

# Sun<sup>™</sup> Management Center 3.5 Supplement for Sun Fire<sup>™</sup> 6800/4810/4800/3800 Systems

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### Contents

#### Preface xxi

#### 1. Introduction 1

Sun Fire 6800/4810/4800/3800 Systems Supplement Software 1

Terms Used in This Book 3

Identifying Platforms and Hardware Domains 6

About the Examples Used in This Book 8

#### 2. Installation and Setup 11

Sun Fire 6800/4810/4800/3800 System-Specific Packages 12

What You Can Do 13

Enabling the SC Failover Capability 14

- ▼ To Enable the SC Failover Capability and Set Up a Logical IP Address 15 Setting Up SNMP on the System Controller 15
  - ▼ To Configure SNMP on the Platform 16
  - ▼ To Configure SNMP on a Domain 17

Installing the Sun Fire 6800/4810/4800/3800 Add-on Software Using the Install Wizard 19

Summary of Sun Management Center 3.5 Software Installation 19

Setting Up the Sun Fire 6800/4810/4800/3800 Add-on Software Using the Setup Wizard 20

- ▼ To Set Up the Platform Agent Using the Setup Wizard 20
- ▼ To Set Up the Domain Agent Using the Wizard GUI 33

Using Advanced Wizard Setup Options 34

Updating Multiple Hosts Using Agent Update 34

Before You Start the Agent Update Process 34

▼ To Create the Agent Update Configuration File on the Target Hosts 35

Using the Agent Update Process 35

Supported Update Configurations 35

- ▼ To Update From Sun Management Center 3.5 Add-on Software 36
- ▼ To Update From No Add-on Software or Sun Management Center 3.0 Platform Update 4 Add-on Software 39

Creating and Setting Up a Sun Fire 6800/4810/4800/3800 Platform Agent Instance 40

- ▼ To Create a Platform Agent Instance 40
- ▼ To Create Multiple Platform Agent Instances 41
- ▼ To Set Up a Sun Fire 6800/4810/4800/3800 Platform Administration Module for a New Platform Agent Instance 41
- ▼ To Start the Platform Instance 42
- ▼ To Stop the Platform Instance 42

Starting Sun Management Center Software Using the Start Wizard 43
Stopping Sun Management Center Software Using the Stop Wizard 43
Uninstalling Sun Management Center Software Using the Uninstall Wizard 43
Assigning Users to Groups 44

▼ To Assign Users to Administrator and Operator Groups 44
 Undoing Setups and Deleting Platform Agents 45

- ▼ To Undo the Setup of the Sun Fire 6800/4810/4800/3800 Default Platform Administration Module 45
- ▼ To Undo the Setup of a Sun Fire 6800/4810/4800/3800 Platform Administration Instance 46
- ▼ To Delete a Platform Agent 46

#### Setting Up Domains 46

- ▼ To Create a Hardware Domain 47
- ▼ To Create Administrative Domains 47

## 3. Platform and Domain Administration and Monitoring Using the Platform Agent 49

Sun Fire 6800/4810/4800/3800 Platform Administration Module 49

- ▼ To Create a Sun Fire 6800/4810/4800/3800 Domain Object Only 51
- ▼ To Create a Sun Fire 6800/4810/4800/3800 Platform Object Only 51
- ▼ To Create a Sun Fire 6800/4810/4800/3800 Composite Object 52

Accessing the Domain Tables in the Platform Administration Module 55

Domain X Slot Tables 56

Domain X Empty Slots 56

Domain X CPU Boards 57

Domain X IO Boards 58

Domain X Unknown Boards 59

Domain *X* Component Tables 59

Domain X CPU Module 60

Domain X DIMM 61

Domain X Ecache 61

Domain X WCI 62

Domain X WCI Port 63

Domains 63

Taking Action on a Domain Table 64

- ▼ To Change a Domain Keyswitch Setting 66
- ▼ To Set Domain Loghosts 68
- ▼ To Display FRU Information 68
- ▼ To Display Host Details 69

Accessing the Platform Tables In the Platform Administration Module 70

Platform System 71

Platform Chassis 71

Platform Slot Tables 72

Platform Empty Slots 73

Platform CPU Boards 73

Platform I/O Boards 75

Platform L2 Repeaters 76

Platform Fan Trays 77

Platform Power Supply 77

Platform System Controller (SC) 78

Platform Unknown Boards 79

Platform Component Tables 80

Platform CPU Module 80

Platform DIMM 81

Platform Ecache 82

Platform WCI 82

Platform WCI Port 83

Platform Domains 84

Taking Action on Platform Tables 85

- ▼ To Assign Available Boards 88
- ▼ To Unassign Boards 88
- ▼ To Power On or Off Boards 89
- ▼ To Test a Board 90
- ▼ To Set Up the System Controller 91
- ▼ To Set Up Loghosts 92
- ▼ To Display FRU Information 93
- ▼ To Display Host Details 94
- ▼ To Change a Domain Access Control List 94

▼ To See Physical and Logical Views 95

Platform Administration Hardware Rules 102

Slot Status Rule (rspa1000) 102

System Frequency Clock Rule (rspa1001) 102

Domain Status Rule (rspa1002) 103

Domain Keyswitch Rule (rspa1003) 103

System Controller Failover Rule (rspa1004) 104

System Controller Change Rule (rspa1005) 104

Log or Trap Host Change Rule (rspa1006) 105

System Controller Not Responding Rule (rspa1007) 105

CPU Module Status Rule (rspa1008) 106

System Controller Firmware Version Rule 106

System Board Test Status Rule (rspa1010) 106

Domain or Board Power State Rule (rspa1011) 107

Data Acquisition Table 107

#### 4. Domain Administration Using the Domain Agent 111

Setting Up Administrative Domains 111

Starting and Stopping Agents 111

Creating a Node 112

Config-Reader Module 112

▼ To Use the Config-Reader Module 112

Loading the Config-Reader Module 117

▼ To Load a Module 117

Accessing Tables in the Domain Config-Reader Module 119

Domain System 119

Domain Boards 120

Domain CPU Units 121

Domain DIMMs 122

Domain I/O Controllers 122

Domain Sun Fire Link ASIC 123

Domain Sun Fire Link Paroli DCA 123

Domain I/O Devices 124

Domain Disk Devices 125

Domain Tape Devices 125

Domain Network Devices 126

Domain Memory Controller 126

Domain Config-Reader Rules 126

CPU Unit Status Rule (rcrse207) 127

Tape Status Rule (rcrse225) 127

System Board Condition Rule (rcrse301) 127

Attachment Point Status Rule (rLnkVld) 128

Sun Fire 6800/4810/4800/3800 System Rules 129

CPU Error Message Rule–Solaris 8, Update 5 and Later (rsr1000) 129

CPU Error Message Rule–Pre-Solaris 8, Update 5 (rsr1001) 129

SCSI Warning Message Rule (rsr1002) 130

UNIX Warning Message Rule (rsr1003) 130

Genunix Date Warning Message Rule (rsr1004) 131

Genunix Clock Warning Message Rule (rsr1005) 131

Fan Plane Warning Message Rule (rsr1006) 132

LUN Failure Rule (rsr1007) 132

PLOGI Failure Rule (rsr1008) 132

ECC Correction Rule (rsr1009) 133

Qlogic Error Rule (rsr1010) 133

Kernel Correction Rule (rsr1011) 134

SCSI Info Event Rule (rsr1012) 134

```
SCSI Disk Online Rule (rsr1013) 134
       Temperature State Rule (rsr1014) 135
      Power State Rule (rsr1015) 135
Physical and Logical Views of a Domain 136
Dynamic Reconfiguration From the Domain 139
Prerequisites 139
Dynamic Reconfiguration Module 140
Dynamic Reconfiguration Properties 141
   Attachment Points 142
       CPU/MEM 142
      PCI/cPCI/hPCI IO 143
       WPCI 144
      cPCI/hPCI cards 145
      SCSI 146
       Empty Slots 147
       MaxCPU 148
   Dynamic Attachment Points 149
       CPU Components 149
       Memory Components 150
      I/O Components 151
      SCSI Components 152
Dynamic Reconfiguration Operations From the Domain 153
   cfgadm Options Supported 154
   Showing Domain Information From the Domain 154
   Ensure Boards Are in a Domain's ACL 154
   Assigning a Board 155
   ▼ To Assign a Board 155
   Unassigning a Board 155
```

5.

