

**Sun Cluster 3.2 2/08 Geographic Edition
Release Notes**

3.2 2/08 Release Notes

820-2994

Release Notes

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(English) Sun Cluster Geographic Edition 3.2 2-08 Release Notes

Sun Cluster Geographic Edition 3.2 2/08 Release Notes

This document provides the following information for Sun™ Cluster Geographic Edition 3.2 2/08 software.

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New Features and Functionality

This section describes each of the following new features provided in the Sun Cluster Geographic Edition 3.2 2/08 software.

- **Hitachi TrueCopy on x86 Based Systems**
Hitachi TrueCopy can be used with Sun Cluster Geographic Edition 3.2 2/08 software on both x86 and SPARC™ based systems.
- **Added Oracle RAC Versions**
This release supports the following versions of Oracle RAC on the following data replication software and platforms:

Platform	RAC Versions	Data Replication Software
SPARC	9i, 10g, 11g	EMC Symmetrix Remote Data Facility, Hitachi TrueCopy
x86	9i, 10g	Hitachi TrueCopy

- **Relaxed Restrictions on Resource-Group Dependencies**
To support multiple instances of Oracle RAC within a partnership, a resource within a protection group can now have dependencies on resources that are outside that protection group. Such dependencies permit the Oracle CRS framework to run independently of Sun Cluster Geographic Edition software, while individual RAC instances remain managed within protection groups.
- **Service Tags**
This release supports Sun Service Tags. For more information about Sun Service Tags, see [Sun Connection on BigAdmin \(http://www.sun.com/bigadmin/hubs/connection/tasks/register.jsp\)](http://www.sun.com/bigadmin/hubs/connection/tasks/register.jsp).
- **Support for Short-Term Difference in Sun Cluster and Geographic Edition Versions Between Partner Clusters**
Sun Cluster Geographic Edition 3.2 2/08 software has been tested to interoperate with Sun Cluster Geographic Edition 3.2 software, and this mixed configuration is supported. To avoid possible problems with future maintenance and management, do not use such a mixed version environment for a longer period than is necessary to complete the update of all related clusters to the current release. Also be aware that some third-party products in the configuration might at some time not support this mixed-version partnership.

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Supported Products

This section describes the supported software for Sun Cluster Geographic Edition 3.2 2/08 software.

- [Supported Software Products](#)
- [Restrictions](#)
- [Support for EMC Symmetrix Remote Data Facility \(SRDF\) Configurations](#)

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Supported Software Products

The following table lists the software products and versions that are supported by Sun Cluster Geographic Edition 3.2 2/08 software.

Supported Products and Versions

Software	Version
Solaris Operating System	<ul style="list-style-type: none"> • SPARC™: Solaris 9 9/05, Solaris 9 9/05 HW; Solaris 10 11/06, Solaris 10 8/07 • x86: Solaris 10 11/06, Solaris 10 8/07
Sun Cluster	3.2 2/08
Volume management software	<ul style="list-style-type: none"> • With Sun StorageTek™ Availability Suite 4 software: <ul style="list-style-type: none"> • Solaris Volume Manager software • (on Solaris 10) Veritas Volume Manager software • With Sun StorEdge™ Availability Suite 3.2.1 software: <ul style="list-style-type: none"> • (on Solaris 9) Solaris Volume Manager software • Veritas Volume Manager software • With Hitachi TrueCopy: Veritas Volume Manager software • With EMC Symmetrix Remote Data Facility: Veritas Volume Manager software
Data Replication	<ul style="list-style-type: none"> • Sun Availability Suite software <ul style="list-style-type: none"> • (on Solaris 9) Sun StorEdge Availability Suite 3.2.1 • (on Solaris 10) Sun StorageTek Availability Suite 4 • Hitachi TrueCopy RAID Manager • EMC Symmetrix Remote Data Facility

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Restriction

As of the time of publication, the following features or products are not supported by Sun Cluster Geographic Edition 3.2 2/08 software:

- ZFS file systems are not supported as replicated storage that is managed by Sun Cluster Geographic Edition software. However, you can have a ZFS file system on a cluster node that runs Geographic Edition software as long as that file system is not part of the Geographic Edition configuration.

