability configuration. This feature is currently not supported. To restore the backed up data, contact Symantec Technical Support.

On Windows, the `vom_bkup.pl` backup script cannot be used to back up an existing Management Server in high-availability configuration.

## Veritas Operations Manager does not support the discovery of LDoms and Zones together on the same host (2281088)

Veritas Operations Manager does not support the discovery of LDoms and Zones if they co-exist on the same Solaris host. In a configuration where both the LDoms and the Zones co-exist, Veritas Operations Manager discovers LDoms.

## Veritas Operations Manager Add-on for Storage Foundation Administration limitations

The centralized Storage Foundation operations that are supported by Veritas Operations Manager Add-on for Storage Foundation Administration are not supported on the managed hosts that have the `VRTSsfmh` package versions lower than 4.0.

The Veritas Operations Manager Add-on for Storage Foundation Administration does not support all the Storage Foundation operations. For the list operations that this add-on supports, refer to the *Veritas™ Operations Manager Add-on for Storage Foundation Administration 4.0 User's Guide*.

### Deployment-related limitations

You cannot upgrade Veritas Operations Manager Management Server from version 2.x to version 4.0. You need to either upgrade to version 3.x and then to version 4.0, or, remove your 2.x installation and perform a fresh installation of Veritas Operations Manager 4.0.

### Coexistence-related limitation during uninstall of Management Server on Windows

Do not uninstall Management Server on a Windows host, if other Veritas products that use `VRTSsfmh` as a shared component are present on it. Some of the Veritas products that use the `VRTSsfmh` component are Storage Foundation for Windows and CommandCentral Storage.

### Windows Management Server HA configuration

Veritas Operations Manager supports only the Windows server versions 2008 (64-bit) and 2008 R2 (64-bit) for configuring the Windows Management Server in high availability environment.

Veritas Operations Manager does not support configuring the disaster recovery feature on the Windows Management Server-HA setup.

Veritas Operations Manager does not support the `vomsc` script on the Windows Management Server-HA setup.

## VMware virtualization support

Veritas Operations Manager does not support the discovery of virtual machines with the Solaris x86 guest operating system.

Veritas Operations Manager does not support the sparse and thin vmdk disks of VMware technology.

## Solaris Zones virtualization support

You must install the `VRTSsfmh` package on the Global Zone. You cannot install the `VRTSsfmh` package on the non-Global Zones.

Solaris Zones virtualization in Veritas Operations Manager does not support slices. Veritas Operations Manager supports only the full disks.

Solaris Zones virtualization in Veritas Operations Manager does not support discovery of secure Oracle, DB2, and Sybase database instances running in the non-Global Zones.

## Logical Domain (LDom) virtualization support

LDom virtualization does not support the storage discovery for the LDom environment.

## While creating the storage template, the file system is created with default setting when template indicates no file system needs to be created (2335583)

For Windows managed host, when you try to provision storage for a volume, the file system is created by default (user interface creates empty file system entry), even if you do not select the create file system option. Also, the next available drive letter is assigned to the file system.

## **Log on to console fails on Internet Explorer if Management Server host name has the underscore ( \_ ) character**

When you install or upgrade Management Server to 4.0 on a Windows 2003 host, and attempt to log on to the console using Internet Explorer, the log on may fail. The failure occurs if the console is launched using the Management Server host name, and the host name contains the underscore ( \_ ) character.

Internet Explorer does not allow the underscore ( \_ ) character in the host name. Do not install Management Server on such a host.

## **VCS configuration check reports violations only if at least one node in the cluster is running Veritas Cluster Server (2117417)**

VCS configuration policy check in Veritas Operations Manager does not report any violations if Veritas Cluster Server is not running on any of the systems in the cluster. Also, if the cluster has a single system and Veritas Cluster Server is not running on that system, the VCS configuration check does not report violations.

# Known issues

This chapter includes the following topics:

- [Management Server issues](#)
- [Managed host issues](#)
- [Storage Provisioning Add-on issues](#)
- [Storage Insight Add-on issues](#)
- [Add-on for Storage Foundation Administration issues](#)
- [Other issues](#)

## Management Server issues

The following issues relate to Veritas Operations Manager Management Server.

### Inconsistent behavior when you configure the LDAP domain if the LDAP server does not respond or server name is invalid (2024598)

If the LDAP server name is invalid or if it does not respond within five minutes when you configure the LDAP domain, the configuration fails with inconsistent results. Either the 'Invalid CA certificate' error message is displayed or the configuration is proceeded to the second stage with an empty search base.