▼ To Unassign a Board 155

Attaching a System Board 156

▼ To Attach a System Board 156

Detaching a System Board 157

▼ To Detach a System Board 157

Connecting a Board 158

▼ To Connect a System Board 158

Disconnecting a Board 159

- ▼ To Disconnect a System Board Other Than a SCSI Board 159
- ▼ To Disconnect a SCSI Board 160

Configuring a Board, a Component, or Memory 161

▼ To Configure a System Board, a Component, or Memory 161

Unconfiguring a Board, a Component, or Memory 161

- ▼ To Unconfigure a System Board or a Component 162
- ▼ To Unconfigure Memory 162

Powering on a Board 163

▼ To Power on a Board 163

Powering off a Board 164

▼ To Power off a Board 164

Testing a Board 165

▼ To Test a Board 165

Showing Status 166

▼ To Show Status 166

#### A. Using the CLI to Install, Set up, Uninstall, Start, and Stop Sun Management Center Software 169

Installing the Software 169

▼ To Install the Supplement Software Using the CLI 169

Setting Up the Sun Fire 6800/4810/4800/3800 Platform Administration Module Using the CLI 171

Setting Up SNMP on the System Controller 172

- ▼ To Configure SNMP on the Platform 172
- ▼ To Configure SNMP on a Domain 173

Setting Up the Agent and Server Layers 175

- ▼ To Set Up the Sun Fire 6800/4810/4800/3800 Platform Administration Module on an Agent Machine 175
- ▼ To Set Up the Sun Fire 6800/4810/4800/3800 Platform Administration Module Server Layer Only on the Server 176

Creating and Setting Up a Sun Fire 6800/4810/4800/3800 Platform Agent Instance 177

- ▼ To Create a Platform Agent Instance 177
- ▼ To Set Up a Sun Fire 6800/4810/4800/3800 Platform Administration Module for a New Platform Agent Instance 177
- ▼ To Assign Users to Administrator and Operator Groups 178

Setting Up the Software Using the CLI 179

- ▼ To Set Up the Domain Administration Module on the Sun Management Center Server 179
- ▼ To Set Up the Platform Administration Module on the Platform 180

Uninstalling Software Using the CLI 182

- ▼ To Uninstall All Sun Management Center Software Using the CLI 182
- ▼ To Uninstall Individual Add-on Modules 184

Starting Sun Management Center Components 185

- ▼ To Start the Default Platform Agent 186
- ▼ To Start a Platform Agent Instance 186
- ▼ To Start All Sun Management Center Components 186

Stopping Sun Management Center Components 187

- ▼ To Stop the Default Platform Agent 187
- ▼ To Stop a Platform Agent Instance 187
- ▼ To Stop All Sun Management Center Components 188

#### Glossary 189

#### Index 193

# Figures

FIGURE 1-1	Platform and Domain Administration Views 2
FIGURE 1-2	Platform Agents Provide Access to Sun Fire 6800/4810/4800/3800 System Controllers 3
FIGURE 1-3	Main Console Window Showing an Administrative Domain Containing Multiple Hosts $4$
FIGURE 1-4	Details View of a Sun Fire 6800/4810/4800/3800 Platform With Multiple Hardware Domains 5
FIGURE 1-5	Typical Sun Fire 6800 Icons 5
FIGURE 1-6	Details Windows for Platform (Upper) and Hardware Domain (Lower) 7
FIGURE 1-7	Choices for Expanding or Uncompressing Icons 9
FIGURE 2-1	Server Host Only Query Panel 21
FIGURE 2-2	Platform Administration Platform Configuration Panel 23
FIGURE 2-3	Platform Administration Domain Community Configuration Panel 24
FIGURE 2-4	Platform Administration Domain IP Configuration Panel 25
FIGURE 2-5	Platform Administration Domain Port Configuration Panel 26
FIGURE 2-6	Platform Administration Default Platform Port Panel 28
FIGURE 2-7	Platform Administration Generate Security Keys Panel 31
FIGURE 2-8	Manage Jobs Panel 36
FIGURE 2-9	New Task Panel 37
FIGURE 3-1	Details Window for a Sun Fire 6800/4810/4800/3800 Platform Object 50
FIGURE 3-2	Node Tab in Create Topology Object Window 53
FIGURE 3-3	Composite Tab With Sun Fire 6800/4810/4800/3800 Systems 54
EICLIDE 2.4	Domain V Tables 55

- FIGURE 3-5 Browser Window Domains Table 65
- FIGURE 3-6 Keyswitch Panel 67
- FIGURE 3-7 Setup Loghosts Panel 68
- FIGURE 3-8 FRU Information Panel 69
- FIGURE 3-9 Platform Tables 70
- FIGURE 3-10 Assign Panel 88
- FIGURE 3-11 Unassign Panel 89
- FIGURE 3-12 Power Off Panel 89
- FIGURE 3-13 Test Board Panel 90
- FIGURE 3-14 System Controller Network Setup Panel 91
- FIGURE 3-15 Setup Loghosts Panel 92
- FIGURE 3-16 FRU Information Panel 93
- FIGURE 3-17 Access Control List Panel 94
- FIGURE 3-18 Platform Details Window 96
- FIGURE 3-19 Hardware Tab and Hardware Summary Table 97
- FIGURE 3-20 Views Pull-Down Menu 98
- FIGURE 3-21 Physical View (Rear View of Sun Fire 6800 System) 99
- FIGURE 3-22 Logical View 100
- FIGURE 3-23 Search Button in the Details Window Logical View 101
- FIGURE 3-24 Data Acquisition Table 108
- FIGURE 4-1 Domain Details Window 113
- FIGURE 4-2 Config-Reader and Rules Icons 114
- FIGURE 4-3 Config-Reader Devices 115
- FIGURE 4-4 Sun Fire 6800/4810/4800/3800 Systems Rules Tables 116
- FIGURE 4-5 Modules Tab in the Details Window 118
- FIGURE 4-6 Domain Physical View of Paroli Cards (Rear) 137
- FIGURE 5-1 Dynamic Reconfiguration Features 141
- FIGURE 5-2 Detach Confirmation Box 158
- FIGURE 5-3 Disconnect Panel 159
- FIGURE 5-4 Unconfigure Memory Panel 163

FIGURE 5-5	Test Board Panel 165	
FIGURE 5-6	Unsuccessful Operation in Show Status for Domain DR Operation	n 167
FIGURE 5-7	Successful Operation in Show Status for Domain DR Operation	167

