# Veritas InfoScale™ 7.0 What's new in this release - Solaris x64

VERITAS™

# Veritas InfoScale 7.0 What's new in this release

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- Product release level

- Hardware information

- Available memory, disk space, and NIC information
- Operating system
- Version and patch level
- Network topology
- Router, gateway, and IP address information
- Problem description:
  - Error messages and log files
  - Troubleshooting that was performed before contacting Symantec
  - Recent software configuration changes and network changes

## Licensing and registration

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- Latest information about product updates and upgrades
- Information about upgrade assurance and support contracts
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- Advice about Symantec's technical support options
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| | |
|---|---|
| Asia-Pacific and Japan | customercare_apj@symantec.com |
| Europe, Middle-East, and Africa | semea@symantec.com |
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## Documentation

Product guides are available on the media in PDF format. Make sure that you are using the current version of the documentation. The document version appears on page 2 of each guide. The latest product documentation is available on the Symantec website.

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## About Symantec Connect

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http://www.symantec.com/connect/storage-management

# What's new in this release

This document includes the following topics:

## About this document

The "What's new in this release" document provides high-level information on the supported platforms and changes introduced in the release.

# About the release

Symantec has restructured its Storage Foundation High Availability (SFHA) product suite so that it is easier to work with and easier to sell. The new product suite is named Veritas InfoScale. Symantec is moving to replace the 19 different products offerings with only four new products.

The four products are as following:

- Veritas InfoScale Foundation

- Veritas InfoScale Storage

- Veritas InfoScale Availability

- Veritas InfoScale Enterprise

Not only are the products being consolidated, the associated pricing and pricing meters are also being simplified. In particular, Symantec is moving away from Symantec Performance Value Units (SPVUs).

These significant changes are intended to:

- Simplify the customer buying experience

- Improve customer life time value

- Reduce complexity for sales

- Enable account penetration through an attractive entry-level offering

# About the Veritas InfoScale product suite

The Veritas InfoScale product suite addresses enterprise IT service continuity needs. It draws on Veritas' long heritage of world-class availability and storage management solutions to help IT teams in realizing ever more reliable operations and better protected information across their physical, virtual, and cloud infrastructures.

It provides resiliency and software-defined storage for critical services across the datacenter infrastructure. It realizes better Return on Investment (ROI) and unlocks high performance by integrating next-generation storage technologies.

The solution provides high availability and disaster recovery for complex multi-tiered applications across any distance.

Management operations for Veritas InfoScale are enabled through a single, easy-to-use, web-based graphical interface, **Veritas InfoScale Operations Manager**.

The table below gives an overview of the four products in the Veritas InfoScale product suite.

**Table 1-1**      Overview of the four products in the Veritas InfoScale product suite

| Product name | Overview |
|---|---|
| **Veritas InfoScale Foundation** | InfoScale Foundation combines the industry-leading File System and Volume Manager technology, and delivers a complete solution for heterogeneous online storage management.<br><br>It also increases storage utilization and enhances storage I/O path availability. |
| **Veritas InfoScale Storage** | Veritas InfoScale Storage enables organizations to provision and manage storage independently of hardware types or locations.<br><br>InfoScale Storage delivers predictable Quality-of-Service by identifying and optimizing critical workloads. |
| **Veritas InfoScale Availability** | Veritas InfoScale Availability helps keep organizations' information available and critical business services up and running with a robust software-defined approach. |
| **Veritas InfoScale Enterprise** | Veritas InfoScale Enterprise addresses enterprise IT service continuity needs. It provides resiliency and software defined storage for critical services across your datacenter infrastructure.<br><br>The solution provides high availability and disaster recovery for complex multi-tiered applications across any distance in physical and virtual environments. |

# Mapping of Storage Foundation High Availability (SFHA) offerings to the new InfoScale Family

The table below shows how SFHA products map to the new InfoScale products.

**Table 1-2** Shows how the SFHA products map to the new InfoScale products

| Earlier SFHA offerings | InfoScale Foundation | InfoScale Storage | InfoScale Availability | InfoScale Enterprise |
|---|---|---|---|---|
| Cluster File System | | ✓ | | ✓ |
| Cluster Server | | | ✓ | ✓ |
| Dynamic Multi-Pathing | ✓ | ✓ | | ✓ |
| Dynamic Multi-Pathing for VMware | ✓ | ✓ | | ✓ |
| Storage Foundation Basic | ✓ | | | |
| Storage Foundation | | ✓ | | ✓ |
| Storage Foundation for Oracle RAC | | | | ✓ |
| Storage Foundation for Sybase ASE CE | | | | ✓ |
| Storage Foundation High Availability | | | | ✓ |

# Entitlement mapping for upgrades from Storage Foundation High Availability (SFHA) offerings to InfoScale

If a user upgrades from SFHA offerings to InfoScale, the table below would help show how the SFHA component entitlement map to InfoScale entitlements.

