Sun™ Management Center 3.5 Supplement for Sun Enterprise™ 6500/5500/4500/3500 Systems

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Preface

This book provides platform-specific Sun™ Management Center 3.5 software information for the following Sun Enterprise™ platforms:

- Sun Enterprise 6500 server
- Sun Enterprise 5500 server
- Sun Enterprise 4500 server
- Sun Enterprise 3500 server

This supplement is intended for Sun Enterprise 6500/5500/4500/3500 system administrators who install and use the Sun Management Center software to monitor and manage their Sun Enterprise 6500/5500/4500/3500 systems.

The Sun Management Center 3.5 documents for Sun Enterprise 6500/5500/4500/3500 systems are available in French, Japanese, Korean, Simplified Chinese, and Traditional Chinese. However, the examples of screens in this supplement appear only in English.

Note – If you have trouble seeing all the text in your language in a given window, resize the window.

Before You Read This Book

Read this supplement after the *Sun Management Center 3.5 Installation and Configuration Guide*, which provides detailed instructions for installing and configuring Sun Management Center 3.5 software and the *Sun Management Center 3.5 User's Guide*, which provides detailed instructions for using Sun Management Center software.

How This Book Is Organized

Chapter 1 describes:

- Installing the Sun Enterprise Add-on Software Using the Sun Management Center 3.5 Installation Wizard
- Setting Up the Sun Enterprise Add-on Software Using the Sun Management Center 3.5 Software Setup Wizard
- Updating Multiple Hosts Using Agent Update
- Uninstalling Software Using the CLI

Chapter 2 describes Usage of Sun Management Center 3.5 Software on Sun Enterprise 6500/5500/4500/3500 Systems.

To view license terms, attribution, and copyright statements for open source software included in this release, the default path is:

```
/cdrom/sunmc_3_5_sparc/image/Webserver/Solaris_9/SUNWtcatr \
/install/copyright
```

If you are using Solaris 8 software, substitute `Solaris_8` for `Solaris_9` in the path.

Typographic Conventions

Typeface[*]	Meaning	Examples
AaBbCc123	The names of commands, files, and directories; on-screen computer output	Edit your `.login` file. Use `ls -a` to list all files. `% You have mail.`
AaBbCc123	What you type, when contrasted with on-screen computer output	`%` **`su`** `Password:`
AaBbCc123	Book titles, new words or terms, words to be emphasized. Replace command-line variables with real names or values.	Read Chapter 6 in the *User's Guide*. These are called *class* options. You *must* be superuser to do this. To delete a file, type `rm` *filename*.

* The settings on your browser might differ from these settings.

Shell Prompts

Shell	Prompt
C shell	*machine-name*`%`
C shell superuser	*machine-name*`#`
Bourne shell and Korn shell	`$`
Bourne shell and Korn shell superuser	`#`

Related Documentation

Application	Title	Part Number
Software installation	*Sun Management Center 3.5 Installation and Configuration Guide*	816-2678
Software use	*Sun Management Center 3.5 User's Guide*	816-2716
Issues, limitations, and bugs	*Sun Management Center 3.5 Release Notes*	816-2718
Dynamic reconfiguration	*Sun Enterprise 6x00/5x00/4x00/3x00 Systems Dynamic Reconfiguration User's Guide*	806-0280

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Sun Management Center 3.5 Supplement for Sun Enterprise 6500/5500/4500/3500 Systems, part number 816-7383-10

Installation and Setup

This chapter describes how to install, set up, uninstall, and update Sun Management Center 3.5 add-software for Sun Enterprise 6500/5500/4500/3500 systems.

The Sun Management Center software is divided into:

- Base packages that provide the Sun Management Center infrastructure and basic support
- Add-on components that provide support for particular hardware platforms

Sun Enterprise 6500/5500/4500/3500 support requires the Sun Management Center 3.5 base packages and the add-on Sun Enterprise 6500/5500/4500/3500 packages.

The *Sun Management Center 3.5 Software Installation and Configuration Guide* describes basic information about installing and setting up the Sun Management Center 3.5 base packages and starting and stopping the software. This chapter describes the processes specifically related to the Sun Enterprise 6500/5500/4500/3500 systems.

Caution – Use the installation scripts and the setup scripts provided with the Sun Management Center 3.5 software. Do *not* manually add packages or manually change configuration files.

Your Sun Management Center 3.5 installation and setup scripts or GUI panels may not display exactly the same messages in exactly the same sequence as the examples shown in this chapter. However, these examples show the basic messages you will receive in approximately the sequence you will receive them. Your actual installation and setup scripts depend on the add-on components you choose to install and other choices you make.

Sun Enterprise 6500/5500/4500/3500 System-Specific Packages

The Sun Enterprise 6500/5500/4500/3500 system-specific packages received with the Sun Management Center 3.5 basic functionality are listed in TABLE 1-1. Refer to the *Sun Management Center 3.5 Software Installation and Configuration Guide* for information about general Sun Management Center prerequisites.

TABLE 1-1 Sun Management Center Packages for the Sun Enterprise 6500/5500/4500/3500 Systems

Package	Description
SUNWessdr	Sun Management Center Sun Enterprise 6500/5500/4500/3500 Dynamic Reconfiguration server properties
SUNWesadr	Sun Management Center Sun Enterprise 6500/5500/4500/3500 Dynamic Reconfiguration module
SUNWesmcf	Sun Management Center MetaData Config Reader
SUNWsycfd	Sun Management Center Agent--Config Reader module
SUNWensfc	Sun Management Center English messages for Sun Enterprise (6500/5500/4500/3500) Config Reader

Installing the Sun Enterprise Add-on Software Using the Sun Management Center 3.5 Installation Wizard

Chapter 6, "Installation and Setup" of the *Sun Management Center 3.5 Installation and Configuration Guide*, describes in detail how to install all the software. An overview of the process follows.

1. As superuser, run the Sun Management Center 3.5 Installation Wizard, `es-guiinst,` as described in Chapter 6, "Installation and Setup," of the *Sun Management Center 3.5 Installation and Configuration Guide*.

2. After the base software is installed, the Select Add-on Product screen provides a selectable list of add-on products that you can install. Select those add-ons that apply to Sun Enterprise systems, and click Next.

3. The Sun Management Center Setup Wizard starts automatically after all the software is installed.

Setting Up the Sun Enterprise Add-on Software Using the Sun Management Center 3.5 Software Setup Wizard

This section describes how to set up the Sun Enterprise add-on software using the Sun Management Center 3.5 Setup Wizard.

Note – When the Back button at the bottom of a panel is enabled (not grayed out), you can click on it to take you back to the previous operation. When the back button is grayed out (not enabled), you cannot go back to the previous operation.

Note – Be sure you click Store Response Data during the Sun Management Center 3.5 base software setup process if you want to use the `setup-responses-file` to duplicate the setup on the current machine on other machines. That way all of your responses will be stored in `/var/opt/SUNWsymon/install/setup-responses-file`. For more information, refer to "Setting Up Base Products and Add-ons on the Solaris Platform" in the *Sun Management Center 3.5 Installation and Configuration Guide*.

▼ To Set Up Sun Enterprise 6500/5500/4500/3500 Add-on Software

● **On any host where you want to set up the add-on software, type** `es-guisetup` **to start the Sun Management Center 3.5 Setup Wizard.**

The add-on software is automatically set up.

Updating Multiple Hosts Using Agent Update

This section describes how to update multiple hosts at once using Agent Update. The Agent Update process itself must be run on the Sun Management Center server machine. You also need to ensure that Sun Management Center 3.5 agents are running on all the target hosts.

Before You Start the Agent Update Process

To use Agent Update to fully install and set up the Sun Enterprise platform agent modules, you must create an Agent Update configuration file for the module on the target hosts, *before* you run the Agent Update Process on the Sun Management Center server machine.

Note – Be sure you click Store Response Data during the Sun Management Center 3.5 base software setup process if you want to use the `setup-responses-file` to duplicate the setup on the current machine on other machines. That way all of your responses will be stored in `/var/opt/SUNWsymon/install/setup-responses-file`. For more information, refer to "Setting Up Base Products and Add-ons on the Solaris Platform" in the *Sun Management Center 3.5 Installation and Configuration Guide*.

▼ To Create the Agent Update Configuration File on the Target Hosts

1. **Ensure the Sun Enterprise platform agent modules are installed on the target hosts.**

2. **Ensure that the Sun Enterprise platform agent modules are set up on the target hosts using either the `es-setup` script or the `es-guisetup` Wizard.**

   After this has been done, subsequent platform agent setup operations using Agent Update will work automatically, using the host-specific information provided initially.