## **Tables**

TABLE 2-1	Sun Management Center Packages for Sun Fire 6800/4810/4800/3800 Systems	12
TABLE 2-2	Pre-Installation, Installation, Setup, Uninstallation, Upgrade, and Post-Installation Procedures $13$	
TABLE 2-3	User Groups 44	
TABLE 3-1	Sun Fire 6800/4810/4800/3800 Domain <i>X</i> Empty Slots 56	
TABLE 3-2	Sun Fire 6800/4810/4800/3800 Domain X CPU Boards 57	
TABLE 3-3	Sun Fire 6800/4810/4800/3800 Domain <i>X</i> IO Boards 58	
TABLE 3-4	Sun Fire 6800/4810/4800/3800 Domain <i>X</i> Unknown Boards 59	
TABLE 3-5	Sun Fire 6800/4810/4800/3800 Domain X CPU Modules 60	
TABLE 3-6	Sun Fire 6800/4810/4800/3800 Domain <i>X</i> Components DIMM 61	
TABLE 3-7	Sun Fire 6800/4810/4800/3800 Domain X Components Ecache 61	
TABLE 3-8	Sun Fire 6800/4810/4800/3800 Domain <i>X</i> Components WCI 62	
TABLE 3-9	Sun Fire 6800/4810/4800/3800 Domain X Components WCI Port 63	
TABLE 3-10	Sun Fire 6800/4810/4800/3800 Domain <i>X</i> Domains 63	
TABLE 3-11	Table Action Menu Items for the Domain View 65	
TABLE 3-12	Domain Table Actions 66	
TABLE 3-13	Sun Fire 6800/4810/4800/3800 System 71	
TABLE 3-14	Sun Fire 6800/4810/4800/3800 Platform Chassis 71	
TABLE 3-15	Sun Fire 6800/4810/4800/3800 Platform Empty Slots 73	
TABLE 3-16	Sun Fire 6800/4810/4800/3800 Platform Slots CPU Boards 73	
TABLE 3-17	Sun Fire 6800/4810/4800/3800 Platform Slots IO Boards 75	

TABLE 3-18	Sun Fire 6800/4810/4800/3800 Platform Slots L2 Repeaters 76
TABLE 3-19	Sun Fire 6800/4810/4800/3800 Platform Slots Fan Trays 77
TABLE 3-20	Sun Fire 6800/4810/4800/3800 Platform Slots Power Supply 77
TABLE 3-21	Sun Fire 6800/4810/4800/3800 Platform Slots SC 78
TABLE 3-22	Sun Fire 6800/4810/4800/3800 Platform Slots Unknown Boards 79
TABLE 3-23	Sun Fire 6800/4810/4800/3800 Platform Components CPU Modules 80
TABLE 3-24	Sun Fire 6800/4810/4800/3800 Platform Components DIMM 81
TABLE 3-25	Sun Fire 6800/4810/4800/3800 Platform Components Ecache 82
TABLE 3-26	Sun Fire 6800/4810/4800/3800 Platform Components WCI 82
TABLE 3-27	Sun Fire 6800/4810/4800/3800 Platform Components WCI Port 83
TABLE 3-28	Sun Fire 6800/4810/4800/3800 Platform Domains 84
TABLE 3-29	Table Action Menu Items for the Platform View 85
TABLE 3-30	Platform Table Actions Menu 86
TABLE 3-31	Sun Fire 6800/4810/4800/3800 Platform Admin Slot Status Rule 102
TABLE 3-32	Sun Fire 6800/4810/4800/3800 Platform Admin System Frequency Clock Rule 102
TABLE 3-33	Sun Fire 6800/4810/4800/3800 Platform Admin System Domain Status Rule 103
TABLE 3-34	Sun Fire 6800/4810/4800/3800 Platform Admin System Domain Keyswitch Rule 103
TABLE 3-35	Sun Fire 6800/4810/4800/3800 Platform Admin System Controller Failover Rule $\ 104$
TABLE 3-36	Sun Fire 6800/4810/4800/3800 Platform Admin System Controller Change Rule 104
TABLE 3-37	Sun Fire 6800/4810/4800/3800 Platform Admin Log or Trap Host Change Rule 105
TABLE 3-38	Sun Fire 6800/4810/4800/3800 Platform Admin System Controller Not Responding Rule 105
TABLE 3-39	Sun Fire 6800/4810/4800/3800 Platform Admin Log or Trap Host Change Rule 106
TABLE 3-40	Sun Fire 6800/4810/4800/3800 Platform Admin SC Firmware Version Rule 106
TABLE 3-41	Sun Fire 6800/4810/4800/3800 Platform Admin System Board Test Status Rule 106
TABLE 3-42	Sun Fire 6800/4810/4800/3800 Platform Admin Domain or Board Power State Rule 107
TABLE 4-1	Sun Fire 6800/4810/4800/3800 Domain System 119
TABLE 4-2	Sun Fire 6800/4810/4800/3800 Domain Boards 120
TABLE 4-3	Sun Fire 6800/4810/4800/3800 Domain CPU Units 121
TABLE 4-4	Sun Fire 6800/4810/4800/3800 Domain DIMMs 122

TABLE 4-5	Sun Fire 6800/4810/4800/3800 Domain I/O Controllers 122
TABLE 4-6	Sun Fire 6800/4810/4800/3800 Domain Sun Fire Link ASIC (WCI) 123
TABLE 4-7	Sun Fire 6800/4810/4800/3800 Domain Sun Fire Link Paroli DCA 123
TABLE 4-8	Sun Fire 6800/4810/4800/3800 Domain IO Devices 124
TABLE 4-9	Sun Fire 6800/4810/4800/3800 Domain Disk Devices 125
TABLE 4-10	Sun Fire 6800/4810/4800/3800 Domain Tape Devices 125
TABLE 4-11	Sun Fire 6800/4810/4800/3800 Domain Network Devices 126
TABLE 4-12	Sun Fire 6800/4810/4800/3800 Domain Memory Controller 126
TABLE 4-13	Sun Fire 6800/4810/4800/3800 Domain Config-Reader CPU Unit Status Rule 127
TABLE 4-14	Sun Fire 6800/4810/4800/3800 Domain Config-Reader Tape Status Rule 127
TABLE 4-15	Sun Fire 6800/4810/4800/3800 Domain Config-Reader System Board Condition Rule 127
TABLE 4-16	Sun Fire 6800/4810/4800/3800 Domain Config-Reader Attachment Point Status Rule $$ 128
TABLE 4-17	Sun Fire 6800/4810/4800/3800 System CPU Error Message Rule 129
TABLE 4-18	Sun Fire 6800/4810/4800/3800 System CPU Error Message Rule 129
TABLE 4-19	Sun Fire 6800/4810/4800/3800 System SCSI Warning Message Rule 130
TABLE 4-20	Sun Fire 6800/4810/4800/3800 System UNISX Warning Message Rule 130
TABLE 4-21	Sun Fire 6800/4810/4800/3800 System Genunix Date Warning Message Rule 131
TABLE 4-22	Sun Fire 6800/4810/4800/3800 System Genunix Clock Warning Message Rule 131
TABLE 4-23	Sun Fire 6800/4810/4800/3800 System Fan Plane Warning Message Rule 132
TABLE 4-24	Sun Fire 6800/4810/4800/3800 System LUN Failure Rule 132
TABLE 4-25	Sun Fire 6800/4810/4800/3800 System PLOGI Failure Rule 132
TABLE 4-26	Sun Fire 6800/4810/4800/3800 System ECC Correction Rule 133
TABLE 4-27	Sun Fire 6800/4810/4800/3800 System Qlogic Error Rule 133
TABLE 4-28	Sun Fire 6800/4810/4800/3800 System Kernel Correction Rule 134
TABLE 4-29	Sun Fire 6800/4810/4800/3800 System SCSI Info Event Rule 134
TABLE 4-30	Sun Fire 6800/4810/4800/3800 System SCSI Disk Online Rule 134
TABLE 4-31	Sun Fire 6800/4810/4800/3800 System Temperature State Rule 135
TABLE 4-32	Sun Fire 6800/4810/4800/3800 System Temperature State Rule 135
TABLE 5-1	Attachment Point Properties for a CPU/MEM Board 142
TABLE 5-2	Attachment Point Properties for a PCI/cPCI/hPCI IO Board 143