Workaround:

In both the cases, you must not proceed with configuring the LDAP domain. You must fix the LDAP server name to point to correct server.

## In a Veritas Operations Manager – HA setup , some of the solutions that you deploy on the primary node do not get deployed on the secondary node automatically (2329377)

After you deploy solutions on the primary node in Veritas Operations Manager that is configured in high availability environment, some of the solutions do not get deployed automatically on the secondary node. This issue causes problems when failover occurs on the secondary node.

Workaround:

After you deploy solutions on the primary node, you must manually deploy them on the secondary node as well.

## Operating system based authentication domains are removed after you refresh the authentication broker in a Windows Management Server-HA setup (2362587)

In a Windows Management Server-HA setup, if you refresh the authentication broker after the first failover, the operating system based authentication domain on the node where the Management Server is active is removed.

Workaround:

In a Windows Management Server-HA setup, you can use the authentication domains that are not based on the operating system to log on to Management Server.

## Veritas Operations Manager prompts you to overwrite the search query though you are saving the query for the first time (2299458)

This issue is observed when you use 3.x Management Server with configured 3.x managed hosts, and you have installed Storage Insight Add-on. When you upgrade the Management Server from version 3.x to 4.0, and run and save the search query (under the **Search** option), the system displays the following error message:

Query by that name already exists, Do you want to update?

Veritas Operations Manager prompts you to overwrite the search query though you are saving the query for the first time.

Workaround: You need to install the Storage Insight Add-on on Management Server 4.0.



## VirtualCenter discovery configuration fails if the discovery of the member ESX servers is already configured in Veritas Operations Manager (2334962)

In Veritas Operations Manager, the VirtualCenter configuration fails if you have configured it after you configure one or more ESX servers that the VirtualCenter manages.

Workaround:

You must not configure the individual ESX servers if you plan to configure the VirtualCenter server that manages the ESX servers. If any such configuration of ESX servers exists in your datacenter, you must remove them before you configure the VirtualCenter that manages the ESX servers.

## Delayed discovery of VirtualCenter server by Control Hosts in Veritas Operations Manager (2342314)

In Veritas Operations Manager, the discovery of some of the VirtualCenter servers using Control Hosts takes long time to complete. This issue occurs because some of the datastores that are associated with the VirtualCenter server do not respond on time, which results in timeout.

Workaround:

From the VMware SDK log, you can identify the datastores that cause the delay in the discovery of VirtualCenter server. In the VirtualCenter server that contains the datastore, navigate to **Administration > vServer Settings > Timeout Settings** and set the timeout to a lower value.

## Log on to the Veritas Operations Manager console may fail on Firefox (1939352)

When you try to log on to the Veritas Operations Manager console on Firefox, you may get the following error:

```
Secure Connection Failed
An error occurred during a connection to <system>
Peer reports it experienced an internal error.
(Error code: ssl_error_internal_error_alert)
```

Workaround:

Perform any one of the following modifications on the configuration settings for Firefox:

- Disable TLS

- Enable SSL 2 encryption protocols

#### To disable TLS in Firefox

- 1 In Firefox, select **Tools > Options**.
- 2 In the **Options** dialog box, click **Advanced**.
- 3 In the **Advanced** panel, under the **Encryption** tab, clear the **Use TLS 1.0** check box.

#### To enable SSL 2 encryption protocols in Firefox

- 1 In Firefox, in the address bar, type **about:config** and press **Enter**.
- 2 On this page, use **Filter** to search for the `security.enable_ssl2` setting.
- 3 Select the `security.enable_ssl2` setting and do one of the following to set the value to `true`:
  - Double-click the `security.enable_ssl2` setting.
  - Right-click the `security.enable_ssl2` setting and then click **Toggle**.
- 4 Restart Firefox.

## Authentication broker crashes while performing LDAP authentication (2017319)

On a host in which LDAP is configured with PAM and TLS is enabled, the authentication broker may crash while performing LDAP authentication.

Workaround:

Perform the following changes.

- Disable `start_tls`.
- Remove PAM from `authsequence`.