Using the Agent Update Process

Using the Agent Update process, create an Image File of the add-on components to be distributed to the target machines, and then add a New Job to Manage Jobs Task list to be run when you specify.

Supported Update Configurations

Using Agent Update you can update the following configurations:

- "To Update From Sun Management Center 3.5 Add-on Software" on page 5
- "To Update From No Add-on Software or Sun Management Center 3.0 Platform Update 4 Add-on Software" on page 9

▼ To Update From Sun Management Center 3.5 Add-on Software

This procedure applies *only* to updating from Sun Management Center 3.5 add-on software.

1. **Create an Image File of the desired Sun Enterprise add-on components to be distributed to the desired agent machines using one of the base Sun Management Center scripts** `es-gui-imagetool` **or** `es-imagetool`**.**

   Refer to Chapter 8, "Post-Installation Tasks," in the *Sun Management Center 3.5 Installation and Configuration Guide* for detailed instructions about using either the Wizard or the CLI Image Tool.

2. **From your main Sun Management Center console window, select the Manage Jobs... option from the Tools menu.**

   The system displays the Manage Jobs panel (FIGURE 1-1), which allows you to distribute the Image File.
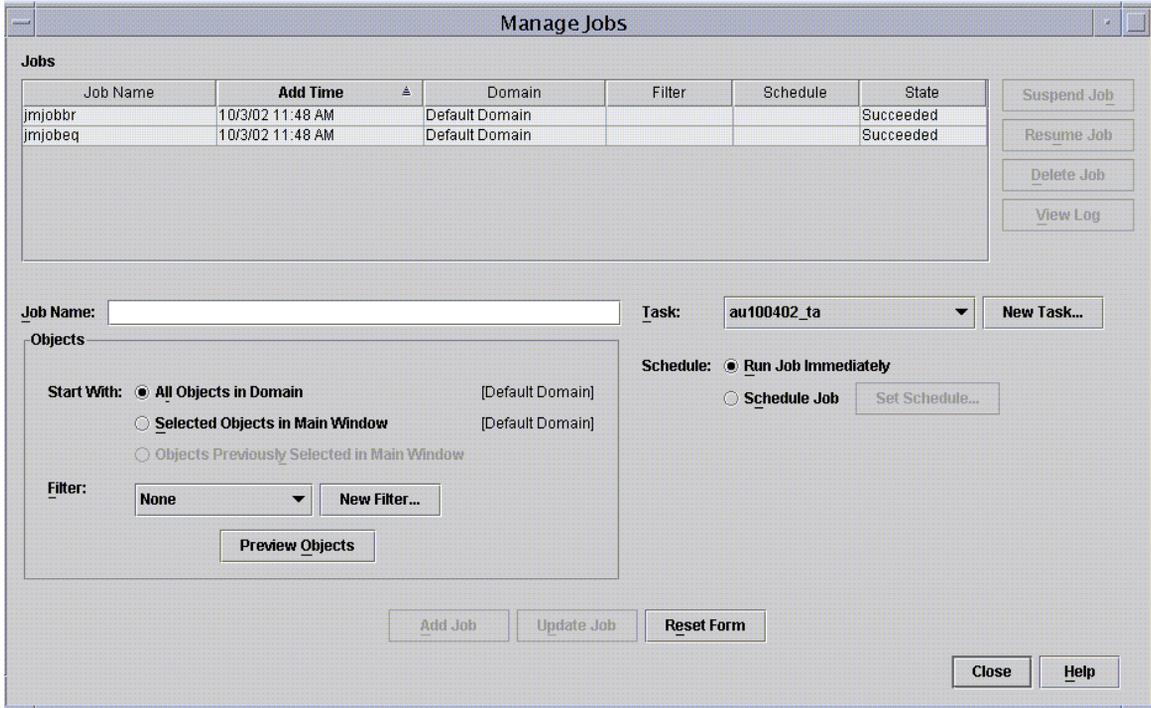
3. **In the Manage Jobs panel, select the New Task... button.**

   The system displays the New Task panel (FIGURE 1-2), which allows you to specify the Agent Update Image File to distribute.
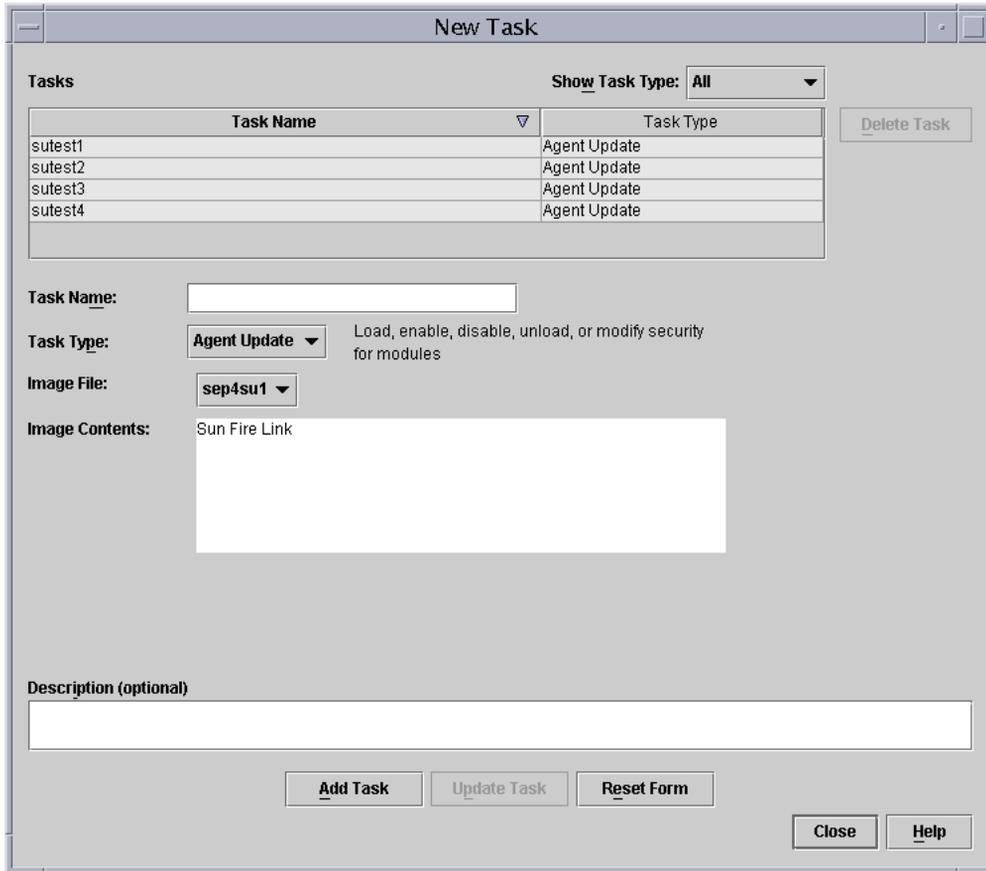
FIGURE 1-2 New Task Panel

4. **In the New Task panel (**FIGURE 1-2**), do the following:**

    a. **Select Agent Update for the Task Type.**

    b. **Select the Image File you created in Step 1.**

    c. **Enter the Task Name.**

    d. **Click the Add Task button.**

    e. **Click the Close button.**

5. **In the Manage Jobs panel (**FIGURE 1-1**), do the following:**

    a. **Enter a Job Name.**

    b. **Select the Task you created in Step 4.**

c. **Do one of the following to schedule when you want the Task to run.**

- **If you want the Task to run immediately, click the radio button to the left of Run Immediately.**

- **If you want to set a schedule for when the Task is to run, click the radio button to the left of Schedule Job, and set the schedule.**

Note – Before you select objects (agent machines) where you want the Image File, you can create a group object containing all your agent machines. That way you do not have to select one agent machine at a time. Refer to Chapter 3, "To Create a Group," in the Sun Management Center 3.5 User's Guide for more information about creating object groups.

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d. **Do one of the following to select the objects (agent machines) to which you want to distribute the Image File.**

- **Click the radio button to the left of All Objects in Domain to select all objects, and specify any filter you want to use to further select objects.**

- **Click the radio button to the left of Selected Objects in Main Window to select one object at a time.**

e. **Preview the objects (agent machines) you have selected and redo your selections if necessary.**

f. **Click the Add Job button.**

The job starts and distributes the Image File to the objects (agent machines) you selected. When the job is running, it appears in the Job list of the Manage Jobs panel. The panel shows the status of the job when running and when complete.