TABLE 5-3	Attachment Point Properties for a WPCI Board 144
TABLE 5-4	Attachment Point Properties for a cPCI/hPCI card 145
TABLE 5-5	Attachment Point Properties for a SCSI 146
TABLE 5-6	Attachment Point Properties for Empty Slots 147
TABLE 5-7	Sun Fire 15K/12K Attachment Point Properties for a MaxCPU Board 148
TABLE 5-8	Dynamic Attachment Point Properties for CPU Components 149
TABLE 5-9	Dynamic Attachment Point Properties for Memory Components 150
TABLE 5-10	Dynamic Attachment Point Properties for I/O Components 151
TABLE 5-11	Dynamic Attachment Point Properties for SCSI Components 152
TABLE 5-12	cfgadm Options Supported by Dynamic Reconfiguration 154
TABLE A-1	User Groups 178

## **Preface**

This  $Sun^{TM}$  Management Center 3.5 Supplement for Sun Fire<sup>TM</sup> 6800/4810/4800/3800 Systems provides instructions on how to install, configure, and use Sun Management Center software on Sun Fire 6800/4810/4800/3800 systems.

This supplement is intended for Sun Fire 6800/4810/4800/3800 system administrators who install and use the Sun Management Center software to monitor and manage their Sun Fire 6800/4810/4800/3800 systems.

The Sun Management Center 3.5 documents for Sun Fire 6800/4810/4800/3800 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.

**Note** – For the latest information about this product, go to the Sun Management Center Web site at http://www.sun.com/sunmanagementcenter.

## How This Book Is Organized

Chapter 1 introduces Sun Management Center software on the Sun Fire 6800/4810/4800/3800 systems.

Chapter 2 describes how to install, set up, update multiple hosts, start, and stop Sun Management Center software on the Sun Fire 6800/4810/4800/3800 systems using the graphical user interface (GUI). Use this chapter with the Sun Management Center 3.5 Installation and Configuration Guide. This chapter includes pre-installation steps, such as and enabling SC failover. The chapter also includes post-installation steps, such as assigning users to administrator and operator groups and setting up domains.

Chapter 3 describes how to administer and monitor the Sun Fire 6800/4810/4800/3800 platform and domains using the Platform Agent. This chapter also describes briefly each property and the alarm rules used by the Platform Agent.

Chapter 4 describes how to administer a Sun Fire 6800/4810/4800/3800 domain using the Domain Agent. This chapter also describes briefly each property and the alarm rules used by the Domain Agent.

Chapter 5 describes how to use the dynamic reconfiguration and other management commands from the Dynamic Reconfiguration (DR) module, which is based on the configuration administration cfgadm(1M) command.

Appendix A describes how to use the command line interface (CLI) to install, setup, uninstall, start, and stop Sun Management Center software.

The glossary defines abbreviations and acronyms used in this supplement and in the Sun Management Center graphical user interface (GUI) for Sun Fire 6800/4810/4800/3800 system-specific modules.

A comprehensive index helps find information quickly in this supplement.

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.

## 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.

Refer to one or more of the following for this information:

- Solaris Handbook for Sun Peripherals
- Online documentation for the Solaris<sup>TM</sup> Operating System
- Other software documentation included with your system

## Typographic Conventions

Typeface <sup>1</sup>	Meaning	Examples	
AaBbCc123	The names of commands, files, and directories; on-screen computer output	Edit your.login file. Use 1s -a to list all files. % You have mail.	
AaBbCc123	What you type, when contrasted with on-screen computer output	% <b>su</b> 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 <i>User's Guide</i> .  These are called <i>class</i> options.  You <i>must</i> be superuser to do this.  To delete a file, type rm <i>filename</i> .	

<sup>1</sup> 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, command line interface	Sun Fire 6800/4810/4800/3800 Systems Dynamic Reconfiguration User Guide	806-6783
Platform administration	Sun Fire 6800/4810/4800/3800 Systems Platform Administration Manual (5.14.0).	816-4851
Command reference	Sun Fire 6800/4810/4800/3800 System Controller Command Reference Manual	816-4852
Changes, limitations, and bugs for Sun Fire 6800/4810/4800/3800 systems	Sun Fire 6800/4810/4800/3800 Systems Firmware 5.14.0 Release Notes	816-4853
Hardware service	Sun Fire 6800/4810/4800/3800 Systems Service Manual	805-7363
Starfire servers	Sun Management Center 3.5 Supplement for Starfire Servers	816-7379
Sun Fire 15K/12K systems	Sun Management Center 3.5 Supplement for Sun Fire 15K/12K Systems	816-7377

Application	Title	Part Number
Administering Sun Fire Link systems	Sun Fire Link Fabric Administrator's Guide	806-1405
Installing Sun FIre Link Systems	Sun Fire Link Software Installation Guide	817-0401

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http://www.sun.com/documentation

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Please include the title and part number of your document with your feedback:

Sun Management Center 3.5 Supplement for Sun Fire 6800/4810/4800/3800 Systems, part number 816-7381-10

## Introduction

This chapter introduces Sun<sup>™</sup> Management Center 3.5 Software platform and domain administration on Sun Fire<sup>™</sup> 6800/4810/4800/3800 systems.

# Sun Fire 6800/4810/4800/3800 Systems Supplement Software

Sun Management Center 3.5 software allows you to monitor Sun systems from a platform such as a workstation or server. You can also use Sun Management Center 3.5 software to manage various remote operations and applications through the network. The Sun Fire 6800/4810/4800/3800 systems supplement software adapts the basic Sun Management Center 3.5 software to function with Sun Fire 6800/4810/4800/3800 systems.

To use the dynamic reconfiguration features described in Chapter 5, you need a thorough understanding of dynamic reconfiguration operations. This supplement describes using Sun Management Center software to perform dynamic reconfiguration operations. For an overall description of dynamic reconfiguration operations that apply to the Sun Fire 6800/4810/4800/3800 systems, refer to the Sun Fire 6800/4810/4800/3800 Systems Dynamic Reconfiguration User Guide.

Sun Fire 6800/4810/4800/3800 systems are divided into hardware domains, with each domain running a separate copy of the Solaris™ Operating System. Depending on the capability and the number of hardware resources, Sun Fire 6800/4810/4800/3800 systems can support up to four domains. (The minimum is one domain.) Because domains are used, the Sun Fire 6800/4810/4800/3800 systems supplement software has two modes of operation (FIGURE 1-1):

■ **Domain administrators** can access Solaris Operating System domain views only through the Sun Management Center agent running on a Sun Fire 6800/4810/4800/3800 domain, or through the Sun Management Center platform

agent that is doing proxy management for the Simple Network Management Protocol (SNMP) agent running on the Sun Fire 6800/4810/4800/3800 system controller.