#### To disable the `start_tls` parameter

- ◆ In the `/etc/ldap.conf` file, after `ssl start_tls` add the following line:

```
ssl no
```

#### To remove PAM from `authsequence`

- ◆ In the `EAT_DATA_DIR/root/.VRTSat/profile/VRTSatlocal.conf` file, delete `pam` from the following entry:

```
"DefaultAuthSequence"="pam unixpwd nis nisplus"
```

## The XPRTLD daemon fails at the start-up because of the corrupt AT pem files in the VRTSsfmh package (2145925)

The XPRTLD daemon fails when Veritas Operations Manager starts, if the AT pem files (the certificate files in the VRTSsfmh package) is corrupt.

Workaround:

### To repair the corrupt AT pem files on 4.0 UNIX:

- 1 Stop the XPRTLD daemon by using the following command:

```
/opt/VRTSsfmh/adm/xprtldctrl stop
```

- 2 Delete all the files in the following directory:

```
/var/VRTSat_lhc/
```

- 3 Take a backup of the credentials in the /var/VRTSat/.VRTSat/profile/certstore/ directory, by using the following command:

```
mv /var/VRTSat/.VRTSat/profile/certstore/*.0 /tmp/backupcreds/
```

- 4 In the directory, delete the pem files by using the following commands:

```
■ rm
   /var/VRTSat/.VRTSat/profile/certstore/keystore/PubKeyFile.pem
```

```
■ rm
   /var/VRTSat/.VRTSat/profile/certstore/keystore/PrivKeyFile.pem
```

- 5 Restart any running shared broker process by using the following command:

```
/opt/VRTSat/bin/vxatd
```

- 6 Authenticate the local host to create a self-signed certificate by using the following commands:

```
export EAT_HOME_DIR=/opt/VRTSsfmh
```

```
export EAT_DATA_DIR=/var/opt/VRTSsfmh/sec
```

```
cd $EAT_HOME_DIR/bin
```

```
./vssat authenticate -d localhost
```

- 7 Start the XPRTLD daemon by using the following command:

```
/opt/VRTSsfmh/adm/xprtldctrl start
```

**To repair the corrupt AT pem files on 4.0 Windows:**

- 1 Stop the XPRTLD daemon by using the following command:

```
net stop xpirtld
```

- 2 Delete all the files in the following directory:

```
%ALLUSERSPROFILE%\Application  
Data\VERITAS\Security\Authentication\VRTSat_lhc
```

- 3 Take a backup of the credential in the following directory:

```
<AT_PROFILE_DIR >\certstore\* c:\temp\*
```

You can get the AT Profile directory from the following locations:

- For 64-bit Windows:  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\VERITAS\Security\Authentication\Credential  
Manager\Profiles\SYSTEM\ProfileDir

- For 32-bit Windows:  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Veritas\Security\Authentication\Credential  
Manager\Profiles\SYSTEM\ProfileDir

- 4 Delete the following pem files:

- <AT\_PROFILE\_DIR>\certstore\keystore\PubKeyFile.pem

- <AT\_PROFILE\_DIR>\certstore\keystore\PrivKeyFile.pem

- 5 Restart any running shared broker process by using the following commands:

- sc stop vrtsat

- sc start vrtsat

- 6 Authenticate the local host to create a self-signed certificate by using the following commands:

```
set EAT_HOME_DIR=%PROGRAMFILES%\VERITAS\VRTSsfmh  
set EAT_DATA_DIR=%ALLUSERSPROFILE%\Symantec\VRTSsfmh\sec  
cd %EAT_HOME_DIR%\bin  
vssat authenticate -d localhost
```

- 7 Start the XPRTLD daemon by using the following command:

```
net start xpirtld
```

## Status of all SF Manager 2.x hosts is shown as healthy on an upgraded Veritas Operations Manager 4.0 setup (2009372)

When you view the status of hosts on an upgraded Veritas Operations Manager 4.0 console that has SF Manager 2.x managed hosts, the status of all the hosts is shown as healthy even though some of the hosts have reported faults.

Workaround:

You need to upgrade the 2.x managed hosts to Veritas Operations Manager 4.0 and then clean up the 2.x faults.

### To clean up the 2.x faults

- 1 Create a file `a.sql` that has the following contents:

```
call HABDBSYNC.SP_ccsf_db_cleanup_21_faults();
```

- 2 Execute the following:

```
export LD_LIBRARY_PATH=/opt/VRTSsfmcs/asa11/lib32:$LD_LIBRARY_PATH
/opt/VRTSsfmh/bin/xdbadm -f ./a.sql -c /var/opt/VRTSsfmcs/conf -o
/etc/vx/VRTSsfmcs/.odbc.ini -d SFMdb3 -v
```

## Certain views in Veritas Operations Manager are not displayed properly after upgrading Management Server to the 4.0 version (2133867)

After you upgrade Management Server from the earlier version to 4.0, certain views in Veritas Operations Manager are not displayed properly.