**Table 1-3**        Shows how the SFHA component entitlements map to InfoScale entitlements

| Earlier SFHA offerings | InfoScale Foundation | InfoScale Storage | InfoScale Availability | InfoScale Enterprise |
|---|---|---|---|---|
| Storage Foundation Basic | ✓ | | | |
| Storage Foundation | | ✓ | | |
| Dynamic Multi-Pathing | ✓ | | | |
| Dynamic Multi-Pathing for VMware | ✓ | | | |
| Cluster Server and Cluster Server HA/DR | | | ✓ | |
| Storage Foundation Enterprise CFS HA | | | | ✓ |
| Storage Foundation for Oracle RAC | | | | ✓ |
| Storage Foundation for Sybase ASE CE | | | | ✓ |

# Licensing changes for InfoScale

The following sections describe the licensing changes in InfoScale:

## InfoScale Product keys

There are four new license keys that relate to the new InfoScale products.

### The vxlicinstupgrade utility

If you use the following platforms: AIX, Solaris or Linux, you can license your product using the installer script. If you registered keys manually at the command line, using the `vxlicinst` binary, you need to use the `vxlicinstupgrade` binary, but for the following two circumstances:

- Upgrading from 6.0 or later

- Adding a new license when you transition a smaller product to a larger product

For more info see *Veritas InfoScale Release Notes*.

# Changes related to installation and upgrade

The following changes are introduced to the installation and upgrading of 7.0 VCS:

- In 7.0, the following new products are supported:
  Veritas InfoScale Foundation
  Veritas InfoScale Storage
  Veritas InfoScale Availability
  Veritas InfoScale Enterprise
  The following old products are regarded as components and are converted to new products during the upgrade:
  Symantec Storage Foundation (SF)
  Symantec Cluster Server (VCS)
  Symantec Storage Foundation and High Availability (SFHA)
  Symantec Storage Foundation Cluster File System (SFCFS)
  Symantec Storage Foundation Cluster File System and High Availability (SFCFSHA)
  Symantec Storage Foundation for Oracle RAC (SF Oracle RAC)
  Symantec Storage Foundation for Sybase ASE CE (SFSYBASECE)
  The following old products are now part of the SF component and not offered as separate components.
  Symantec Dynamic Multi-Pathing (DMP) standalone
  Veritas Volume Manager (VxVM)
  Veritas File System (VxFS)
  For more information,

- All packages are installed at the time of installation irrespective of the product. Also, the installation of packages is no longer categorized as recommended, minimum or all.
  The installation script installer installs the packages. Component installation scripts, such as installvcs, are no longer supported.

- The`install<prod><version>` script, for example, `installsf70` is no longer available under the `/opt/VRTS/install/` directory after an installation or upgrade.

- Installation of two products is not supported, Veritas InfoScale Enterprise will be installed to include Veritas InfoScale Storage and Veritas InfoScale Availability on all the systems.
  For more information,

- For 7.0, the new release image file names are as follows:
  Veritas_InfoScale_7.0_Solaris_SPARC.tar.gz
  Veritas_InfoScale_7.0_Solaris_SPARC.iso
  Veritas_InfoScale_7.0_Solaris_x86.tar.gz
  Veritas_InfoScale_7.0_Solaris_x86.iso
  To install the product for your platform, you can either expand the .tar.gz or .zip file or mount the .iso file. Note that the content of the .iso file and archive files are identical.
  To mount the .iso file on your platform, See "Mounting the ISO image" on page 12.

- For InfoScale Availability 7.0, on Solaris 11 x64, you can upgrade VCS 6.0.5 to InfoScale Availability 7.0. For VCS 6.0PR1, VCS 6.0.1 and VCS 6.0.3, you can upgrade to VCS 6.0.5 first and then upgrade VCS 6.0.5 to Availability 7.0.
  1. Upgrade the Operating System to Sol11 U1 or Sol 11 U2.
  2. Upgrade VCS 6.0PR1, VCS6.0.1 or VCS6.0.3 to VCS 6.0.5. For VCS 6.0PR1, you can use the Install Bundles to upgrade to VCS 6.0.5.
  3. Upgrade VCS 6.0.5 to Availability 7.0.

- For InfoScale Availability 7.0, on Solaris 11 x64, if you want to upgrade VCS 6.0.5 to InfoScale Availability 7.0, you can use full upgrade, online upgrade and live upgrade; if you want to upgrade the VCS part of SFHA6.0.5 to InfoScale Availability 7.0, you can use full upgrade and online upgrade.

## Mounting the ISO image

An ISO file is a disc image that must be mounted to a virtual drive for use. You must have superuser (root) privileges to mount the Veritas InfoScale ISO image.