■ **Platform administrators** can access platform views from the system controller console through the Sun Management Center platform agent.

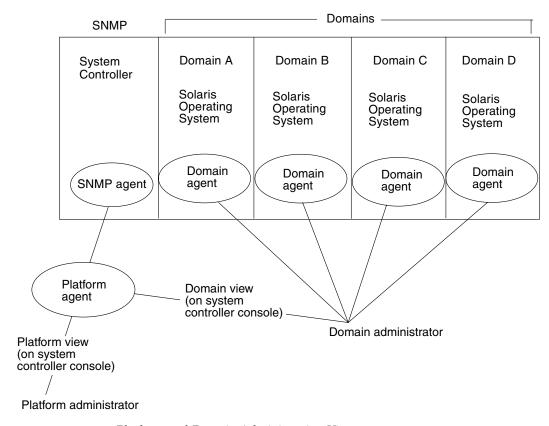


FIGURE 1-1 Platform and Domain Administration Views

After the supplement software has been installed on a host machine (workstation or server), you can run Sun Management Center 3.5 software on that host machine to access the system controller in Sun Fire 6800/4810/4800/3800 systems.

The initial software supplement setup creates one platform agent, which provides access to one system controller. To access additional system controllers on other Sun Fire 6800/4810/4800/3800 systems, install an agent instance for each system controller (FIGURE 1-2).

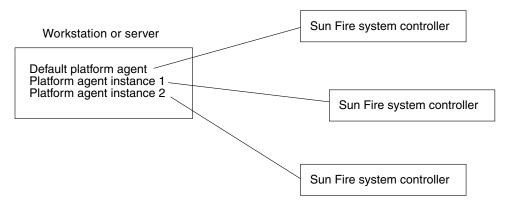


FIGURE 1-2 Platform Agents Provide Access to Sun Fire 6800/4810/4800/3800 System Controllers

## Terms Used in This Book

**Note** – In this document, "administrative domain" refers to a Sun Management Center administrative domain, and should not be confused with other uses of the term "domain" related to other Sun products or documentation.

**Administrative domain** — An administrative domain consists of one or more host systems.

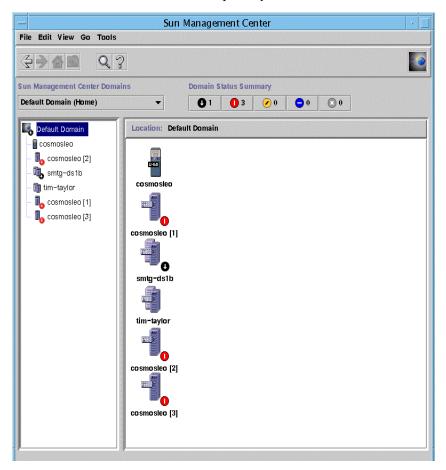
**Dynamic reconfiguration** — The Sun Fire 6800/4810/4800/3800 supplement software provides a graphical user interface to facilitate dynamic reconfiguration operations. Dynamic reconfiguration software is a part of the Solaris Operating System and provides the ability to safely remove or install system boards or compact PCI I/O cards into a system while the Solaris Operating System is running. Dynamic reconfiguration software also provides the ability to transfer system boards or compact PCI I/O cards from one domain to another, while the Solaris Operating System is running.

**Platform** — An alternate term for a complete system. A Sun Fire 6800 system is an example of a platform, as described in this book.

**Domain** or **hardware domain** — Within a Sun Fire 6800/4810/4800/3800 platform, a domain can consist of logically independent multiple sections within a partition, with each domain running a separate copy of the operating system. This type of domain

consists of system boards and other devices, as opposed to an administrative domain, which can consist of multiple hardware domains and entire platforms. For clarity, this type of domain is referred to as a "hardware domain" in this book.

FIGURE 1-3 shows an example of an administrative domain. Note that the administrative domain includes complete systems and hardware domains.



Main Console Window Showing an Administrative Domain Containing Multiple Hosts

For contrast, FIGURE 1-4 shows hardware domains in a host.

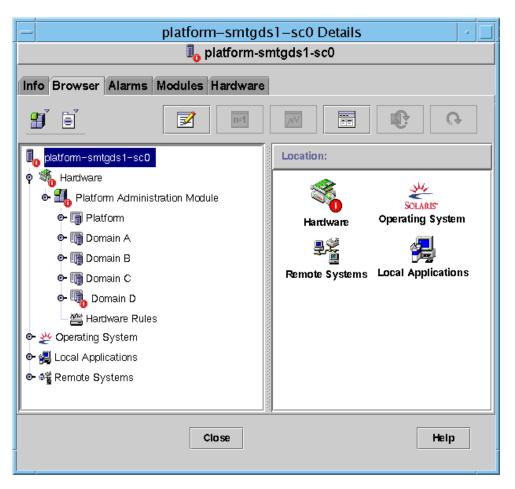


FIGURE 1-4 Details View of a Sun Fire 6800/4810/4800/3800 Platform With Multiple Hardware Domains

FIGURE 1-5 shows typical icons for a Sun Fire 6800 system. Icons for other types of Sun Fire systems display corresponding model numbers.



FIGURE 1-5 Typical Sun Fire 6800 Icons

# Identifying Platforms and Hardware Domains

The platform and hardware domain Details windows are very similar when they are first displayed. By default, both windows open to the Browser tab. FIGURE 1-6 compares the Details windows for a typical platform and a typical hardware domain.

- **Platform:** To identify a platform Details window, look for a platform icon (FIGURE 1-6) and five tabs (Info, Browser, Alarms, Modules Hardware).
- Hardware domain: To identify a hardware domain Details window, look for a hardware domain icon (FIGURE 1-6) and seven tabs. The tabs include the five tabs listed above for a platform, plus a View Log tab and an Applications tab.

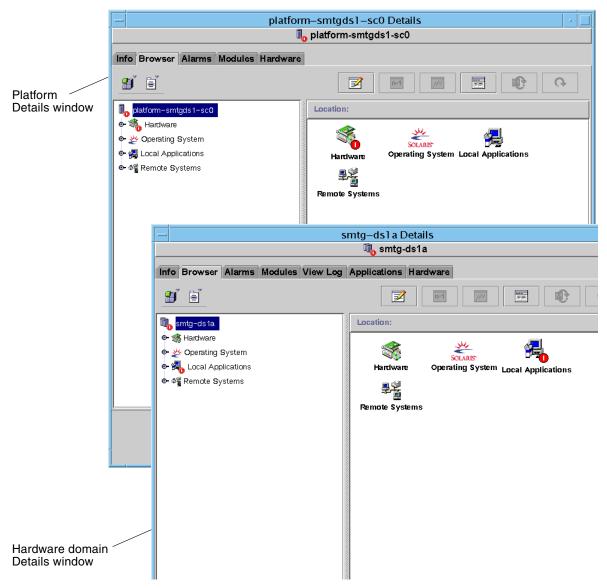


FIGURE 1-6 Details Windows for Platform (Upper) and Hardware Domain (Lower)

## About the Examples Used in This Book

Many steps or operations shown in this book can be accomplished in more than one way. For the sake of brevity, only one way is shown in an operation, usually the easiest or quickest way.