Workaround:

To display the views correctly, you must clear the browser cache after you upgrade Management Server to the 4.0 version of Veritas Operations Manager.

In Internet Explorer, you can configure the temporary Internet files settings to avoid this problem.

### To configure the temporary Internet files settings in Internet Explorer:

- 1 Select **Tools > Internet Options**.
- 2 In the **General** tab of the **Internet Option** dialog box, under **Temporary Internet Files Section** click **Settings**.
- 3 Choose the **Every time visit to the page** option and click **OK**.
- 4 In the **Internet Options** dialog box, click **OK**.

## Pagination issue is observed in the Host table of Business entity overview page (2369071)

This issue is observed when you have created an application business entity with a large number of managed hosts. On the business entity overview page, in the **Servers** tab, the **Hosts** table does not display the hosts correctly. The first page displays the data correctly; however, when you click on the subsequent pages, only blank table without any record is displayed.

Workaround:

In the **Hosts** table, on the right upper corner, click **Table setting**. On the **Table Settings** page, for the **Rows Per Page** field, select **Show All**.

Now instead of displaying the records spread across multiple pages, Veritas Operations Manager shows all records in the first page itself.

## Managed host issues

The following issues relate to host management.

### Logical Volume Manager (LVM) discovery does not work on Red Hat Enterprise Linux 6 hosts (2354719)

For Linux hosts that have LVM2 version 2.02.54, or later, the LVM disk groups and volumes may not be discovered in Veritas Operations Manager.

Workaround:

On the Linux host, update the key `si_unit_consistency` to value 0 in the LVM configuration file `/etc/lvm/lvm.conf`. Logon to the Veritas Operations Manager user interface, and refresh the Linux host. Now, the LVM disk groups and volumes will be discovered.

### DMP-related operations display selection does not support DMP configuration error (2322100)

If you connect a 3.x managed host to a 4.0 Management Server, and then upgrade 3.x managed host to 4.0, you cannot perform DMP-related operations (**Solution > Veritas DMP Maintenance**).

Workaround:

Run the following command on the managed host:

```
run /opt/VRTSsfmh/bin/mh_driver --rescan
```

## Managed hosts stop communicating to Management Server after Veritas Cluster Server is installed (2341920)

After Veritas Cluster Server is installed, upgraded, or removed from a managed host that has the VRTSsfmh package, the managed host stops communicating to Management Server. This occurs because the local host credentials for the managed host are corrupted when Veritas Cluster Server is installed, upgraded, or removed.

Workaround:

Stop the XPRTLD component, delete the local host credentials for the managed host, and then restart the XPRTLD component using the following commands:

On a UNIX host:

```
/opt/VRTSsfmh/adm/xprtldctrl stop  
rm -rf /var/opt/VRTSsfmcs/sec/root  
/opt/VRTSsfmh/adm/xprtldctrl start
```

On a Windows host:

```
net stop xprtld  
  
rd /s C:\ProgramData\Symantec\VRTSsfmh\sec  
  
net start xprtld
```

Veritas Operations Manager creates new certificates when you restart XPRTLD.

## Cannot add a managed host with pure IPv6 address to Management Server that supports IPv4 and IPv6 (2137308)

If you install Management Server on a computer that supports both the IPv4 and the IPv6 network addresses, and configure it using a fully qualified domain name, you cannot add a managed host that has a pure IPv6 network address to this Management Server.

Workaround:

To avoid this issue, you must configure Management Server using only the hostname. Make sure that the `/etc/hosts` file in the `/etc` directory also contains the IPv6 address and hostname.

## Issue related to upgrading the managed hosts (from 3.x to 4.0) that have LUNs from IBM XIV storage array (2367519)

This issue is related to all managed hosts having IBM XIV enclosure connected to them. When you upgrade the managed hosts from version 3.x to 4.0, on the Veritas

Operations Manager console, two entries are displayed for the same enclosure. The first entry is a dangling object, which has no association with any of the objects. The other entry has Disk, LUNs, array port , and the initiators associations setup, and is reported correctly.

It is to protect the deletion information for the shared objects.

Workaround:

Upgrade the managed host on XIV hosts to Veritas Operations Manager 4.0.