Note – When updating multiple hosts, any failure of a host results in a `Failed` status even though the majority of the hosts might have been updated successfully. Click on View Log to the right of the Jobs list on the Manage Jobs panel to see an individual list of the updates that succeeded and the updates that failed. If the Agent Update process did succeed, the Sun Management Center agents should restart automatically. You can open a host Details window on the Sun Management center console to each of the targeted hosts, and verify that the expected modules are present and working.

▼ To Update From No Add-on Software or Sun Management Center 3.0 Platform Update 4 Add-on Software

This procedure applies to either:

- Updating from no add-on software to Sun Management Center 3.5 add-on software
- Updating from Sun Management Center 3.0 Platform Update 4 add-on software to Sun Management Center 3.5 add-on software

1. **Log in as root on the Sun Management Center server machine.**

2. **Create an agent-update image using either of the image tools.**

   - To create an agent-update image using `es-gui-imagetool`, follow the instructions in "To Create an Agent-Update Image Using `es-gui-imagetool`" in the *Sun Management Center 3.5 Installation and Configuration Guide*.
   - To create an agent-update image using `es-imagetool`, follow the instructions in "To Create an Agent-Update Image Using `es-imagetool`" in the *Sun Management Center 3.5 Installation and Configuration Guide*.

3. **Download the file** `/opt/SUNWsymon/base/bin/agent-update.bin` **to each target machine's root directory.**

   If you installed Sun Management Center in a different directory than `/opt`, download `/installdir/SUNWsymon/base/bin/agent-update.bin`, where *installdir* is the install directory you specified.

4. **Log in as root on the target machine.**

5. **Go to the directory where you downloaded** `agent-update.bin`**.**

6. **Type ./agent-update.bin -s** *server* **-r** *http-port* **-p** *image-name***, where**

   - *server* is the server that you logged into in Step 1.
   - *http-port* is the Sun Management Center Web server port.
   - *image-name* is the name of the agent-only image you created in Step 2.

7. **Provide the security seed and the SNMPv1 community string.**

   The agent-update process prompts you for the security seed and the SNMPv1 community string.

   - The security seed must be the same seed that you provided when you sent up the Sun Management Center server and agent.
   - The SNMPv1 community string must be the same community string you provided when you set up the Sun Management Center server and agent.

The update process applies the update to the machine without prompting for further information.

When the update process completes, check the update status by viewing the log file `/var/opt/SUNWsymon/log/agent-update.log` on the server host.

Uninstalling Software Using the CLI

You can uninstall:

■ All the Sun Management Center software (see "To Uninstall All Sun Management Center Software" on page 10)
■ One or more modules of the Sun Enterprise add-on software (see "To Uninstall Individual Add-on Modules" on page 11)

▼ To Uninstall All Sun Management Center Software

1. As superuser, type:

```
# ./es-uninst
```

The system displays this message.

```
This script will help you to uninstall the Sun Management Center software.

Following Sun Management Center Products are installed:
-------------------------------------------------------------------------

PRODUCT                                             DEPENDENT PRODUCTS
-------------------------------------------------------------------------

Production Environment                              All Addons
Sun Enterprise 6500-3500 Servers/sun4d DR                    None
Sun Enterprise 6500-3500 Servers/sun4d Config Reader         None

Do you want to uninstall Production Environment? [y|n|q]
```

2. **Type** y **to uninstall Production Environment, which uninstalls all Sun Management Center software.**

The system displays this message.

```
This will uninstall ALL Sun Management Center Products. !!!

Do you want to change selection? [y|n|q]
```

3. **Do one of the following**

   - **Type** y **to change your selection.**

     The system displays your selection; go to the beginning of Step 2.

   - **Type** n **to** *not* **change your selection.**

     The system displays this message.

```
Do you want to preserve database? [y|n|q]
```

Note – If you answer **y** for yes, the system preserves any data in the database, including open and closed alarms, loaded modules and their configurations, discoveries, managed objects, and rule thresholds.

---

4. **Type** y **to keep any existing topology and event data; or type** n **to discard the data.**

The system displays this message.

```
Proceed with uninstall? [y|n|q]
```

5. **Type** y **to proceed with the uninstall; or type** n **to** *not* **proceed with the uninstall.**

If you type **y** to proceed, the system displays the list of packages to be uninstalled, the packages as they are uninstalled, the status of the uninstallation, and the location of the log file.

▼ To Uninstall Individual Add-on Modules

1. **As superuser, type:**

```
# ./es-uninst
```

The system displays this message.

```
This script will help you to uninstall the Sun Management Center software.

Following Sun Management Center Products are installed:
-------------------------------------------------------------------------

PRODUCT                                                 DEPENDENT PRODUCTS
-------------------------------------------------------------------------

Production Environment                                  All Addons
Sun Enterprise 6500-3500 Servers/sun4d DR                  None
Sun Enterprise 6500-3500 Servers/sun4d Config Reader       None

Do you want to uninstall Production Environment? [y|n|q]
```

2. **Type** n **to** *not* **uninstall the Production Environment; in other words, type** n **to uninstall individual modules.**

   The system displays this message.

```
Do you want to uninstall Sun Enterprise 6500-3500 Servers/sun4d DR [y|n|q]
Do you want to uninstall Sun Enterprise 6500-3500 Servers/sun4d Config Reader
[y|n|q]
```

3. **Type** y **beside Sun Enterprise 6500-3500 Servers/sun45d DR or Config Reader if you do want to uninstall them, or** n **beside them if you do** *not* **want to uninstall them.**

   The system displays the module that will be uninstalled and this message.

```
Do you want to change selection? [y|n|q]
```

4. **Do one of the following:**

   - **Type** y **to change the selections.**

     The system displays your selections; go to the beginning of Step 3.

   - **Type** n **to** *not* **change your selections.**

     The system displays this message.

```
Proceed with uninstall? [y|n|q]
```

5. Type y **to proceed with the uninstall; or type** n **to** *not* **proceed with the uninstall.**

If you type **y** to proceed, the system displays the list of packages to be uninstalled, the packages as they are uninstalled, the status of the uninstallation, and the location of the log file.

Usage of Sun Management Center 3.5 Software on Sun Enterprise 6500/5500/4500/3500 Systems

This supplement covers the following topics:

- Applicable Platforms
- Dynamic Reconfiguration
- To Connect a Board
- To Disconnect a Board
- To Configure a Board
- To Unconfigure a Board
- To Test Memory
- Config-Reader Module
- Config-Reader Rules

Applicable Platforms

This book provides platform-specific Sun™ Management Center software information for the following Sun Enterprise™ platforms:

- Sun Enterprise 6500 server
- Sun Enterprise 5500 server
- Sun Enterprise 4500 server
- Sun Enterprise 3500 server

The *Sun Management Center 3.5 User's Guide* describes the software functionality that is common to all the supported hardware platforms, while platform-specific information is included in this supplement.

For complete information on how you can use the Sun Management Center software to manage and monitor your machines, read *both* this supplement *and* the *Sun Management Center 3.5 User's Guide*.

Dynamic Reconfiguration

Note – In this supplement, the dynamic reconfiguration features that are described are applicable only to the Sun Enterprise 6500/5500/4500/3500 systems using the 12/02 release or subsequent compatible version of the Solaris™ 9 Operating Environment.

Dynamic reconfiguration enables you to add, remove, or replace hardware units such as CPU/Memory and I/O boards while the system is powered up and running. Dynamic reconfiguration also enables boards to be reserved in a powered up state and inactive state for immediate use as spare units. This feature is only available on systems that have boards and slots designed for hot-plugging.

Note – The Dynamic Reconfiguration module must be loaded to use the dynamic reconfiguration feature of the Sun Management Center software. For more information on loading modules, refer to the "Managing Modules" chapter in the *Sun Management Center 3.5 User's Guide*.