For example, in the main console window (FIGURE 1-3), you can choose from four possible ways to open a Details view of Sun Fire 6800/4810/4800/3800 systems:

- Click once on the Sun Fire 6800/4810/4800/3800 icon in the hierarchy view (left side of the window), then click the Tools menu in the top bar, and select Details.
- Do the same as above in the topology view (right side of the window).
- Double-click the Sun Fire 6800/4810/4800/3800 icon in the hierarchy view.
- Double-click the Sun Fire 6800/4810/4800/3800 icon in the topology view.

Similarly, there are multiple ways to expand (or uncompress) an icon. As shown in FIGURE 1-7, you can:

- Click the Expand All button (not available in some windows).
- Click the Uncompress symbol next to the icon.
- Double-click the icon in the hierarchy or topology views.

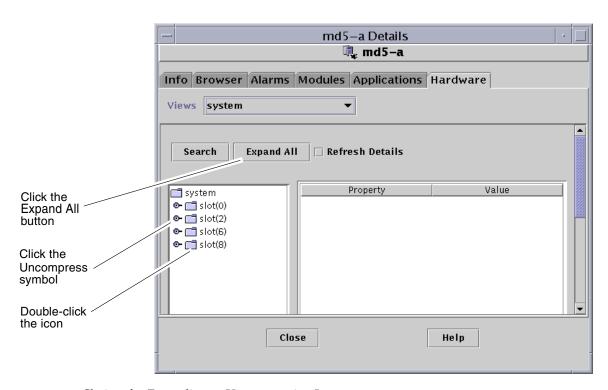


FIGURE 1-7 Choices for Expanding or Uncompressing Icons

## Installation and Setup

This chapter contains instructions for installing, setting up, uninstalling, starting, and stopping Sun Fire 6800/4810/4800/3800 add-on software. Refer to the *Sun Management Center 3.5 Installation and Configuration Guide* for information about installing, setting up, uninstalling, starting, and stopping base Sun Management Center software.



**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.

See "Using the CLI to Install, Set up, Uninstall, Start, and Stop Sun Management Center Software" on page 169 to perform these functions using the command line interface (CLI).

## Sun Fire 6800/4810/4800/3800 System-Specific Packages

TABLE 2-1 lists the Sun Fire 6800/4810/4800/3800 system-specific packages with the host they should be installed on, and the base layer they belong to.

TABLE 2-1 Sun Management Center Packages for Sun Fire 6800/4810/4800/3800 Systems

Package	Description	Host	Layer
SUNWesadf	Sun Management Center agent support for dynamic reconfiguration on Sun Fire 15000, 6800/4810/4800/3800 systems	Sun Fire 6800-3800 platform machine	Agent
SUNWescdf	Sun Management Center console support for dynamic reconfiguration on Sun Fire 15000, 6800/4810/4800/3800 systems	Workstations of common network location	Console
SUNWessco	Sun Management Center Sun Fire support - server component	Sun Management Center server machine	Server
SUNWessda	Sun Management Center - Sun Fire 6800/4810/4800/3800 domain agent	Sun Fire 6800-3800 domains	Agent
SUNessdf	Sun Management Center server support for dynamic reconfiguration on Sun Fire 15000, 6800/4810/4800/3800 systems	Sun Fire 6800-3800 platform machine	Agent
SUNWesspa	Sun Management Center - Sun Fire platform agent	Sun Fire 6800-3800 platform machine	Agent
SUNWesspc	Sun Management Center console for Sun Fire platform administration	Sun Fire 6800-3800 platform machine	Agent
SUNWessps	Sun Management Center - Sun Fire platform support	Sun Fire 6800-3800 platform machine	Agent
SUNWesssd	Sun Management Center server for Sun Fire 6800/4810/4800/3800 domain	Sun Management Center server machine	Server
SUNWessdc	Sun Management Center Sun Fire 6800/4810/4800/3800 domain administration	Sun Fire 6800-3800 domains	Agent
SUNWedacs	Sun Management Center Sun Fire 6800-3800 Domain Admin module setup for server and agent	Sun Management Center server machine and Sun Fire 6800-3800 domains	Server Agent

TABLE 2-1 Sun Management Center Packages for Sun Fire 6800/4810/4800/3800 Systems (Continued)

Package	Description	Host	Layer
SUNWesscp	Sun Management Center Sun Fire Support - server component for Platform Admin module	Sun Management Center Server	Server
SUNWesccp	Sun Management Center Sun Fire Support - console component for Platform Admin module	Console	Console
SUNWesccd	Sun Management Center Sun Fire Support - console component for Dynamic Reconfiguration	Console	Console

### What You Can Do

With Sun Management Center 3.5 software, you can install, set up, uninstall, and update in different ways, primarily using the Sun Management Center 3.5 Wizards or the command line interface (CLI). You might also need to perform certain procedures if you want to use certain features. TABLE 2-2 lists the various procedures with a cross-reference to the information in this chapter.

TABLE 2-2 Pre-Installation, Installation, Setup, Uninstallation, Upgrade, and Post-Installation Procedures

To Perform This Task	Described in	
Enable SC failover and find logical IP address	"Enabling the SC Failover Capability" on page 14	
Set Up SNMP on the system controller	"Setting Up SNMP on the System Controller" on page 15	
Installing software using the Sun Management Center Installation 3.5 Wizard	Refer to the Sun Management Center 3.5 Installation and Configuration Guide	
Setting Up the Sun Fire 6800/4810/4800/3800 Add-on Software Using the Setup Wizard	"Setting Up the Sun Fire 6800/4810/4800/3800 Add-on Software Using the Setup Wizard" on page 20 "Using Advanced Wizard Setup Options" on page 34	
Update multiple hosts using Agent Update	"Updating Multiple Hosts Using Agent Update" on page 34	
Creating and Setting Up a Platform Agent	"Creating and Setting Up a Sun Fire 6800/4810/4800/3800 Platform Agent Instance" on page 40	
Starting Software Using the Start Wizard	"Starting Sun Management Center Software Using the Start Wizard" on page $43$	
Stopping Software Using the Stop Wizard	"Stopping Sun Management Center Software Using the Stop Wizard" on page $43$	

**TABLE 2-2** Pre-Installation, Installation, Setup, Uninstallation, Upgrade, and Post-Installation Procedures (Continued)

To Perform This Task	Described in
Uninstalling Software Using Uninstall Wizard	"Uninstalling Sun Management Center Software Using the Uninstall Wizard" on page 43
Assigning Users	"Assigning Users to Groups" on page 44
Undoing Setups and Deleting Platform Agents	"Undoing Setups and Deleting Platform Agents" on page 45
Setting Up Domains	"Setting Up Domains" on page 46
Install Sun Management Center 3.5 base software using the CLI	Refer to the Sun Management Center 3.5 Installation and Configuration Guide
Installing Sun Fire 6800/4810/4800/3800 add-on packages using the CLI	"To Install the Supplement Software Using the CLI" on page 169
Setting up Sun Fire 6800/4810/4800/3800 add-on packages using the CLI	"Setting Up the Software Using the CLI" on page 179
Uninstalling one module, several modules, or all Sun Management Center software using the CLI	"Uninstalling Software Using the CLI" on page 182
Starting software using the CLI	"Starting Sun Management Center Components" on page 185
Stopping software using the CLI	"Stopping Sun Management Center Components" on page 187

## Enabling the SC Failover Capability

If you want to use the SC Failover capability, you need to do the following before you install and set up the Sun Fire 6800/4810/4800/3800 add-on software:

- Enable the SC Failover capability
- Create a logical IP address that will refer to *both* SCs, rather than pointing to each one by its physical IP address.

