



Sun™ Fire 15K/12K Dynamic Reconfiguration Release Notes

Solaris 9

Sun Microsystems, Inc.
4150 Network Circle
Santa Clara, CA 95054 U.S.A.
650-960-1300

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Preface

This guide contains instructions for installing the dynamic reconfiguration (DR) software on Sun Fire 15K and Sun Fire 12K systems that are running the Solaris 9 operating environment; and release notes for DR.

Before You Read This Book

This guide is intended for the Sun Fire system administrator who has a working knowledge of UNIX® systems, particularly those based on the Solaris™ operating environment. If you do not have such knowledge, read the Solaris User and System Administrator documentation provided with this system, and consider UNIX system administration training.

Using UNIX Commands

This document may not contain information on basic UNIX commands and procedures such as shutting down the system, booting the system, and configuring devices.

See one or more of the following for this information:

- *Solaris Handbook for Sun Peripherals*
- Online documentation for the Solaris software environment
- Other software documentation that you received with your system

Typographic Conventions

Typeface or Symbol	Meaning	Examples
AaBbCc123	The names of commands, files, and directories; on-screen computer output	Edit your <code>.login</code> file. Use <code>ls -a</code> to list all files. % You have mail.
AaBbCc123	What you type, when contrasted with on-screen computer output	% su Password:
<i>AaBbCc123</i>	Book titles, new words or terms, words to be emphasized	Read Chapter 6 in the <i>User's Guide</i> . These are called <i>class</i> options. You <i>must</i> be superuser to do this.
	Command-line variable; replace with a real name or value	To delete a file, type <code>rm filename</code> .

Shell Prompts

Shell	Prompt
C shell	<i>sc_name:sms-user</i> :> or <i>domain_id:sms-user</i> :>
C shell superuser	<i>sc_name</i> :# or <i>domain_id</i> :#
Bourne shell and Korn shell	>
Bourne shell and Korn shell superuser	#

Related Documentation

Application	Title	Part Number
System Management Services (SMS) 1.2 software for the Sun Fire 15K system	<i>System Management Services (SMS) 1.2 Dynamic Reconfiguration User Guide</i>	816-4279-10
Sun Fire 15K DR user information	<i>Sun Fire 15K Dynamic Reconfiguration User Guide</i>	816-4278-10
Planning the installation of a Sun Fire 15K	<i>Sun Fire 15K System Site Planning Guide</i>	806-3510-10
Installing the Solaris operating environment	<i>Solaris 9 Installation Roadmap</i>	816-1662-10
Sun Fire 15K/12K DR user information	<i>Sun Fire 15K/12K Dynamic Reconfiguration User Guide</i>	816-5075-10
System Management Services (SMS) 1.2 software for the Sun Fire 15K/12K systems	<i>System Management Services (SMS) 1.2 Dynamic Reconfiguration User Guide</i>	816-5076-10

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Sun Fire 15K/12K Dynamic Reconfiguration Release Notes

This chapter contains the release notes for Dynamic Reconfiguration (DR) on Sun Fire 15K servers and covers the following topics:

- New Sun Fire System Available
- Known DR Limitations
- Dynamic Reconfiguration (DR) Bugs

New Sun Fire System Available

In addition to the Sun Fire 15K system, dynamic reconfiguration runs on the new Sun Fire 12K system. The Sun Fire 12K system can accommodate up to nine system boards (which are numbered SB0 through SB 8, and IO0 through IO8). The following documents provide information about the Sun Fire 12K systems:

System Management Services (SMS) 1.2 Dynamic Reconfiguration User Guide (part number 816-5076-10)

Sun Fire 15K/12K Dynamic Reconfiguration User Guide (part number 816-5075-10)

Known DR Limitations

This version of the Dynamic Reconfiguration (DR) software on Sun Fire 15K systems has the following functional limitations:

DR Limitations

- DR is not supported on I/O boards. However, you can hot-plug hPCI cards on I/O boards to reconfigure I/O capacity dynamically. Do not use the `psradm(1M)` command concurrently with a hot-swap operation on the same domain.
- Do not attempt to perform DR operations on a Max CPU system board that resides in a domain.
- If you attempt to perform DR operations that reconfigure permanent memory on a board where STMS is enabled, the operation is rejected.

Dynamic Reconfiguration (DR) Bugs

The following are known Dynamic Reconfiguration (DR) software bugs.

Command Reissue Timeout During SC Failover (BugIds 4643724 and 4645703)

If a failover on the system controller (SC) is performed while the affected domains are in the address or response bus degraded mode, a reissue timeout `dstop` command is sent when an attempt is made to set the domains to non-degraded mode.

Workaround: None.

The `memscrubber` process never sleeps in a domain that is configured with large memory (BugId 4647808)

When a domain is configured with a large amount of memory (340GB or more) either at boot time or due to subsequent DR operations, the memory scrubbing thread will monopolize a particular system lock for 60 to 90 minutes once every 12 hours. Any DR operation which attempts to configure or unconfigure memory in the domain during one of these windows will hang until the system lock is released. As long as a DR operation remains hung for this reason, any additional DR operations will also hang.

Workaround: If this problem is encountered, it will go away on its own within 90 minutes. However, the problem can be avoided entirely by adding the following line to the `/etc/system` file prior to booting: `set memscrub_span_pages = 0x3000`

DCA doesn't detect a failed network connection (BugId 4628314)

DCA doesn't detect a failed network connection, which can cause a DR command to hang.

Workaround: Kill any of the following remote DR command that appears to be hung: `addboard(1M)`, `moveboard(1M)`, `deleteboard(1M)`, `rcfgadm(1M)`, or `showdevices(1M)`.

Mailbox framework failure (BugId 4525439)

The following message sometimes appears when you run a DR command: "WARNING: reply timed out and Mailbox framework failure."

Workaround: Retry the operation.