Contact your Sun representative to learn whether a feature or product becomes qualified with Sun Cluster Geographic Edition 3.2 2/08 software at a later date.

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Support for EMC Symmetrix Remote Data Facility (SRDF) Configurations

Sun Cluster Geographic Edition 3.2 2/08 software currently supports the following SRDF configurations:

- Static SRDF device group
- Dynamic SRDF device group

Sun Cluster Geographic Edition 3.2 2/08 software supports SRDF configurations in Synchronous, Semi-synchronous, and Adaptive Copy modes. However, Semi-synchronous and Adaptive Copy modes are not suitable for a business-continuity solution.



Note

Before you choose to use SRDF Semi-synchronous or Adaptive Copy modes with Sun Cluster Geographic Edition software, consult EMC documentation for any warnings or restrictions concerning the use of these modes in business-continuity configurations.

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Known Issues and Bugs

The following known issues and bugs affect the operation of the Sun Cluster Geographic Edition 3.2 2/08 release.

The `geopg create` Command Fails if the "description" Property Value Contains Multiple Words Separated by Spaces (6643519)

Problem Summary: When run from the command line, the `geopg create` command fails with an exception if the value of the `description` property contains multiple words that are separated by spaces. However, this problem does not occur when the GUI is used.

Workaround: If a multiple-word description is required, either separate the words with a nonspace character such as an underscore (`_`) or use the GUI to update the description after you create the protection group.

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Switchover Cannot Be Performed with Asynchronous SRDF (6389092)

Problem Summary: When Symmetrix Remote Data Facility (SRDF) data replication is used, Sun Cluster Geographic Edition software does not allow you to issue the `geopg switchover` command if a device group that is included in a protection group is set to Asynchronous mode.

The failback-switchover procedure that is included in the Sun Cluster Geographic Edition documentation for SRDF therefore does not work as written for device groups in Asynchronous mode because the procedure includes the `geopg switchover` command.

Workaround: To perform a failback-switchover, after you resynchronize the clusters in the partnership, temporarily change device groups from Asynchronous mode to Synchronous mode by using the following command:

```
# smrdf -g devicegroup set mode sync
```

After you complete and verify the switchover, set the device groups back to Asynchronous mode by using the following command:

```
# smrdf -g devicegroup set mode async
```

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Unable to Start Sun Cluster Geographic Edition on Any Node of the Cluster Due to Corruption in CCR Tables (6619265)

Problem Summary: If actions or events result in corruption in CCR tables, the Sun Cluster Geographic Edition framework cannot start on any node of the affected cluster.

Workaround: There is no workaround for this problem. Contact your Sun Support office for assistance to correct the errors in the CCR. Do not attempt to modify CCR tables without Sun assistance.

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Having Resource Groups That Have Local Zones in Their nodelist in Availability Suite Protection Groups Is Not Working (6598942)

Problem Summary: In this release of Sun Cluster Geographic Edition software, you cannot add resource groups to a protection group if those resource groups are configured to run in a non-global zone.

Workaround: If management of resources in a zone is required, use the Sun Cluster HA for Containers agent.

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Unable to Restart Geo on the Same Node Immediately After Start Failure (6528160)

Problem Summary: If an exception occurs while starting the Sun Cluster Geographic Edition control module, the module is disabled on the node.

Workaround: Before you restart the Sun Cluster Geographic Edition framework, restart the common agent container (CAC):

```
# /usr/sbin/cacaoadm restart
```

If the Sun Cluster Geographic Edition framework still does not start, stop the CAC framework, remove the old resource groups that the `geoadm start` command created, and restart the CAC:

```
# /usr/sbin/cacaoadm stop -f
# clrg delete -F geo-resourcegroup...
# /usr/sbin/cacaoadm restart
```

Then restart the Sun Cluster Geographic Edition framework.

