

VERITAS Storage Foundation and High Availability Solutions 4.1

Maintenance Pack 2

Linux

This document contains information about installing patch updates for products in the VERITAS Storage Foundation and High Availability Solutions 4.1 Maintenance Pack 2 (MP2) release. Patch update packages for the following products are on the accompanying 4.1 Maintenance Pack 2 software discs:

VERITAS Cluster Server

VERITAS Volume Replicator

VERITAS Storage Foundation™/Storage Foundation HA

VERITAS Storage Foundation Cluster File System/Storage Foundation Cluster File System HA

VERITAS Storage Foundation *for Oracle RAC*

VERITAS 4.1 release products must be installed before updating them with Maintenance Pack 2 packages. If you have not yet installed a VERITAS 4.1 product, see the *VERITAS Storage Foundation and High Availability Solutions Getting Started Guide* for the location of release notes and installation instructions. This guide is available in PDF format on the VERITAS 4.1 software discs.

If you already have the 4.1 release of any VERITAS product installed on your system, see “[Installing Updates](#)” on page 8 for the location of Maintenance Pack 2 patch installation instructions for the listed VERITAS products.

Maintenance Pack Disc Contents

There are two Maintenance Pack 2 discs.

Disc 1

Red Hat Enterprise Linux 4 i686
Red Hat Enterprise Linux 4 Intel IA64
Red Hat Enterprise Linux 4 x86_64

Disc 2

SUSE Linux Enterprise Server 9 i586
SUSE Linux Enterprise Server 9 Intel IA64
SUSE Linux Enterprise Server 9 x86_64



4.1 Maintenance Pack 2 Supported Linux Distributions

The following two tables list VERITAS products and the Linux distributions, chip architectures, and kernels on which they operate.

Red Hat Enterprise Linux 4 (RHEL 4) Update 1, Update 2, and Update 3

VERITAS Product	i686			ia64		x86_64		
	up	smp	hugemem	smp	large-smp	up	smp	large-smp
Storage Foundation QuickStart, Standard, Enterprise, & Enterprise HA								
Storage Foundation for DB2	✓	✓	✓	✓	✓	✓	✓	✓
VERITAS Cluster Server								
VERITAS Volume Replicator								
Storage Foundation Cluster File System (SFCFS)								
Storage Foundation for Oracle RAC (SFRAC)		✓	✓	✓	✓		✓	✓

Note VERITAS products will operate on subsequent kernel and patch releases provided the operating systems maintain kernel ABI (application binary interface) compatibility. The largesmp kernel is supported only on RHEL 4 Update 3.

For the latest SFRAC support for Oracle releases, see the 4.1 MP2 *Storage Foundation for Oracle RAC Release Notes*.



SUSE Linux Enterprise Server 9 (SLES 9) SP1, SP2, SP3

VERITAS Product	i586			ia64	x86_64	
	default	smp	big smp	default	default	smp
Storage Foundation QuickStart, Standard, Enterprise, & Enterprise HA	✓	✓	✓	✓	✓	✓
Storage Foundation for DB2						
VERITAS Cluster Server						
VERITAS Volume Replicator						
Storage Foundation Cluster File System (SFCFS)				✓		✓
Storage Foundation for Oracle RAC (SFRAC)						

Note SFCFS and SFRAC are supported in 32-bit mode on x86 and x86_64 (EM64T and AMD Opteron) architectures on RHEL 4 only. This is to support SFCFS/SFRAC 4.0 customers running RHEL 3 who are upgrading to RHEL 4 and SFCFS/SFRAC 4.1.

Because there is limited kernel virtual address space on 32-bit kernels, VERITAS strongly recommends running SFCFS and SFRAC on the hugemem kernel when operating in 32-bit mode. See the 4.1 MP2 *Storage Foundation Cluster File System Release Notes* for more information.

Maintenance Pack 2 is supported on SUSE SP1 (.139, .145 and later), SUSE SP2 (.201 minimum requirement), and SUSE SP3 (.241 and later).