**Note** – If you use the physical IP address of one SC during setup of the add-on software, when failover occurs, the add-on software is no longer communicating with the now main SC. To allow the add-on software to communicate with whichever SC is the main SC, you need to create a logical IP address that refers to both SCs.

You then need to use that logical IP address when you set up the Sun Fire 6800/4810/4800/3800 add-on software.

### ▼ To Enable the SC Failover Capability and Set Up a Logical IP Address

1. Select an unused IP address that begins with the same subnet address as both SCs.

For example, if one SC has an physical IP address of 129.146.235.14 and the other SC has a physical IP address of 129.146.235.41, the logical IP address would be 129.146.235.xxx, where xxx is an unused IP address within that subnet. For the example in Step 2, 129.146.235.251 is used as the logical IP address.

2. From the SC, set up a logical IP address for the SC using the following command.

```
schostname:SC> setupplatform -p sc
```

The system displays the following:

```
SC
--
SC POST diag Level [off]:
Enable SC Failover? [no]:
Logical Hostname or IP Address []:
```

- 3. Type yes to Enable SC Failover.
- 4. Type the logical IP address you selected in Step 1 (129.146.235.251 in our example).
- 5. Use this logical IP address to set up the platform agent during es-setup or esguisetup.

## Setting Up SNMP on the System Controller

Before you install and set up Sun Fire 6800/4810/4800/3800 add-on software, you need to configure SNMP on the platform and the domain. This section contains both procedures, and you need to do both.

- Configuring SNMP on the platform
- Configuring SNMP on the domain

### ▼ To Configure SNMP on the Platform

**Note** – Do not set up multiple Platform Administration Agents to manage the same Sun Fire 6800/4810/4800/3800 system controller. Doing so causes the system to run slowly or even hang.

1. As superuser, access the system controller by using the telnet(1) command as shown in CODE EXAMPLE 2-1.

**CODE EXAMPLE 2-1** Accessing the System Controller With telnet and Entering the Platform Shell

```
# telnet schostname
System Controller schostname:SC>

Type 0 for Platform Shell

Type 1 for domain A
Type 2 for domain B
Type 3 for domain C
Type 4 for domain D
Input: 0
schostname:SC>
```

where *schostname* is the system controller host name.

2. At the system controller main menu, type 0 (or alternatively P or p) to enter the platform shell as shown in CODE EXAMPLE 2-1.

The platform shell prompt, *schostname*: SC, is displayed.

3. Type setupplatform -p snmp, and answer the questions as shown in CODE EXAMPLE 2-2.

**CODE EXAMPLE 2-2** Configuring an SNMP Agent on a Platform

```
schostname:SC> setupplatform -p snmp

SNMP
----
Platform Description [description]: your_description
Platform Contact [contactname]: contact_name
Platform Location [location]: your_platform_location
Enable SNMP Agent? [no]: yes
```

#### **CODE EXAMPLE 2-2** Configuring an SNMP Agent on a Platform (Continued)

```
Trap Hosts [hostname]: monitoring_machine

Public Community String [string]: your_string1

Private Community String [string]: your_string2
```



**Caution** – For Trap Hosts, be sure to enter the host name of the machine where you will run the Platform Admin module and from which you will monitor your Sun Fire 6800/4810/4800/3800. For example, your *monitoring\_machine* might be called CompA, and you want to monitor your main SC called tiger-sc0 among other machines. You would run the setupplatform command as shown in CODE EXAMPLE 2-2 on tiger-sc0, and enter **CompA** as the Trap Host.

**Note** – You need to enter both the platform trap host here and the domain trap host in Step 4 in "To Configure SNMP on a Domain" on page 17 for the platform administration module to monitor the domain state changes.

- 4. Press and hold the CTRL key while pressing the ] key, to get to the telnet> prompt.
- 5. Type q to exit from telnet.

### ▼ To Configure SNMP on a Domain

1. As superuser, access the system controller by typing the telnet command as shown in CODE EXAMPLE 2-3.

**CODE EXAMPLE 2-3** Accessing the System Controller With telnet and Entering the Domain Shell

```
# telnet schostname
System Controller schostname:SC>

Type 0 for Platform Shell

Type 1 for domain A
Type 2 for domain B
Type 3 for domain C
Type 4 for domain D

Input: 1
schostname:A>
```

where *schostname* is the system controller host name. In CODE EXAMPLE 2-3, domain A is shown as an example.

2. Enter a domain. Type 1, 2, 3, or 4 (or alternatively a, b, c, d, or A, B, C, D) to enter the proper domain shell as shown in CODE EXAMPLE 2-3.

The domain shell prompt, *schostname*: *X*, is displayed, where *X* is the domain that you have selected.

- 3. If the domain is active and the domain keyswitch is set to on, diag, or secure (you are running the Solaris Operating System, you are in OpenBoot PROM mode, or you are running POST), perform the following steps:
  - a. Press and hold the CTRL key while pressing the ] key, to get to the telnet> prompt.
  - b. At the telnet> prompt type send break.

CODE EXAMPLE 2-3 shows a connection to domain A.

**4.** Type setupdomain -p snmp, and answer the questions as shown in CODE EXAMPLE 2-4.

#### **CODE EXAMPLE 2-4** Configuring an SNMP Agent on a Domain

```
schostname:A> setupdomain -p snmp
SNMP
----
Domain Description [description]: your_description
Domain Contact [contactname]: contact_name
Trap Hosts [hostname]: server_name
Public Community String [string1]: your_string1
Private Community String [string2]: your_string2
```

For Trap Hosts, enter the host name of the Sun Management Center server from which you will perform platform administration.

**Note** – You need to enter both the platform trap host in Step 3 in "To Configure SNMP on the Platform" on page 16 and the domain trap host here for the platform administration module to monitor the domain state changes.

For Public and Private Community Strings, enter a different string for each domain and platform.

- 5. Type disconnect to exit the connection to the domain shell.
- 6. Repeat Step 2 through Step 5 for each additional domain, if any.

- 7. Press and hold the CTRL key while pressing the ] key, to get to the telnet> prompt.
- 8. Type q to exit from telnet.

# Installing the Sun Fire 6800/4810/4800/3800 Add-on Software Using the Install Wizard

This section provides a summary of installing Sun Management Center 3.5 base software and Sun Fire 6800/4810/4800/3800 add-on software using the Install 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.

- You can install the console, server, and agent layers either separately or in combination.
- You can install the Sun Fire 6800-3800 Platform Agent on any machine where you have Sun Management Center 3.5 software running.
- You can install the Sun Fire 6800-3800 Domain Agent *only* on Sun Fire 6800-3800 domains.

## Summary of Sun Management Center 3.5 Software Installation

- 1. As superuser, run the es-guiinst script 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 Fire 6800/4810/4800/3800 systems, and click Next.
- The Sun Management Center Setup Wizard starts automatically after all the software is installed.

## Setting Up the Sun Fire 6800/4810/4800/3800 Add-on Software Using the Setup Wizard

This section describes how to set up the platform agent and the domain agent on Sun Fire 6800/4810/4800/3800 systems using the Sun Management Center Setup Wizard. For more details about the entire software setup process, refer to Chapter 6, "Installation and Setup," of the Sun Management Center 3.5 Installation and Configuration Guide.

**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 the Platform Agent Using the Setup Wizard

Set up the Sun Fire 6800-3800 Platform Agent on any machine where you have installed it.

## 1. Type es-guisetup on a machine where the platform agent is installed to start the Sun Management Center Setup Wizard.