▼ To Display the Dynamic Reconfiguration Table

To display the Dynamic Reconfiguration Table, do one of the following:

- Bring up the platform Details window under the Browser tab and Hardware icon. FIGURE 2-1 shows the icon for the Dynamic Reconfiguration module.
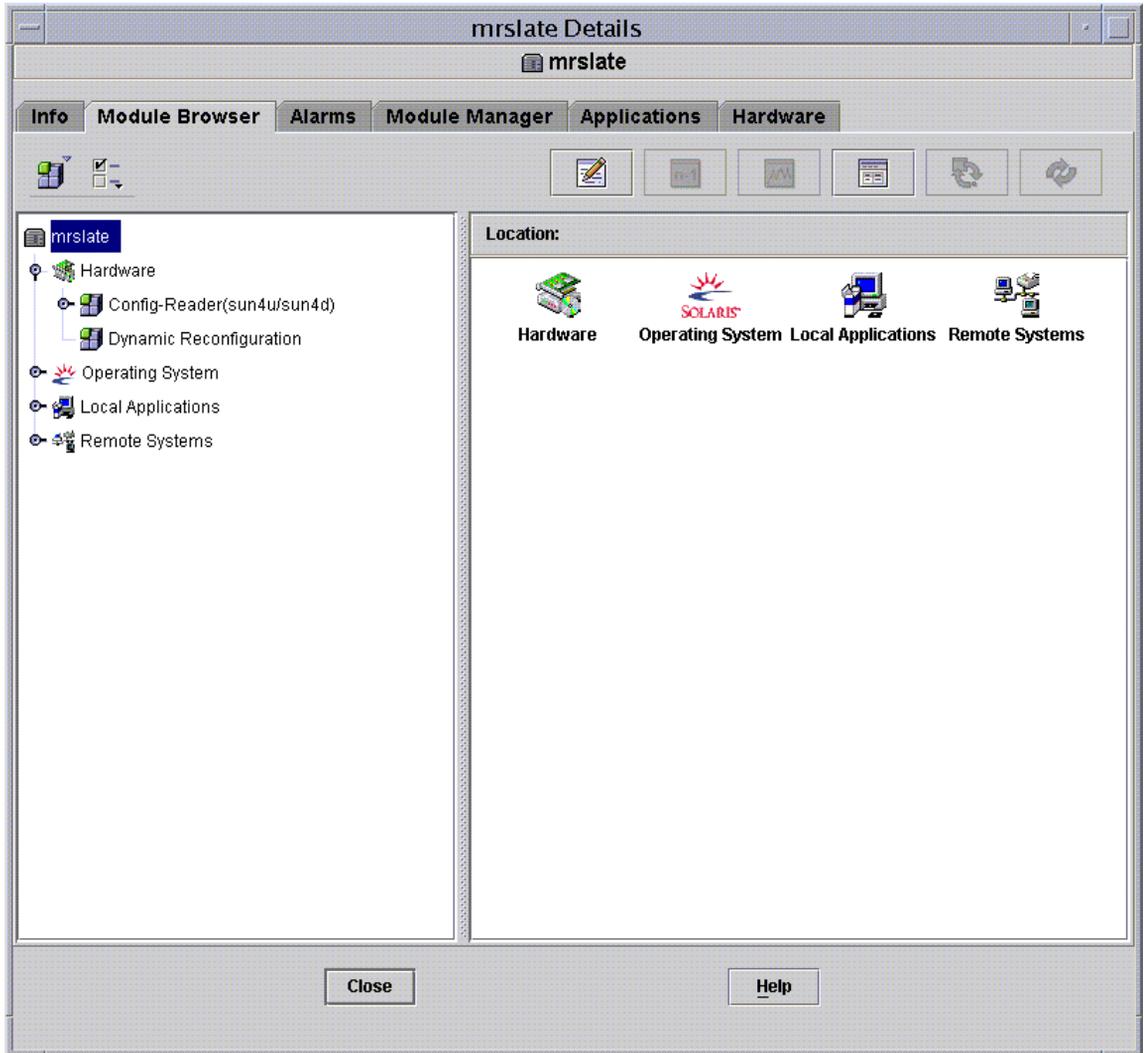
FIGURE 2-1 Dynamic Reconfiguration Module

■ Double-click on Dynamic Reconfiguration, and the Dynamic Reconfiguration table shown in FIGURE 2-2 appears.
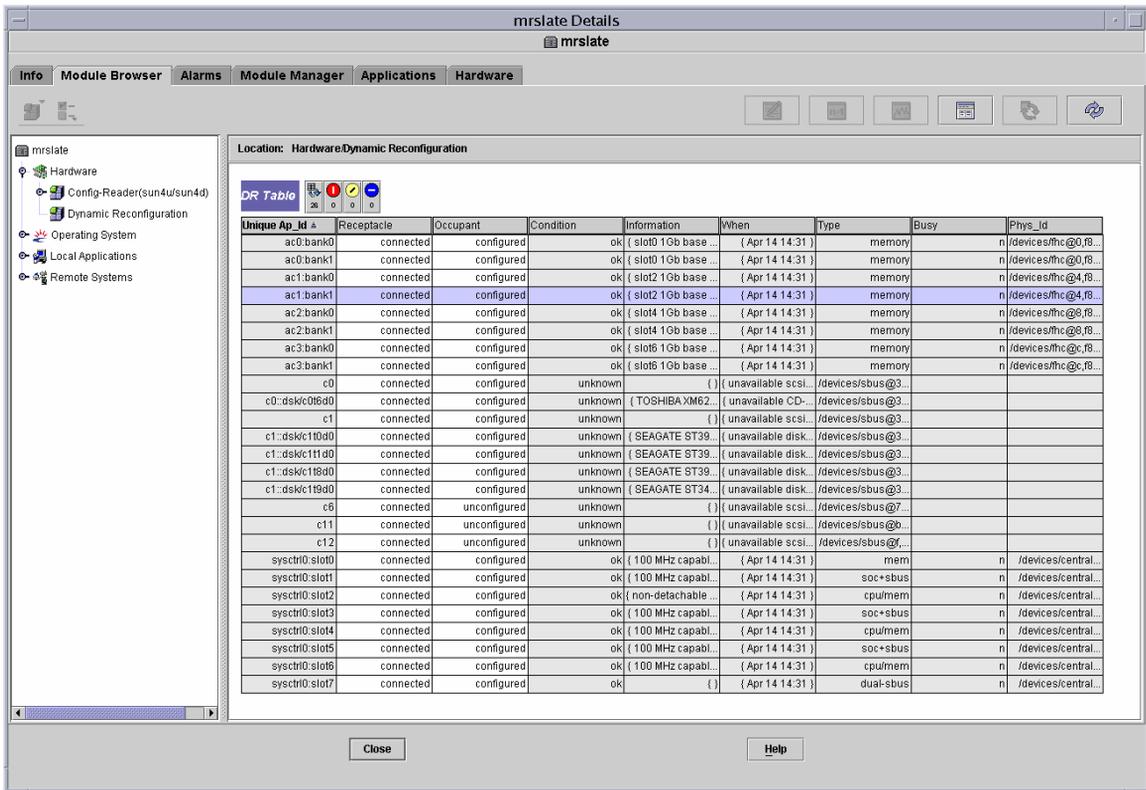
FIGURE 2-2   Dynamic Reconfiguration Table

- The Dynamic Reconfiguration button is displayed also in the physical and logical views of the Hardware tab of the Details window. However, by default the Hardware tab displays the Hardware Summary view (FIGURE 2-3), which does not have the Dynamic Reconfiguration button.
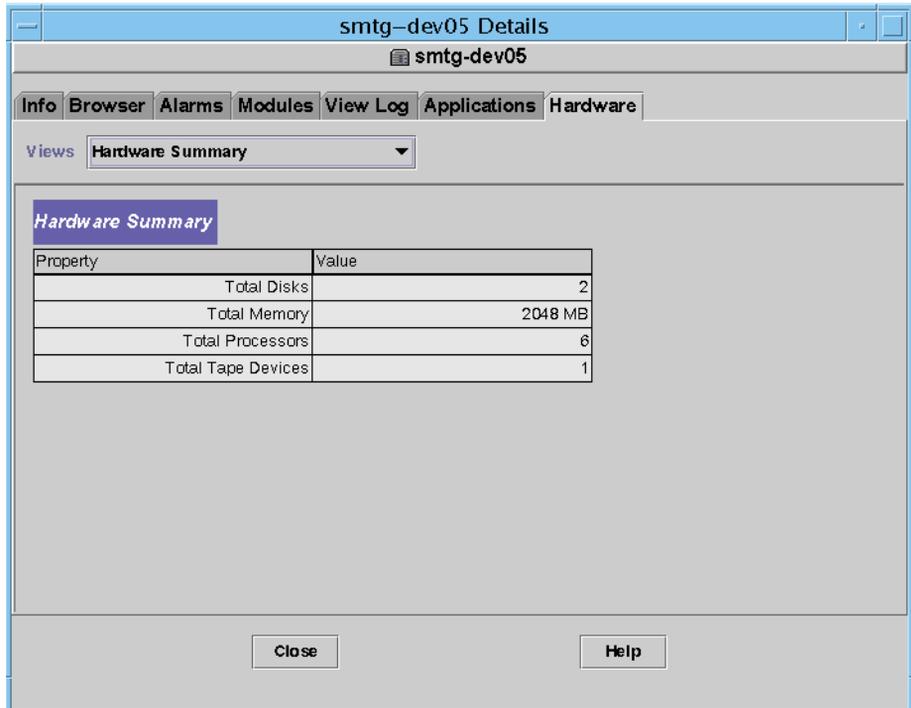
FIGURE 2-3   Hardware Tab (Default View)