Latest VERITAS Product Information

Before installing any product, read the following VERITAS Technical Support TechNote for information on the latest supported kernels, service pack and errata updates, patches, and software issues regarding this release:

<http://support.veritas.com/docs/277033>

Software Issues

If you use the `up2date` command to update a RHEL 4 server, it may fail and display the following error message:

```
Testing package set / solving RPM inter-dependencies...
There was a package dependency problem. The message was:

Unresolvable chain of dependencies:
VRTSvcs 4.1.20.00-MP2_RHEL4          requires VRTSperl
....
....
```

The origin of the problem is unknown. To enable the `up2date` command to complete without errors, exclude the Perl package from updating by typing the following command:

```
# up2date --exclude=perl -u
```

To prevent a reoccurrence, update the Perl package manually.



Package Installation Script

You install upgrade packages by running the `installmp` installation script from the command line. The `installmp` script is at the top level of the 4.1 Maintenance Pack 2 disc. The `installmp` script checks for any installed VERITAS package and replaces it with the appropriate patch RPM. There is no uninstallation script.

All VERITAS product processes are stopped after running `installmp`. To ensure that processes restart correctly, a manual restart or system reboot is required. If you want to configure a product, run the product installation scripts from the `/opt/VRTS/install` directory using the `-configure` option.

See the individual product release notes for information on how to restart processes, or how to uninstall Maintenance Pack 2 and return to the 4.1 product level.



Mounting the 4.1 Maintenance Pack 2 Software Disc

To load the software from a CD-ROM drive:

1. Log in as superuser.
2. Insert a VERITAS software disc into a drive connected to your system.
3. After inserting the disc, enter:

```
# mount -o ro /dev/cdrom /mnt/cdrom
```
4. Change to the appropriate directory and product subdirectory to view the product release notes (see [“Installing Updates”](#) on page 8).



Installing Updates

After mounting the software disc, change to the directory of the product you want to upgrade and read the product release notes for installation information.

You cannot roll back Maintenance Pack 2 to the previously installed release. To restore release 4.1 on your system, you must completely remove Maintenance Pack 2, then reinstall VERITAS 4.1.

To install a product, you must run the product installation script instead of the generic installer script. For example, if you are installing Storage Foundation software, after mounting the 4.1 VERITAS software disc, go to the *distribution/storage_foundation* directory and type:

```
# ./installsf -installonly [-usersh]
```

The **-installonly** option is required to perform the installation without configuring the software.

Read the product release notes of the product you want to install for more information.



- ◆ To upgrade VERITAS Cluster Server:

```
# cd /mnt/cdrom/distribution/cluster_server \  
/release_notes
```

Follow the instructions in the file `vcs_notes.pdf`.

- ◆ To upgrade VERITAS Cluster Server Enterprise Agent for Oracle:

```
# cd /mnt/cdrom/distribution/ \  
cluster_server_agents/oracle_agent
```

Follow the instructions in the `README` file.

- ◆ To upgrade VERITAS Storage Foundation/Storage Foundation HA (includes VERITAS File System, VERITAS Volume Manager, VERITAS Volume Replicator, and the VERITAS Enterprise Administrator):

```
# cd /mnt/cdrom/distribution/storage_foundation \  
/release_notes
```

Follow the instructions in the file `sf_notes.pdf`.



- ◆ To upgrade VERITAS Storage Foundation Cluster File System/Storage Foundation Cluster File System HA:

```
# cd /mnt/cdrom/distribution \  
/storage_foundation_cluster_file_system \  
/release_notes
```

Follow the instructions in the file `sfcfs_notes.pdf`.

- ◆ To upgrade VERITAS Storage Foundation *for Oracle RAC*:

```
# cd /mnt/cdrom/distribution \  
/storage_foundation_for_oracle_rac \  
/release_notes
```

Follow the instructions in the file `sfrac_notes.pdf`.



Support Tools

Diagnostic tools are available to assist in troubleshooting problems associated with these products. These tools are available on disc or can be downloaded from the VERITAS FTP site. See the README.VRTSpt file in the support directory for details.

Japanese Documentation Disc

If you purchased the VERITAS Japanese language product, a language documentation disc is included in the *VERITAS Storage Foundation and High Availability Solutions for Linux* media kit. The language documentation disc contains PDF versions of the translated product guides, and 4.1 Maintenance Pack release notes.