## Problem in viewing the database to the service group correlation for non-Global zones if their names are different from their virtual host names (2361368)

If the name of a non-Global Zone is different from its virtual host name, the correlation between the oracle database and the service group, which is associated with the non-Global Zone does not get displayed in Veritas Operations Manager.

Workaround:

Ensure that the name of the non-Global Zone and the name of the host to which it is associated are the same.

## Zones discovery fails if host does not have ZFS file systems or file systems on disks (2367754)

If a Solaris 10 managed host does not contain any ZFS file systems or no file systems that are mounted on the disks, the discovery of Zones on the managed host fails.

There is no workaround for this issue.

## Exchange service group is not listed in the Exchange Servers table (1976615)

After you add a host that has an Exchange server installed in the high availability environment to the Management Server, the Exchange service group is not discovered. This issue does not get resolved even after you perform a refresh host operation.

Workaround:

You need to refresh the database family.



### To refresh the database family

- ◆ Execute the following command:

```
/opt/VRTSsfmh/bin/mh_ctl.pl --family DB --refresh
```

## Quick I/O cache value is not enabled after performing the storage provisioning operation on AIX managed hosts (2131183)

If you use a VxFS file system-based storage provisioning template on which the Quick I/O cache (CQIQ) value is set as 'Yes' to provision storage on AIX managed host, the storage provisioning operation is successfully completed. However, cache I/O does not get updated appropriately. The 'qio\_cache\_enable' value in `vxtunefs` output remains '0'.

### Workaround:

On AIX platform, the tune VxFS parameters are not set properly. You can use the `vxtunefs` from the managed node.

## Information on the disks and the LUNs for a Windows host where Storage Foundation for Windows is newly installed are not displayed on the console (2345887)

Information on the disks and the LUNs for a Windows host on which Storage Foundation for Windows is newly installed are not displayed on the console. This happens because the information that are discovered by the Storage Foundation agent is deleted by the Logical Device Manager (LDM) agent.

### Workaround:

After restarting the host following the installation of Storage Foundation for Windows, select the host from **Settings > Host Management** in the Veritas Operations Manager and refresh it twice.

## Cannot replace or recover a disk removed from a UNIX host (2317671)

Using the Veritas Operations Manager Add-on for Storage Foundation Administration, you can replace or recover a faulted disk. But, using this add-on, you cannot replace or recover a disk that is removed using the `rmdisk` command on a UNIX host.

### Workaround:

To replace or recover a disk that is removed using the `rmdisk` command on a UNIX host, use the CLI, Veritas Enterprise Administrator console, or the Add-on for Storage Foundation Administration for UNIX.

## After the replace disk operation, the faulted disk status remains as replaceable (2353612)

In Veritas Operations Manager 4.0, after you perform Replace Disk operation, the faulted disk status does not change. It still displays the state as **in Use (Replaceable)**. The state will change if the disk is removed, or initialized.

Workaround:

You need to use the command-line interface (CLI), Veritas Enterprise Administrator console, or the Storage Foundation Administration for Unix Add-on to perform this operation.

## Storage Provisioning Add-on issues

The following issues relate to the Storage Provisioning Add-on.

### Volumes with thin disks must be mounted before a volume migration operation (2139046)

The volume migration operation fails on the unmounted volumes that contain thin disks, and Veritas Operations Manager displays the following error message:

Error V-383-7-205 Failed to commit moving volume <volume name>. Operation failed.

There is no workaround for this issue.

### A volume is migrated to any available enclosure if no target array is specified (2143010)

If you do not specify the enclosure while performing the volume migration operation, the view that lists the status of volume migrations displays no value in the **Target array** column. However, the volume migration task is performed successfully by selecting any available enclosure.

There is no workaround for this issue.

### The label that you specify for the file system under the Parameters tab is not accepted by the storage template (2411130)

While creating a storage template for Windows platform, you can specify the label for the file system under the **Parameters** tab of the selected file system. This label is not accepted by Veritas Operations Manager if the template is created using

Veritas Storage Foundation Add-on for Storage Provisioning version 4.0 and Veritas Operations Manager Management Server version 4.0 or 4.0 RU1.

Workaround: You must upgrade the 4.0 template to 4.0 RU1 template for the label to be accepted.

## The status of volume migration of a volume from a volume set is not refreshed on the Provisioning and Migration Status page (2481483)

This issue is observed when you migrate a volume that belongs to a volume set using the volume migration wizard. The migration is not displayed on the **Provisioning and Migration Status** page of the Veritas Operations Manager console. This is applicable to Veritas Storage Foundation Add-on for Storage Provisioning version 4.0 and 4.0 Release Update 1.