To display the dynamic reconfiguration table:

a. **Open the Views pull-down menu (**FIGURE 2-4**) and select one of the system views.**

   Depending on your selection, you see either a physical view of the system (FIGURE 2-5) or a logical view (FIGURE 2-6). Both views have a Dynamic Reconfiguration button.

b. **Click the Dynamic Reconfiguration button to see the Dynamic Reconfiguration window (**FIGURE 2-7**).**
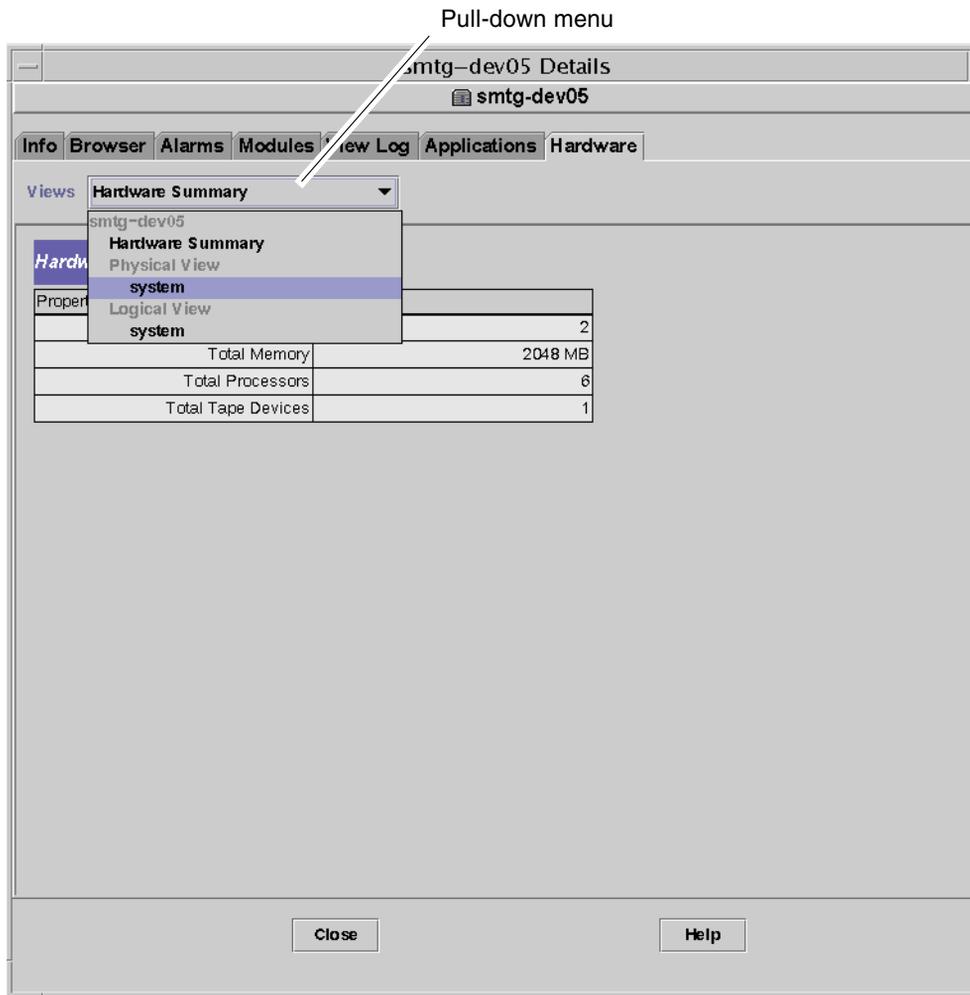
Pull-down menu

FIGURE 2-4   Pull-Down Menu in the Hardware Tab

Dynamic Reconfiguration button
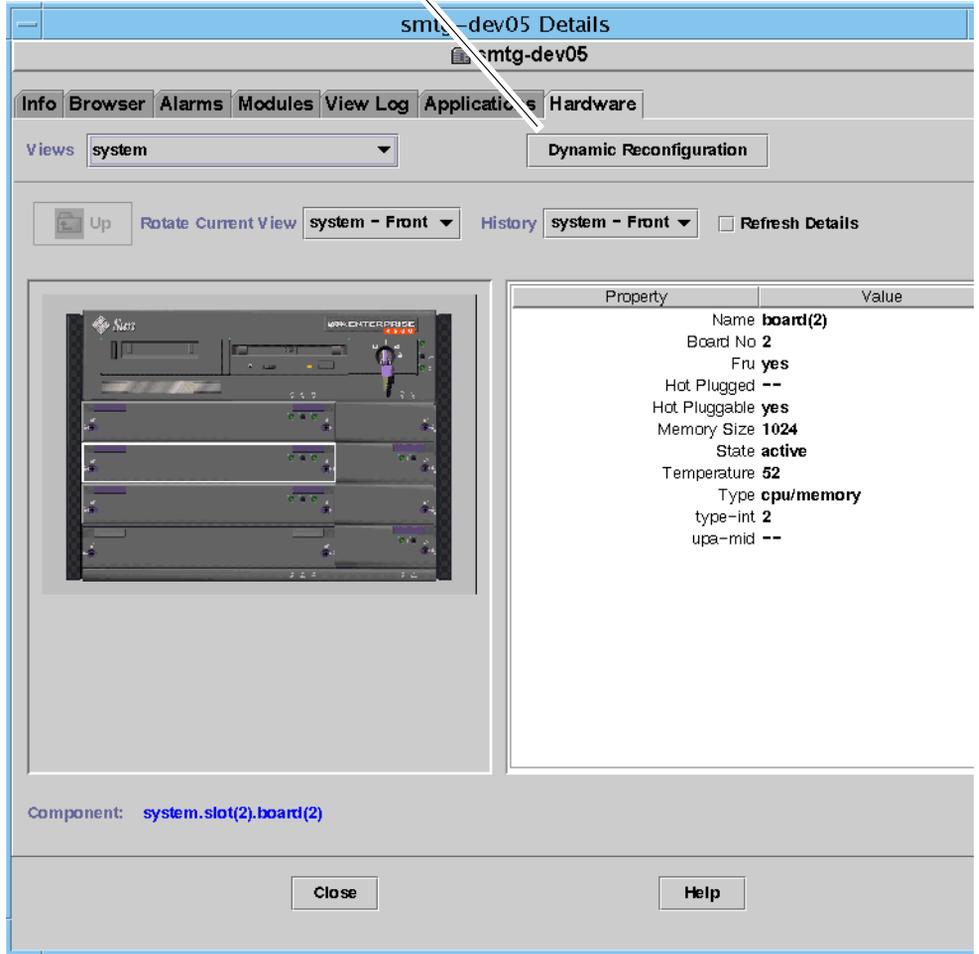
FIGURE 2-5   Physical View in the Hardware Tab

