

Oracle® Solaris Cluster Geographic Edition
3.3 Release Notes

3.3 Release Notes

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Release Notes

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Oracle® Solaris Cluster Geographic Edition 3.3 Release Notes

This document provides the following information for Oracle® Solaris Cluster Geographic Edition 3.3 software.

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For information about Oracle Solaris Cluster 3.3 software, see the [Oracle Solaris Cluster 3.3 Release Notes](#) .

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New Features and Functionality

This section describes new features provided in the Oracle Solaris Cluster Geographic Edition 3.3 software.

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Zone Cluster Support

This release supports a zone cluster as a member of a partnership with another zone cluster or with a global cluster. This feature requires that the zone cluster runs on Oracle Solaris Cluster 3.3 software. For planning guidelines and configuration instructions, see [Oracle Solaris Cluster Geographic Edition Installation Guide](#)

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Supported Products

This section lists the software products and versions that are supported by Oracle Solaris Cluster Geographic Edition 3.3 software.

- [Data Replication](#)
- [Oracle Solaris Cluster Software](#)
- [Volume Management Software](#)

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Data Replication

- [EMC Symmetrix Remote Data Facility SymCLI 6.0.1 and microcode 5671 software](#)
- [Oracle Solaris Cluster Geographic Edition script-based plug-ins](#)
- [Hitachi TrueCopy RAID Manager/Solaris Version 01-18-03/03 or compatible](#)
- [Hitachi Universal Replicator RAID Manager/Solaris Version 01-18-03/03 or compatible](#)
- [MySQL 5.0 or compatible](#)
- [\(With Oracle RAC 10g release 10.2.0.4 or 11g only\) Oracle Data Guard](#)
- [Sun StorageTek Availability Suite 4](#)

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Oracle Solaris Cluster Software

- Oracle Solaris Cluster 3.3
- Sun Cluster 3.2 11/09

Oracle Solaris Cluster Geographic Edition 3.3 supports the same versions of the Solaris OS as the cluster software version you use. See the Release Notes for your version of cluster software for the supported versions of the Solaris OS.

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Volume Management Software

Data Replication Software	Supported Volume Managers
EMC Symmetrix Remote Data Facility	Veritas Volume Manager
Hitachi TrueCopy	Veritas Volume Manager
Hitachi Universal Replicator	Veritas Volume Manager
Oracle Data Guard ¹	Oracle Automatic Storage Management Solaris Volume Manager for Sun Cluster Veritas Volume Manager with cluster feature
Sun StorageTek Availability Suite 4	Solaris Volume Manager Veritas Volume Manager

¹ For information about additional supported storage management options, see "[Storage Management Requirements for Oracle Files](#)" in the Oracle Solaris Cluster Data Service for Oracle Real Application Clusters Guide.

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Restrictions

As of the time of initial release, the following features or products are not supported by the 3.3 release of Oracle Solaris Cluster Geographic Edition software:

- ZFS Replicated Storage
- EMC SRDF Support and Restrictions

ZFS Replicated Storage

ZFS storage pools are not supported as replicated storage that is managed by Geographic Edition software. However, you can have a ZFS storage pool on a cluster node that runs Geographic Edition software if that storage pool is not part of the replicated storage that is managed by Geographic Edition software.

Contact your Oracle representative to learn whether a feature or product becomes qualified with Oracle Solaris Cluster Geographic Edition 3.3 software at a later date.

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EMC SRDF Support and Restrictions

Oracle Solaris Cluster Geographic Edition 3.3 software currently supports the following EMC Symmetrix Remote Data Facility (SRDF) configurations:

- Dynamic SRDF device group
- Static SRDF device group

Geographic Edition 3.3 software supports these configurations in Synchronous and Asynchronous modes for data replication in disaster-recovery environments. Synchronous mode is supported for takeover and switchover operations. Asynchronous mode is

supported for takeover operations, and a workaround permits switchover in asynchronous mode as well. For details, see the workaround for Bug 6389092 [here](#).



Caution

EMC SRDF Adaptive mode is not supported for use with clustered data services. It does not guarantee data consistency in normal operations.

The `domino` option, which can be set on EMC SRDF device pairs, suspends writes to the primary site if writes to the secondary site fail. Any failure of secondary storage or of the communication link between the Geographic Edition partnered clusters might cause the complete loss of application data services. This is not a highly available configuration, and you should not configure the `domino` option on devices that will be used by clustered data services.

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Commands Modified in This Release

There are no changes to the Geographic Edition command interfaces in this release that might cause user scripts to fail.

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Known Issues and Bugs

The following known issues and bugs affect the operation of the Oracle Solaris Cluster Geographic Edition 3.3 release.

- [Protection Group Remains in Configuration Error State During Failback-Switchover After a Complete Site Failure \(6972299\)](#)
- [Geographic Edition Commands Fail When Executed by Non-Root User With Correct RBAC Settings on Global Zone \(6970308\)](#)
- [Geo Operations That Start Resource Group Do Not Report Problems When Resource Group Start Does Not Complete Successfully \(6969230\)](#)
- [Not All CMAS XML Files Are Copied to Zone Nodes if Installed After Zone Cluster Created and in Noncluster Mode \(6968002\)](#)
- [geo-failovercontrol Resource Fails to Start on Second Node if Connection Lost to Primary Node \(6932775\)](#)
- [Switchover Cannot Be Performed with Asynchronous SRDF \(6389092\)](#)

Protection Group Remains in Configuration Error State During Failback-Switchover After a Complete Site Failure (6972299)

Problem Summary: A protection group with Hitachi TrueCopy replication remains in a configuration error state during failback-switchover after a complete site failure.