There is no workaround for this issue.

## Storage Insight Add-on issues

The following issues relate to the Storage Insight Add-on.

### Mismatch between the total available size of the RAID group and the total available size of the physical disk (2219669)

The total available size of the RAID group that is displayed in the **RAID Group** table of an enclosure does not match with the total available size of the underlying physical disks that is displayed in the **Physical Disks** table.

There is no workaround for this issue.

### The overview chart for an EMC CLARiiON enclosure capacity contains incorrect information on the total capacity (2215684)

In the chart that explains the capacity of an EMC CLARiiON enclosure that has thin provisioning capability, the total capacity of the enclosure might not be equal to the sum of the physical configured, spare, and the unconfigured sizes.

There is no workaround for this issue.

## The vxlist utility does not display the information on the physical disks for the LUNs (2219286)

If a LUN is masked to the host that is added to multiple Management Servers, the `vxlist -l lun` command on the host does not get the information on the physical disks (PDEVs).

There is no workaround for this issue.

## The information on the Storage distribution by RAID level capacity may not match the capacity of the addressable size of the RAID groups (2219668)

In the chart that displays the storage distribution of an EMC CLARiiON by its RAID level capacity, the information on the storage distribution by RAID level for RAID5/6 LUNs does not match with the addressable capacity for the RAID groups 5/6.

There is no workaround for this issue.

## Cannot configure an EMC CLARiiON enclosure on a Windows control host using a security file (2221574)

Cannot configure an EMC CLARiiON enclosure on a Windows control host using a security file.

Workaround:

To configure an EMC CLARiiON using a security file, choose a UNIX control host instead of a Windows control host.

## Add-on for Storage Foundation Administration issues

The following issues relate to the Veritas Operations Manager Add-on for Storage Foundation Administration issues:

### Cannot delete multiple volumes at a time on a Windows host (2358556)

When you try to delete multiple volumes of the same disk group at a time on a Windows host, only the first volume among the ones that you have selected is removed from the host.

Workaround:

Select and delete each volume individually.

## Other issues

This section lists additional issues that cannot be categorized in the rest of the Veritas Operations Manager known issues sections.

### Erroneous classification of hosts on the VOM Management Entitlement Report (2348378)

In the VOM Management Entitlement Report, the hosts that have the licenses for ApplicationHA or CommandCentral Storage are considered as Storage Foundation hosts, and the column that indicates whether these hosts are Storage Foundation hosts in the **VOM Management Entitlement Report** table is marked as **No**.

There is no workaround for this issue.



# Getting help

This appendix includes the following topics:

- [Veritas Operations Manager on the Web](#)
- [Getting help](#)
- [Using the product documentation](#)
- [Commenting on product documentation](#)

## Veritas Operations Manager on the Web

For comprehensive, up-to-date information about Veritas Operations Manager, visit the Symantec Web site:

<http://go.symantec.com/vom>

## Getting help

If an issue arises while you use the products, refer to the product documentation and online help. If necessary, report it to Symantec.

For technical assistance, visit

[www.symantec.com/enterprise/support/index.jsp](http://www.symantec.com/enterprise/support/index.jsp)

This site provides access to resources such as TechNotes, product alerts, software downloads, hardware and software compatibility lists, and the customer email notification service. Use the Knowledge Base Search feature to access additional product information, including current and past releases of product documentation.

## Using the product documentation

The following guides provide information about Veritas Operations Manager:

- *Veritas Operations Manager Administrator's Guide*
- *Veritas Operations Manager Getting Started Guide*
- *Veritas Operations Manager Installation Guide*

For complete host operating system and system resource specifications, as well as any known limitations or issues in this release, see the *Veritas Operations Manager Release Notes*.

For information about the third-party software that is used in this product, see the *Veritas Operations Manager Third-Party License Agreements*.

The latest version of the product documentation is available on the Symantec Technical Support Web site at the following URL:

<http://go.symantec.com/vom>

For the late breaking news that is related to this release, use the following TechNote:

<http://www.symantec.com/docs/TECH157641>

## Commenting on product documentation

Submit comments about the product documentation to the following email address:

[storage\\_management\\_docs@symantec.com](mailto:storage_management_docs@symantec.com)

Please include the following information with your documentation comments:

- The title and product version of the guide you are commenting on
- The topic (if relevant) you are commenting on
- Your comment
- Your name