Dynamic Reconfiguration button
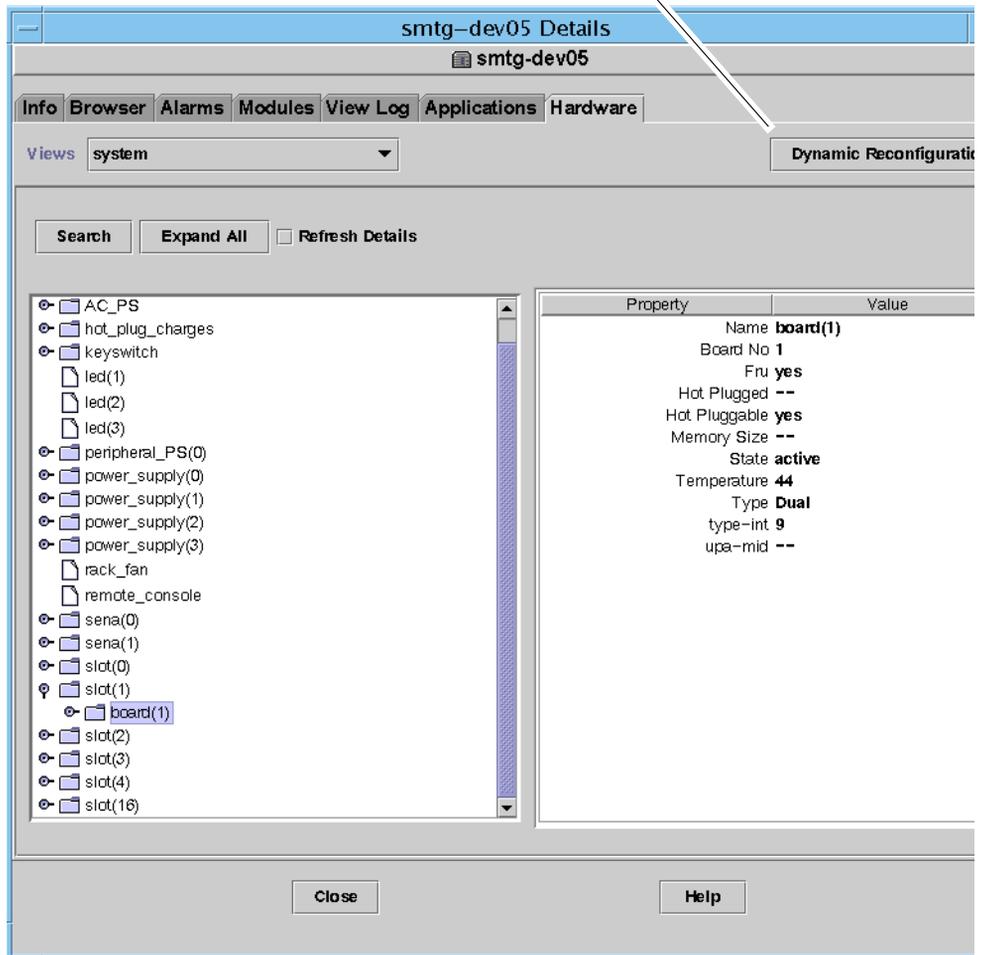
FIGURE 2-6 Logical View in the Hardware Tab

Note – For more information on the Hardware tab of the Details window, refer to the "Details" chapter in the *Sun Management Center 3.5 User's Guide*.
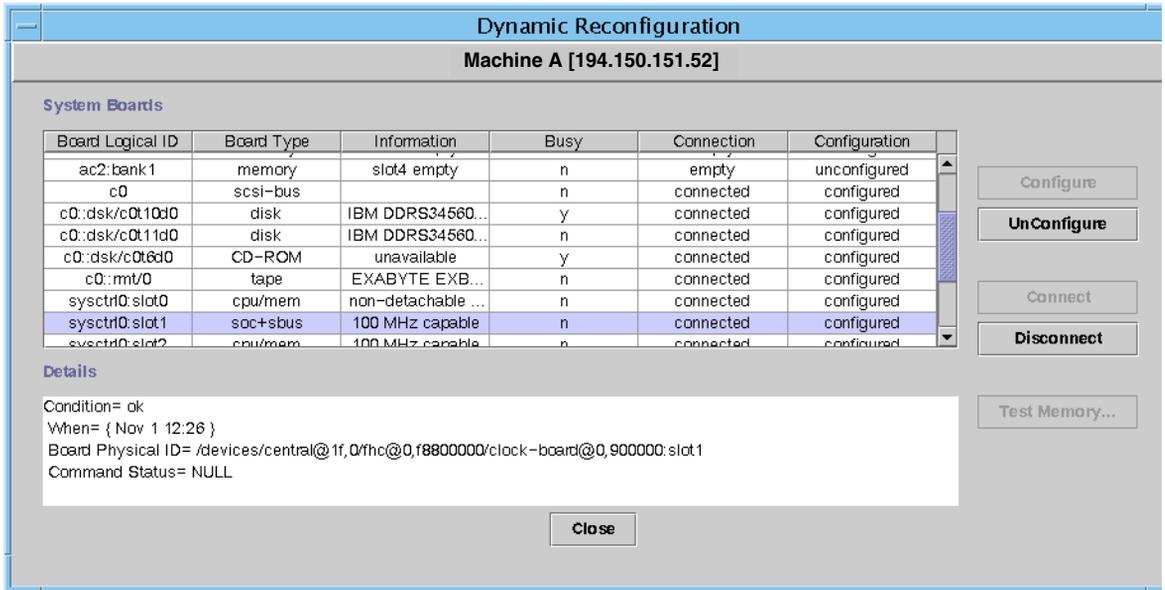
FIGURE 2-7   Dynamic Reconfiguration Window

Dynamic Reconfiguration Data Properties Table

The following table provides a brief description of the data properties for the Dynamic Reconfiguration module. When selected, the dynamic reconfiguration data property table is displayed in the Browser tab of the Details window. For more information on viewing data property tables, refer to the "Browser" chapter in the *Sun Management Center 3.5 User's Guide*.

TABLE 2-1   Dynamic Reconfiguration Properties

Property	Description
Unique Ap_Id	Unique attachment point ID
Receptacle	An attachment point defines two unique elements, which are distinct from the hardware resources that exist beyond the attachment point. One of the two elements of an attachment point is a receptacle. Configuration administration supports physical insertion and removal operations as well as other configuration administration functions at an attachment point.
Occupant	The other element of the attachment is an occupant physical insertion or removal of hardware resources. This occurs at attachment points and results in a receptacle gaining or losing an occupant.
Condition	Condition or status

TABLE 2-1   Dynamic Reconfiguration Properties *(Continued)*

Property	Description
Information	Additional information about the attachment point, including the date of operation
When	Date and time of the last requested action
Type	Type affected: CPU, disk, memory, or other if known
Busy	State: whether busy or not
Phys_Id	Directory path or physical address

System Boards Summary Table

Where applicable, the system boards summary table lists all slots in the card cage and shows the status of all slots and their occupants (TABLE 2-2).

TABLE 2-2   Columns in the System Boards Summary Table

Column	Description
Board Logical ID	Board ID as reflected by the `cfgadm` command
Board Type	Type of board (I/O, CPU/memory, or unknown)
Information	When the board was installed in the slot and additional information about the board, including whether or not it is detachable
Busy	Whether the board is currently in use (yes or no)
Connection	Whether the board is connected, disconnected, or the board slot is empty
Configuration	Whether the board is configured or unconfigured

Details Panel

Below the system boards summary table, the Details panel shows information about the state of a selected slot and its occupant board (TABLE 2-3).

TABLE 2-3 Details Panel in the Dynamic Reconfiguration Window

Field	Description
Condition	Status of the board occupying that slot
When	Date and time of the last requested action. When you select a new action, the values change to the current date and time.
Board Physical ID	System designation for the board
Command Status	Reports dynamic reconfiguration operations and error conditions

Note – The Configure, Unconfigure, Connect, Disconnect, and Test Memory buttons are grayed out as required by the condition of the board and slot. You cannot perform any dynamic reconfiguration when the slot is empty.

Performing Dynamic Reconfiguration Operations

You can perform three types of operations in the Dynamic Reconfiguration window:

- Connecting or disconnecting a board
- Configuring or unconfiguring a board or memory bank
- Testing memory

Note – For information on the proper use of these functions, refer to the *Sun Enterprise 6x00, 5x00, 4x00, and 3x00 Systems Dynamic Reconfiguration User's Guide*, part number 806-3984.

If after performing a dynamic reconfiguration operation, you see the error messages `Error opening logical view` or `Error opening physical view`, close and reopen the Details window for the host.

▼ To Connect a Board

> **Note –** Refer to the "Procedures" chapter in the *Sun Enterprise 6x00, 5x00, 4x00, and 3x00 Systems Dynamic Reconfiguration User's Guide*, part number 806-3984, for the step-by-step instructions for this procedure.