Workaround: Put the TrueCopy device group in the SMPL state, then start the protection group globally as follows:

```
# geopg start -e global PGname
```

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Geographic Edition Commands Fail When Executed by Non-Root User With Correct RBAC Settings on Global Zone (6970308)

Problem Summary: Execution of Geographic Edition commands fails for non-superuser, even if the user has the correct RBAC role, due to a change in CCR access rules.

Workaround: Only if you are using Sun StorageTek Availability Suite, EMC SRDF, or Hitachi TrueCopy or Universal Replicator data

replication, make the Geographic Edition data retrieval commands' `setuid` as follows:

```
# chmod 4555 /usr/cluster/lib/geo/lib/scgeo_devicegroup_get
# chmod 4555 /usr/cluster/lib/geo/lib/scgeo_partnership_get
# chmod 4555 /usr/cluster/lib/geo/lib/scgeo_protectiongroup_get
```

Do not use this workaround if you are using Oracle Data Guard or a Geographic Edition script-based plug-in for data replication. With these data replication methods, this workaround might expose to unprivileged users passwords that are held in the Cluster Configuration Repository (CCR). Instead, perform Geographic Edition commands as superuser.

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Geo Operations That Start Resource Group Do Not Report Problems When Resource Group Start Does Not Complete Successfully (6969230)

Problem Summary: When Geographic Edition methods bring resource groups online, the methods complete successfully even if a resource group initially fails to start on a node.

Workaround: This is intended behavior. The resource group will fail over to another node and might start correctly there. The initial error is ignored, and a later probe is used to determine and report resource group status after sufficient time has elapsed.

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Not All CMAS XML Files Are Copied to Zone Nodes if Installed After Zone Cluster Created and in Noncluster Mode (6968002)

Problem Summary: If the user installs Geographic Edition after a zone cluster is created, when the cluster is booted into noncluster mode, the files that are needed for Geographic Edition to work in zone clusters might not all be copied to the zone-cluster nodes (non-global zones).

Workaround: On each node of the zone cluster, perform the following tasks:

1. Copy the following files from the `/etc/cluster/geocmass/` directory to the `/etc/cacao/instances/default/modules/` directory:

```
com.sun.cluster.agent.cluster.xml
com.sun.cluster.agent.config_access.xml
com.sun.cluster.agent.event.xml
com.sun.cluster.agent.failovercontrol.xml
com.sun.cluster.agent.logquery.xml
com.sun.cluster.agent.node.xml
com.sun.cluster.agent.rgm.xml
com.sun.cluster.agent.devicegroup.xml
```

2. Restart the common agent container.

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

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geo-failovercontrol Resource Fails to Start on Second Node if Connection Lost to Primary Node (6932775)

Problem Summary: When many protection groups are configured, failure of the primary node of a cluster might cause the startup of the Geographic Edition infrastructure to time out while starting on another node.

Workaround: Increase the `START_TIMEOUT` property of the `geo-failovercontrol` resource from the default of 600 seconds

to 1800 seconds (30 minutes). The required value might need to be determined by trial and error, depending on the number of protection groups that are configured.

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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:

```
# symrdf -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:

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

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Required Patches

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



Note

You must be a registered SunSolve user to view and download the required patches for the Oracle Solaris Cluster Geographic Edition product. If you do not have a SunSolve account, contact your Oracle service representative or sales engineer, or register online at <http://sunsolve.sun.com>.

If a cluster runs Sun StorageTek Availability Suite, you must have the following patches installed:

- SPARC: Sun StorageTek Availability Suite 4 SNDR: a minimum of 123246-07
- x86: Sun StorageTek Availability Suite 4 SNDR: a minimum of 123247-07

Check with an Oracle service representative for the availability of these patches.

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Oracle Solaris Cluster Geographic Edition 3.3 Documentation

The Oracle Solaris Cluster Geographic Edition 3.3 user documentation set consists of the following collections, in addition to this Release Notes:

- [Oracle Solaris Cluster Geographic Edition 3.3 Software Collection](#)
- [Oracle Solaris Cluster Geographic Edition 3.3 Reference Collection](#)

For the latest documentation, go to the Oracle Technology Network documentation site at <http://www.oracle.com/technetwork/indexes/documentation/index.html>. This site enables you to access Oracle Solaris Cluster Geographic Edition documentation on the Web. You can browse the documentation index or search for a specific book title or subject.

Oracle Solaris Cluster Geographic Edition 3.3 documentation is available only in English.

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Oracle Solaris Cluster Geographic Edition 3.3 Software Collection

The Oracle Solaris Cluster Geographic Edition 3.3 Software Collection contains the following manuals.

Part Number	Book Title
821-1409	Oracle Solaris Cluster 3.3 Documentation Center
821-1416	Oracle Solaris Cluster Geographic Edition Overview
821-1415	Oracle Solaris Cluster Geographic Edition Installation Guide
821-1414	Oracle Solaris Cluster Geographic Edition System Administration Guide
821-1413	Oracle Solaris Cluster Geographic Edition Data Replication Guide for EMC Symmetrix Remote Data Facility
821-1412	Oracle Solaris Cluster Geographic Edition Data Replication Guide for Hitachi TrueCopy and Universal Replicator
821-1410	Oracle Solaris Cluster Geographic Edition Data Replication Guide for Oracle Data Guard
821-1411	Oracle Solaris Cluster Geographic Edition Data Replication Guide for Sun StorageTek Availability Suite

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Oracle Solaris Cluster Geographic Edition 3.3 Reference Collection

This collection contains the [Oracle Solaris Cluster Geographic Edition Reference Manual](#), part number 821-1408.

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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.

No documentation issues are known at this time.

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