**To mount the ISO image**

**1**    Log in as superuser on a system where you want to install Veritas InfoScale.

**2**    Associate the ISO image to a block device:

```
# lofiadm -a <ISO_image_path> <block_device>
```

Where:

*<ISO_image_path>* is the complete path to the ISO image

*<block_device>* is the complete path to the block device

**3**    Mount the image:

```
# mount -F hsfs -o ro <block_device> /mnt
```

# Changes related to Veritas InfoScale Availability

Veritas InfoScale Availability includes the following changes for 7.0:

## VMwareDisks agent

For the Solaris 11 x64 platform, Veritas InfoScale Availability has introduced a new resource type — VMwareDisks, which can monitor and control the disks attached to the VMware Virtual Machines. With the help of VMwareDisks resources, VCS can now support vMotion. These resources are managed by VMwareDisks agent.

## Stronger security with 2048 bit key and SHA256 signature certificates

For the Solaris 11 x64 platform, VCS in Veritas InfoScale Availability 7.0 uses 2048 bit key and SHA256 signature certificates. The vcsauthserver will generate certificates with 2048 bit key and SHA256 signature. The enhancement will provide stronger security to VCS users. The 2048 bit and SHA256 certificates will be used by default during a fresh InfoScale Availability 7.0 installation. You can choose to upgrade the certificates during the VCS upgrade or at a later time.

## Co-existence of SF 6.0.5 and Availability 7.0

This release supports the co-existence of SF 6.0.5 and Availability 7.0.

## Inter Process Messaging (IPM) protocol used for secure communication is deprecated

Veritas' proprietary secure communication protocol, IPM-based secure communication, which is used for secure communication between CP server and VCS clusters, is deprecated in version 7.0.

CP servers on release 7.0 support the following communication protocols:

- Communication between InfoScale Availability clusters on releases prior to 6.1 and CP servers on release 7.0 happen over IPM protocol.

- Communication between InfoScale Availability clusters on releases 6.1 or higher and CP servers on release 7.0 happen over HTTPS protocol.

In future releases, the IPM protocol may not be supported for CP server and InfoScale Availability clusters. If you want to run a future release version of CP server, Veritas recommends upgrading InfoScale Availability clusters to release version 6.1 or higher.

# Changes related to support for SmartIO caching on SSD devices exported by FSS

For the VxVM and VxFS features in Veritas InfoScale Foundation, Veritas InfoScale Storage and Veritas InfoScale Enterprise products, SmartIO supports the use of SSD devices exported by FSS to provide caching services for applications running on VxVM volumes and VxFS file system. In this scenario, Flexible Storage Sharing (FSS) exports SSDs from nodes that have a local SSD. FSS then creates a pool of the exported SSDs in the cluster. From this shared pool, a cache area is created for those nodes in the cluster that do not have local SSDs. Each cache area is accessible only to that particular node for which it is created. The cache area can be a VxVM cache area or a VxFS cache area. The cache areas can be enabled to support warm or persistent caching across reboots.

For more information, see *Veritas InfoScale Solutions 7.0 SmartIO for Solid-State Drives Solutions Guide*.

# Changes related to ApplicationHA

ApplicationHA is a standalone product and is not included in Veritas InfoScale product suite. You can use any earlier version.

# Changes related to documentation

The following changes have been introduced to the documents in 7.0:

- The look-and-feel of the documents reflect the new Veritas brand.

- The release introduces a common Release Notes and Installation Guide for the Veritas InfoScale products suite.

- This release introduces configuration and upgrade guides for each Veritas InfoScale component.

- *Symantec™ Dynamic Multi-Pathing Installation Guide* is deprecated. Related information is now available in the *Storage Foundation Configuration and Upgrade Guide*.

- The software image has an updated document directory structure to reflect the product changes.

- The documents that were titled *Storage Foundation and High Availability Solutions* are renamed to *Veritas Infoscale*. The file names for these documents are changed as well.

For more information see *Veritas InfoScale™ 7.0 Release Notes*.

# Platforms supported

The release supports Oracle Solaris 11 x64 on both physical and virtual environments.

For a detailed info of platforms supported see *Veritas InfoScale 7.0 Release Notes*.

# Not supported in this release

The following features are not supported in this release but they may be supported in a future release:

- Rolling Upgrade, Phased Upgrade and Live Upgrade

- Deployment Server

- `-makeresponsefile` option for installer

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**Note:** You can use the response file that is created by operating the installer.

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The following features will not be supported by the Veritas InfoScale products:

- Web-based installation

- Upgrading from VCS 6.0PR1, 6.0.1, and 6.0.3 to 7.0 on Solaris 11 x64.

- Oracle RAC 10g Release 2 is not supported in Storage Foundation for Oracle RAC.