● **Select the board row in the system boards summary table and click the Connect button (**FIGURE 2-8**).**

Board Logical ID	Board Type	Information	Busy	Connection	Configuration
ac0:bank0	memory	slot7 1Gb base 0x0 interleaved 2–way permanent	n	connected	configured
ac0:bank1	memory	slot7 empty	n	empty	unconfigured
ac1:bank0	memory	slot9 1Gb base 0x40 interleaved 2–way permanent	n	connected	configured
ac1:bank1	memory	slot9 empty	n	empty	unconfigured
sysctrl0:slot1	soc+sbus	non–detachable 100 MHz capable	n	connected	configured
sysctrl0:slot3	soc+sbus	100 MHz capable	n	disconnected	unconfigured
sysctrl0:slot5	dual–pci	100 MHz capable	n	connected	configured
sysctrl0:slot7	cpu/mem	non–detachable 100 MHz capable	n	connected	configured
sysctrl0:slot9	cpu/mem	100 MHz capable	n	connected	configured

Details

Condition= unknown
When= { May 6 15:01 }
Board Physical ID= /devices/central@1f,0/fhc@0,f8800000/clock–board@0,900000:slot3
Command Status= Dynamic Reconfiguration Completed.

FIGURE 2-8 Dynamic Reconfiguration Window With Disconnected Board Selected

▼ To Disconnect a Board

> **Note –** Refer to the "Procedures" chapter in the *Sun Enterprise 6x00, 5x00, 4x00, and 3x00 Systems Dynamic Reconfiguration User's Guide*, part number 806-3984, for the step-by-step instructions for this procedure.

● **Select the board row in the system boards summary table and click the Disconnect button.**

The disconnected board displays a yellow LED (FIGURE 2-9).

If you disconnect a connected and configured board, the board is disconnected and also automatically unconfigured, thus performing two operations at once.
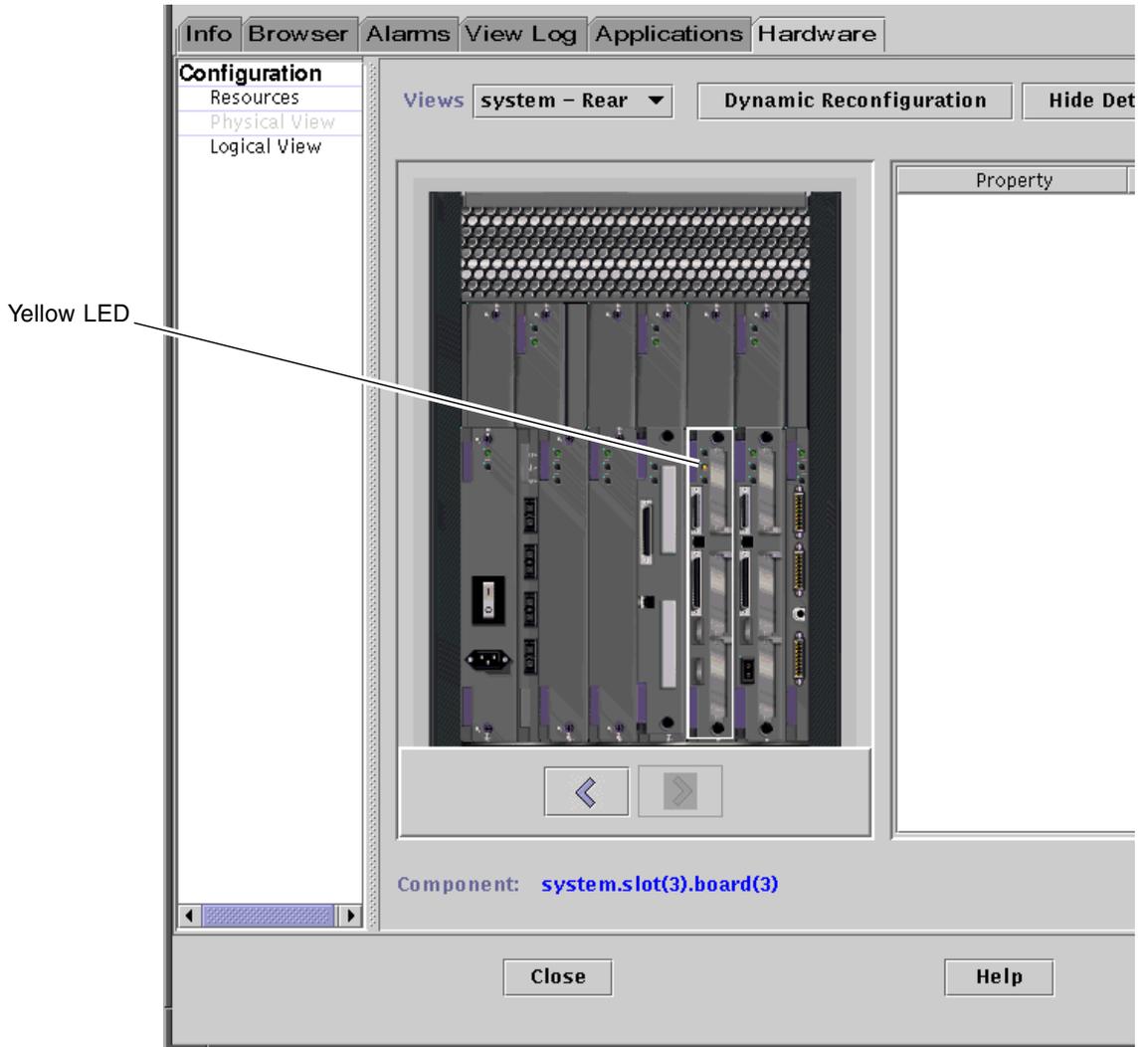
FIGURE 2-9   Physical View of a Disconnected Board With Yellow LED

▼ To Configure a Board

Note – Refer to the "Procedures" chapter in the *Sun Enterprise 6x00, 5x00, 4x00, and 3x00 Systems Dynamic Reconfiguration User's Guide*, part number 806-3984, for the step-by-step instructions for this procedure.

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1. **Select the board row in the system boards summary table and click the Configure button.**

   The Confirm dialog box is displayed (FIGURE 2-10).

2. **Select OK or Cancel.**

   When you configure a disconnected board, the board is also automatically connected, thus performing two operations at once.

FIGURE 2-10 Confirm Dialog Box

▼ To Unconfigure a Board

Note – Refer to the "Procedures" chapter in the *Sun Enterprise 6x00, 5x00, 4x00, and 3x00 Systems Dynamic Reconfiguration User's Guide*, part number 806-3984, for the step-by-step instructions for this procedure.

● **Select the board row in the system boards summary table and click the Unconfigure button.**

Testing Memory

Sun Management Center 3.5 software enables you to test the memory of CPU/Memory boards in the Dynamic Reconfiguration window.

▼ To Test Memory

Note – Refer to the "Procedures" chapter in the *Sun Enterprise 6x00, 5x00, 4x00, and 3x00 Systems Dynamic Reconfiguration User's Guide*, part number 806-3984, for the step-by-step instructions for this procedure.

A board *must* be unconfigured before its memory can be tested.

1. **Select the board row in the system boards summary table and click the Test Memory button.**

   The Test Memory dialog box is displayed (FIGURE 2-11).
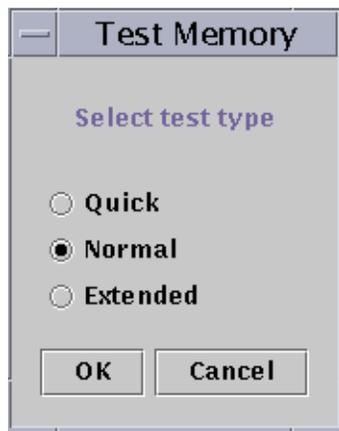
FIGURE 2-11 Test Memory Dialog Box

2. **Select the type of test: Quick, Normal, or Extended.**

   Quick and normal tests take several minutes, while an extended test may take more than an hour. For more information on these tests, refer to the *Sun Enterprise 6x00, 5x00, 4x00, and 3x00 Systems Dynamic Reconfiguration User's Guide*, part number 806-3984.

3. **Click OK to close this dialog box and test the memory, or click Cancel to cancel your request.**

Config-Reader Module

The Config-Reader module, when loaded, is displayed under the hardware icon.

The Config-Reader (sun4u/sun4d) module monitors your hardware and alerts you whenever there is a problem. For example, this module checks for single in-line memory module (SIMM) errors, monitors board temperatures and power supply status, and so on.

This module also obtains the physical view and logical view of your host. For more information on the physical and logical views, refer to the *Sun Management Center 3.5 User's Guide*.

Config-Reader Module Data Property Tables

This section includes the Config-Reader module data property tables:

The following tables describe the data properties that are contained in each of the Config-Reader data property tables. When selected, the Config-Reader data property tables are displayed in the Browser tab of the Details window. For more information, see the "Browser" chapter in the *Sun Management Center 3.5 User's Guide*.