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CVM Disk Group Not Imported During Protection Group Start if "-n" Option Is Used (6503715)

Problem Summary: On a system where a VxVM cluster-feature disk group is not imported, if the user starts the protection group and uses the `-n` option to the `geopg start` command, the disk group is not imported. This failure to import in turn causes the starting of Oracle RAC database resources to fail.

Workaround: When a protection group is configured for Oracle RAC, do not use the `-n` (no replication) option to the `geopg start` command when you start the protection group.

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Neither `geoadm start` Nor `geoadm stop` Function Properly When Sun Cluster Geographic Edition Resources Are in the `STOP_FAILED` State (6446765)

Problem Summary: Certain unusual configuration errors could leave the cluster in a state where the Sun Cluster Geographic Edition framework can neither be started (`geoadm start`) nor cleanly stopped (`geoadm stop`).

Workaround: It is most likely that a Sun Cluster Geographic Edition infrastructure resource is in the `STOP_FAILED` state. To clear the `STOP_FAILED` state, take the following actions:

1. Use the `cluster status -t rs,rg` command to determine which resources and resource groups are affected.
2. Clear the `STOP_FAILED` flag for all resources and resource groups that are in the `STOP_FAILED` state by using the following command for each:

```
# clresource clear resource
```

3. Manually stop the application that failed to stop.
For example, if an `ora_1snr` failed to stop, stop it fully. Ignore this step if the affected resources are Sun Cluster Geographic Edition infrastructure only.
4. If necessary, stop the resource groups.
If a resource failed to stop during a resource group stop, the resource group remains in the `STOP_FAILED` state and

you must stop it by using the following command:

```
# clresourcegroup offline resourcegroup
```

If the resources failed to stop during a restart of the resource or while the resource was being disabled, ignore this step.

5. Retry the `geoadm stop` command.

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Sun Cluster Manager Does Not Always Refresh Protection Group Status Change (6302217)

Problem Summary: Configuration and state changes of entities on a page that is displayed in Sun Cluster Manager should cause the page to be refreshed automatically. Sometimes the refresh does not occur.

Workaround: Use the navigation tree to navigate to a different page, then return to the original page. The original page is refreshed on reload.

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Sun Cluster Manager Requires Same Root Password on Partner Clusters (6260505)

Problem Summary: To use the Sun Cluster Manager graphical user interface (GUI), the root password must be the same on all nodes of both clusters in the Sun Cluster Geographic Edition deployment.

Workaround: If you use Sun Cluster Manager to configure your clusters, ensure that the root password is the same on every node of both clusters. If you prefer not to set the root password identically on all nodes, use the command-line interface to configure your clusters.

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No RBAC Support for Sun Cluster Manager (6226493)

Problem Summary: Sun Cluster Manager does not support RBAC roles.

Workaround: Start Sun Cluster Manager as superuser on the local cluster.

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Required Patches

This section provides information about patches for Sun Cluster Geographic Edition configurations.



Note

You must be a registered My Oracle Support™ user to view and download the required patches for the Sun Cluster Geographic Edition product. If you do not have a My Oracle Support account, contact your Oracle service representative or sales engineer, or register online at [My Oracle Support](#).

You must have the following patches installed:

- Sun StorEdge Availability Suite 3.2.1 CORE: a minimum of 116466-09
- Sun StorEdge Availability Suite 3.2.1 II: a minimum of 116467-09
- Sun StorEdge Availability Suite 3.2.1 SNDR: a minimum of 116468-13
- SPARC: Sun StorageTek Availability Suite 4 SNDR: a minimum of 123246-03
- x86: Sun StorageTek Availability Suite 4 SNDR: a minimum of 123247-03

Check with a Sun service representative for the availability of these patches.

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Sun Cluster 3.2 Commands

Starting in release 3.2, Sun Cluster software includes new object-oriented commands. The Sun Cluster Geographic Edition user documentation has been revised to refer to these commands. If you have experience with the original Sun Cluster command set, be assured that the original commands continue to be supported.

