



# Sun™ Cluster 3.0 U1 and Sun StorEdge™ Software 3.0 Release Note Supplement

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# Sun StorEdge Services Software Release Note Supplement

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This release note supplement contains important last-minute information about the Sun StorEdge™ 3.0 services software operating in a Sun™ Cluster 3.0 Update 1 environment. The services software that can operate in this environment are the Sun StorEdge Network Data Replicator (Sun SNDR) and Sun StorEdge Instant Image software.

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**Note** – Sun Cluster 3.0 Update 1 is also known as the Sun Cluster 3.0 07/01 release.

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This supplement includes the following topics:

- [“Supported Software and Hardware” on page 2](#)
- [“Product Notes” on page 3](#)
- [“Workarounds to Known Bugs” on page 5](#)

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# Supported Software and Hardware

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**Note** – You cannot use the Sun StorEdge Fast Write Cache (FWC) product (all versions, including the SUNWnvm Version 3.0 software) in any Sun Cluster environment because cached data is inaccessible from other machines in a cluster. To compensate, you can use a Sun caching array.

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**TABLE 1** Supported Software, Patches, and Hardware

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<b>Operating Environment Software</b>	<p>Solaris™ 8 (initial release) Solaris 8 10/00 (also known as Update 2) Solaris 8 01/01 (Update 3) Solaris 8 04/01 (Update 4)</p> <ul style="list-style-type: none"><li>• Solaris 8 6/00 (Update 1) is not supported.</li></ul>
<b>Sun Cluster Software</b>	Sun Cluster 3.0 Update 1 software (also known as the 07/01 release)
<b>Volume Manager Software</b>	Solaris DiskSuite™ 4.2.1, Solaris Volume Manager VERITAS Volume Manager (VxVM) 3.1
<b>Sun StorEdge Services Software and Patches</b>	<p>Sun StorEdge Version 3.0 software includes the Sun StorEdge core services and one or both of the Sun SNDR and Sun StorEdge Instant Image Version 3.0 software.</p> <p>The initial release of the Version 3.0 software requires that the following patches are installed. If you have SunSolve subscription, patches are available at <a href="http://sunsolve.sun.com/">http://sunsolve.sun.com/</a></p> <p><b>Patch number</b> 111945-xx - Storage Cache Manager 111946-xx - Storage Volume Driver 111947-xx - Instant Image 111948-xx - Sun SNDR</p>
<b>Supported Cluster Configuration</b>	The Sun Cluster 3.0 Update 1 and Sun StorEdge 3.0 services software with patches are supported in a two-node cluster environment only.
<b>Hardware</b>	<p>A CD-ROM drive connected to the host server where the Sun software is to be installed.</p> <p>Disk space requirements:</p> <ul style="list-style-type: none"><li>• The Sun SNDR software requires approximately 1.4 Mbytes</li><li>• The Instant Image software requires approximately 1 Mbyte</li><li>• The Sun StorEdge configuration location requires 4.5 Mbytes</li><li>• Supporting Sun StorEdge services packages require approximately 3 Mbytes</li></ul>

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# Product Notes

This section describes the following topics:

- [“Shutting Down Nodes After You Install the Sun StorEdge Services Software” on page 3](#)
- [“Creating and Configuring Sun StorEdge Volume Sets” on page 3](#)
- [“Switching Over Global Devices Only” on page 4](#)
- [“A Directory Named .\\_ is Created After Mounting a Secondary Volume” on page 4](#)

## Shutting Down Nodes After You Install the Sun StorEdge Services Software

Because the Sun StorEdge services installation process requires you to shut down and restart each node in the cluster, *make sure that you install the Sun StorEdge services software and related patches during your normal maintenance window.*

As a result of this shutdown and restart, you might experience a panic condition on the node you are restarting. The node panic is expected behavior in the cluster and is part of the cluster software’s *failfast mechanism*. The *Sun Cluster 3.0 U1 Concepts* manual describes this mechanism and the Cluster Membership Monitor (CMM).

## Creating and Configuring Sun StorEdge Volume Sets

**Only one system administrator or root user at a time** is allowed to create and configure Sun StorEdge volume sets. This restriction help avoids corrupting the Sun StorEdge services configuration.

## Switching Over Global Devices Only

The `scswitch(1M)` command enables you to manually switch all resource groups and device groups from the primary mastering node to the next preferred node. The *Sun Cluster 3.0 U1 System Administration Guide* describes how to perform these tasks.

Local devices do not fail over and switch back; do not configure them as part of your cluster. A file system mounted on a volume and designated as a local device must not be configured as a device to fail over and switch back in the Sun Cluster environment. Only global devices mounted with the `global` option in the `/etc/vstab` file can switch to another cluster node.

## A Directory Named `._` is Created After Mounting a Secondary Volume

After you synchronize the primary and secondary Sun SNDR volumes, you might notice a directory named `._` if you perform a directory listing. This directory is created by the cluster file system. For example:

```
secondary_hostname# ls -a
.
..
._
.profile
bin
classes
[and so on]
```

You can ignore this directory or delete it. When you unmount the cluster file system, the directory disappears.

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# Workarounds to Known Bugs

This section provides workarounds to the following known bugs:

- [“4480728 System Panic Occurs When Manually Switching Over More Than 160 Sun SNDR Volume Sets”](#) on page 5

## *4480728*

### *System Panic Occurs When Manually Switching Over More Than 160 Sun SNDR Volume Sets*

If you use the `scswitch(1M)` command to manually switch over more than 160 Sun SNDR volume sets while the volume sets are synchronizing, a system panic might occur.

#### **Workaround**

Before you try to manually switch over more than 160 Sun SNDR volumes sets, place your Sun SNDR volume sets into logging mode. Logging mode stops the Sun SNDR replication and starts scoreboard bitmap logging for the volume sets

#### **1. Check the status of your Sun SNDR volumes.**

This optional step enables you to see the volume sets that are currently synchronizing.

```
# /usr/opt/SUNWesm/sbin/sndradm -p | more
```

#### **2. Place all volume sets into logging mode.**

This step halts any synchronization operations and starts logging changes to volumes.

```
# /usr/opt/SUNWesm/sbin/sndradm -l
```

#### **3. Check the status again to make sure the volume sets are in logging mode.**

#### **4. Manually switch over the volume sets using the `scswitch` command.**

#### **5. To resynchronize the volume sets, use the `sndradm -m` or `sndradm -m -r` commands.**