System Table

TABLE 2-4   System Properties

Property	Description
Name	Instance name
Operating System	Operating environment running in the machine
Operating System Version	Operating environment version
System Clock Frequency	Clock frequency
Architecture	Architecture of the machine
Host name of the System	Host name of the system
Machine Name	Machine type
System Platform	Hardware platform of the system
Serial Number	Serial number of the machine
Timestamp	Time stamp value
Raw Timestamp	Raw time stamp value
Total Disks	Total number of disks present in the system
Total Memory	Total memory present in the system
Total Processors	Total processors present in the system
Total Tape Devices	Total tape devices present in the system

Board Table

TABLE 2-5 Board Properties

Property	Description
Name	Instance name
Board No.	Number of the board
Fru	Field-replaceable unit
Hot Plugged	Whether it is hot-plugged
Hot Pluggable	Whether it is hot-pluggable
Memory size	Size of the memory
State	State
Temperature	Temperature of the board
Type	Type of board (for example, CPU/memory, SBus, clock, and so on)

CPU Unit Properties Table

TABLE 2-6 CPU Unit Properties

Property	Description
Name	Name
Board No.	Number of the board
Clock Frequency	Frequency of timer
Cpu Type	Type of system
Dcache Size	Size of Dcache in Kbytes
Ecache Size	Size of Ecache in Mbytes
Fru	Field-replaceable unit
Icache Size	Size of Icache in Kbytes
Model	Name of CPU model
Processor ID	Identification number of the processor
Status	Status of CPU unit
Unit	Identification of the unit

SIMM Table

TABLE 2-7   SIMM Properties

Property	Description
Name	Name of the SIMM
Board Reference Number	Number that references the board
Fru	Field-replaceable unit
Size	Size of SIMM in Mbytes
Slot	Number of the SIMM
Status	Status of the SIMM

AC Power Supply Table

TABLE 2-8   AC Power Supply Properties

Property	Description
Name	Name
Status	Status

Hot-Plug Charges Table

TABLE 2-9   Hot-Plug Properties

Property	Description
Name	Name
Fru	Field-replaceable unit

Auxiliary 5V Table

TABLE 2-10   Auxiliary 5V Properties

Property	Description
Name	Name
Fru	Field-replaceable unit
Status	Status

Peripheral 5V, Peripheral 12V, System 3V, and System 5V Table

TABLE 2-11 presents the properties for the following:

- Peripheral 5V
- Peripheral 5V Precharge
- Peripheral 12V
- Peripheral 12V Precharge
- System 3V
- System 3V Precharge
- System 5V
- System 5V Precharge

TABLE 2-11   Common Peripheral and System Properties

Property	Description
Name	Name
Fru	Field-replaceable unit
Status	Status of the power supply

Keyswitch Table

TABLE 2-12 Keyswitch Properties

Property	Description
Name	Name
Position	Position of the keyswitch

Peripheral Power Supply Table

TABLE 2-13 Peripheral Power Supply Properties

Property	Description
Name	Name
Fru	Field-replaceable unit
Hpu	Hot-pluggable unit
Status	Status of the peripheral power supply
Unit No.	Unit number

Power Supply Table

TABLE 2-14 Power Supply Properties

Property	Description
Name	Name
Fru	Field-replaceable unit
Hpu	Hot-pluggable unit
Status	Status
Unit No.	Unit number

Rack Fan Table

TABLE 2-15   Fan Properties

Property	Description
Name	Name, for example, `rack_fan`
Status	Status of the fan

Remote Console Table

TABLE 2-16   Remote Console Properties

Property	Description
Name	Instance name: for example, `remote_console`
Status	Status of the remote console: enabled or disabled

FHC Table

The FHC node is inside the I/O unit.

TABLE 2-17   FHC Properties

Property	Description
Name	Name
Board Num	Board number
Model	Name of the FHC model
Upa Mid	Number of the ultra port architecture unit
Version No.	Version number

AC Table

TABLE 2-18 AC Properties

Property	Description
Name	Name
Bank0 Status	Bank0 status
Bank1 Status	Bank1 status
Device Type	Device type
Model	Name of the AC model
Version No.	Version number

Fan Table

TABLE 2-19 Fan Properties

Property	Description
Name	Name
Status	Status of the fan

PFA Rules Table

TABLE 2-20 lists the properties for the Predictive Failure Analysis (PFA) rules.

TABLE 2-20 PFA Rules Properties

Property	Description
PFA SIMM Rule	SIMM rule value
PFA Disk Rule	Disk rule value
Smart/PFA Disk Rule	Smart PFA disk rule value

I/O Controllers Table

TABLE 2-21   I/O Controllers Properties

Property	Description
Name	Name
Board Number	Board number
Clock Frequency	Frequency of timer
Device Type	Device type
Instance Number	Instance Number
Model	Name of the I/O controller model
Reg	Reg property
UPA Mid	UPA MID
UPA Portid	UPA Port ID
Version Number	Version number

I/O Devices Table

TABLE 2-22   I/O Devices Properties

Property	Description
Name	Name instance
Device Type	Device type
Disk Count	Number of disks present on this device
Instance Number	Instance number
Model	Name of the I/O device model
Network Count	Number of network interfaces present on this device
Reg	Reg property
Tape Count	Number of tape devices present on this I/O device

Disk Device Table

TABLE 2-23   Disk Device Properties

Property	Description
Name	Name
Device Type	Device type
Disk Name	Name of the disk
Fru	Field-replaceable unit
Instance Number	Instance number of the disk
Disk Target	Disk target number

Tape Device Table

TABLE 2-24   Tape Device Properties

Property	Description
Name	Name
Device Type	Device type
Fru	Field-replaceable unit
Instance Number	Instance number of the tape
Model	Name of the tape device model
Tape Name	Tape name
Status	Status of the tape device
Tape Target	Tape target number

Network Device Table

TABLE 2-25   Network Device Properties

Property	Description
Name	Name
Device Type	Device type
Ethernet Address	Ethernet address of the interface

TABLE 2-25 Network Device Properties *(Continued)*

Property	Description
Internet Address	Internet address of the interface
Interface Name	Name of the interface
Symbolic Name	Symbolic name of the interface

Config-Reader Rules

The following table includes Config-Reader rules with detailed explanation of those rules that have critical alarms.

TABLE 2-26 Config-Reader Rules

Rule ID	Description	Type of Alarm
rcr4u201	Precharge status rule This alarm is generated when the status of the precharge voltages is not "OK."	Critical
rcr4u203	Power supply status rule This alarm is generated when the status of the power supply is not "OK."	Critical
rcr4u204	Fan status rule This alarm is generated when the fan status is not "OK."	Error
rcr4u205	Temperature rule This rule is triggered when the temperature on the system boards goes beyond a threshold value. Depending on the board temperature, a critical or an alert alarm is generated.	Critical, Alert
rcr4u207	CPU unit status rule When the CPUs are not "online" this rule is generated.	Critical
rcr4u208	ECC error logged in syslog	Warning alarm that is closed immediately
rcr4u209	SIMM error rule	Alert alarm that is closed immediately
rcr4u210	Hardware error	Alert alarm that is closed immediately
rcr4u211	Fatal error	Alert alarm that is closed immediately

TABLE 2-26 Config-Reader Rules *(Continued)*

Rule ID	Description	Type of Alarm
rcr4u212	CPU detects ECC error on SIMM	Alert alarm that is closed immediately
rcr4u213	Hot-plug removed	Alert alarm that is closed immediately
rcr4u214	Power failing	Alert alarm that is closed immediately
rcr4u215	Hot-plugged	Alert alarm that is closed immediately
rcr4u216	CPU panic	Alert alarm that is closed immediately
rcr4u217	SCSI tape error	Alert alarm that is closed immediately
rcr4u218	AC status rule This rule is generated when the AC status is not "OK."	Critical
rcr4u219	Disk removed	Alert alarm that is closed immediately
rcr4u220	Disk inserted	Alert alarm that is closed immediately
rcr4u221	Redundant power	Alert alarm that is closed immediately
rcr4u224	Hot-plug installed	Alert alarm that is closed immediately
rcr4u225	ST status rule This rule is generated when the status of the tape drive is not "OK."	Critical
rpfa300	Complex rule looks for SIMM memory errors in `syslog` and makes a predictive failure alarm entry for each error.	Critical
rpfa301	Complex rule looks for disk soft errors in `syslog` and makes a predictive failure alarm entry for each error.	Critical
rpfa302	Complex rule looks for disk soft errors in `syslog` that are spilled out by a SMART drive.	Critical