For more information about the object-oriented Sun Cluster commands, see [Appendix A, "Sun Cluster Object-Oriented Commands"](#), in Sun Cluster System Administration Guide for Solaris OS.

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Sun Cluster Geographic Edition 3.2 2/08 Documentation

The Sun Cluster Geographic Edition 3.2 2/08 user documentation set consists of the following collections:

- Sun Cluster Geographic Edition 3.2 2/08 Release Notes Collection
- Sun Cluster Geographic Edition 3.2 2/08 Software Collection
- Sun Cluster Geographic Edition 3.2 2/08 Reference Collection

For the latest documentation, go to the docs.sun.com web site. The docs.sun.com web site enables you to access Sun Cluster Geographic Edition documentation on the Web. You can browse the docs.sun.com archive or search for a specific book title or subject at the following Web site:

| <http://docs.sun.com>

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Sun Cluster Geographic Edition 3.2 2/08 Software Collection

The Sun Cluster Geographic Edition 3.2 2/08 Software Collection contains the following manuals.

Part Number	Book Title
820-3004	Sun Cluster Geographic Edition Overview
820-2995	Sun Cluster Geographic Edition Installation Guide
820-2996	Sun Cluster Geographic Edition System Administration Guide
820-2999	Sun Cluster Geographic Edition Data Replication Guide for Sun StorageTek Availability Suite
820-2998	Sun Cluster Geographic Edition Data Replication Guide for Hitachi TrueCopy
820-2997	Sun Cluster Geographic Edition Data Replication Guide for EMC Symmetrix Remote Data Facility

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Sun Cluster Geographic Edition 3.2 2/08 Reference Collection

This collection contains the [Sun Cluster Geographic Edition Reference Manual](#), part number 820-2992.

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Localization Issues

No localization issues are known of at this time.

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Documentation Issues

This section discusses known errors or omissions for man pages, documentation, or online help and steps to correct these

problems.

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Data Replication Guides for EMC Symmetrix Remote Data Facility, Hitachi True Copy, and Sun StorageTek Availability Suite (CR 6640525)

In the procedure "How to Resynchronize a data replication Protection Group" in each of these manuals, the following instruction applies to Step 1, "Log in to a cluster node":

If only one of the clusters is running release 3.2 2/08 of Sun Cluster Geographic Edition software, log in to a node of that cluster. This enables that cluster to propagate the `External_Dependency_Allowed` protection-group property, which is introduced in the Sun Cluster Geographic Edition 3.2 2/08 release, to the cluster that runs the 3.2 release, which does not contain this property. Otherwise, the absence of the `External_Dependency_Allowed` property might result in the protection group going into a synchronization-error state.

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Sun Cluster Geographic Edition Installation Guide

This section discusses errors and omissions from the Sun Cluster Geographic Edition Installation Guide.

The section "Planning Required IP Addressed and Hostnames" documents that, when you configure a partnership between two clusters that are in different DNS domains, for example, `denver.com` and `london.uk`, you must include the domain when you specify a cluster name to Sun Cluster Geographic Edition commands. This topic does not make clear that, however, the cluster name itself must not be defined to the Sun Cluster software to include its domain. For example, to rename a cluster from `denver` to `newyork`, use the command `cluster rename denver newyork`, not `cluster rename denver.com newyork.net`.

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Sun Cluster Geographic Edition System Administration Guide

This section discusses errors and omissions from the Sun Cluster Geographic Edition System Administration Guide.

When you use the `geops` command to administer trust between clusters that are in different domains, append the domain to the cluster name. For example, if the cluster `newyork` is in the `.usa` domain, add trust to the cluster by using the command `geops add-trust -c newyork.usa`. This requirement is not documented in the System Administration Guide procedures.

In addition, the cluster name as it is returned by the `cluster list` command must not include the domain name, as the system might interpret such names as `cluster.domain.domain` and not be able to resolve the cluster name correctly. Do add the domain of a cluster to the `/etc/hosts` file.

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V.29 pick up at 4/30 for l10n translation.