Once the Sun Management Center base software setup is complete, the Wizard displays the following message:

Select Add-on Products

The following add-on products are newly installed on this system and will be set up.

- Sun Fire Platform Administration

#### 2. Click Next to continue.

Do one of the following:

- If you are *not* setting up the platform agent on a server machine, go to Step 4.
- If you are setting up the platform agent on a server machine, the Sun Fire 6800-3800 Platform Agent Setup panel displays the following message.



FIGURE 2-1 Server Host Only Query Panel

#### 3. Do one of the following:

■ Click the radio button to the left of No to continue and set up all hosts. Go to Step 4.

#### ■ Click the radio button to the left of Yes to only set up the server host.

The Sun Fire 6800-3800 Platform Agent Setup panel displays the following message. Go to Step 20l

```
Setting up server host...

Status:
Setting up server host...
...
Setup of server host complete.
```

#### 4. Click Next to continue.

The Sun Fire 6800-3800 Platform Agent Setup panel displays the following message:

```
To set up the Sun Fire 6800-3800 platform administration module, you need to provide SC IP address, community strings, port numbers for domain agent etc.

Would you like to set up the Sun Fire 6800-3800 platform administration module?

O Yes
O No
```

#### 5. Do one of the following:

- Click the radio button to the left of No to *not* set up the Platform Administration module. Go to Step 23.
- Click the radio button to the left of Yes to set up the Platform Administration module.



FIGURE 2-2 Platform Administration Platform Configuration Panel

**Note** – You must enter a value for each prompt.

i. Type the host name or IP address of the System Controller (for example, 10.8.28.209).



**Caution** – If you want to use the SC failover feature, you must put a logical IP address in this field. Both SCs can then use this logical IP address. Only one SC can use a physical IP address. If you do not put a logical IP address in this field and if a SC failover occurs, you receive a red alarm that the SC is not responding. For information about enabling SC failover and setting up a logical IP address, see "To Enable the SC Failover Capability and Set Up a Logical IP Address" on page 15.

- ii. Type the read community string for the platform (for example, P-public).
- iii. Type the write community string for the platform (for example, P-private).
- 6. Click Next to continue.



FIGURE 2-3 Platform Administration Domain Community Configuration Panel

**Note** – You must enter a value for each domain.

- a. Type the write community string for domain A, such as A-private
- b. Type the write community string for domain B, such as B-private
- c. Type the write community string for domain C, such as C-private
- d. Type the write community string for domain D, such as D-private

#### 7. Click Next to continue.



FIGURE 2-4 Platform Administration Domain IP Configuration Panel

- a. Type the IP address or host name of domain A, or leave blank.
- b. Type the IP address or host name of domain B, or leave blank.
- c. Type the IP address or host name of domain C, or leave blank.
- d. Type the IP address or host name of domain D, or leave blank.
- 8. Click Next to continue.



FIGURE 2-5 Platform Administration Domain Port Configuration Panel

**Note** – You must enter a value for each domain.

- a. Type the Sun Management Center agent port number on domain A.
- b. Type the Sun Management Center agent port number on domain B.
- c. Type the Sun Management Center agent port number on domain C.
- d. Type the Sun Management Center agent port number on domain D.

#### 9. Click Next to continue.

```
Updating configuration files with platform and domain information.

Status:

Updating configuration files...

Update of configuration files complete.
```

The Sun Fire 6800-3800 Platform Agent Setup panel displays the following message:

```
Setting up server host and chassis model information.

Status:

Setting up server host...
....
Setup of server host complete.
Getting chassis model from system controller...
Retrieval of chassis model from system controller complete.
```

- If there was no error in getting the chassis model, go to Step 11.
- If there was an error in getting the chassis model from the system controller, the system displays an error message:

```
Error getting chassis model from system controller.
```

#### i. Click OK.

The Sun Fire 6800-3800 Platform Agent Setup panel displays the following message:

Either could not find the chassis model from the SC or the SC returned an unknown chassis model. These are the supported model types: 3800, 4800, 4810, and 6800. The chassis model needs to be one of these models.

Chassis model:

ii. Enter 3800, 4800, 4810, or 6800 for the chassis model.

The Sun Fire 6800-3800 Platform Agent Setup panel displays the following message:

```
Checking configuration files...

Status:

Set the platform server: <hostname> or <IPaddress> platform.snmpPort: 166

Default platform agent port: 166
Checking of configuration files complete.
```

#### 12. Click Next to continue.

One of the following occurs:

- You will not see the default port panel if the default port number has been set previously. Go to Step 14.
- The Sun Fire 6800-3800 Platform Agent Setup panel displays the following message if the default port number was not set previously.

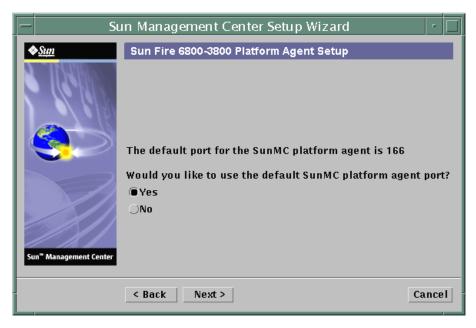


FIGURE 2-6 Platform Administration Default Platform Port Panel

#### 13. Do one of the following:

- Click the radio button to the left of Yes to use the default Sun Management Center platform agent port.
- Click the radio button to the left of No to not use the default Sun Management Center platform agent port.

The Sun Fire 6800-3800 Platform Agent Setup panel displays the following message:

```
Set the platform agent port.

Platform agent port number: 166
```

One of the following occurs:

- If you clicked Yes to use the default port, the default agent port number is displayed for Platform agent port number.
- If you clicked No to *not* use the default port, the Platform agent port number is blank for you to enter.
  - Enter the platform agent port number you want to use.

#### 15. Click Next to continue.

One of the following occurs.

- If you do *not* receive a warning message, go to Step 22.
- If the default port is in use, the Sun Fire 6800-3800 Platform Agent Setup panel displays a warning message.

```
Warning, platform agent port 166 is currently in use. Pick a different port, or ensure that this port is available when you next start Sun Management Center.

Would you still like to use this port?

Yes No
```

#### 16. Do one of the following:

- Click No to *not* use the default port. Go to Step 14.
- Click Yes to still use the default port.

#### 17. Click Next to continue.

One of the following occurs:

■ If there was no port conflict, the Sun Fire 6800-3800 Platform Agent Setup panel displays the following message:

```
Confirmation of the platform agent port.

Platform agent port: 166
```

■ If there was a port conflict, the Sun Fire 6800-3800 Platform Agent Setup panel displays the following message:

```
Confirmation of the platform agent port.

Platform agent port: 166

Remember to resolve the port conflict prior to starting Sun Management Center.
```

#### 18. Click Next to continue.

One of the following occurs:

- If the platform agent port number was not changed, you do not receive the security keys message; go to Step 22.
- If the platform agent port number was changed, the Sun Fire 6800-3800 Platform Agent Setup panel displays the following message:



FIGURE 2-7 Platform Administration Generate Security Keys Panel

#### 19. Do one of the following:

- Click the radio button to the left of Yes to regenerate the security keys now, and go to Step 22.
- Click the radio button to the left of No to *not* regenerate the security keys now. The same Sun Fire 6800-3800 Platform Agent Setup panel appears as in FIGURE 2-7.

#### 20. Do one of the following:

- Click the radio button to the left of Yes to regenerate the security keys now, and go to Step 21.
- Click the radio button to the left of No to *not* regenerate the security keys now, and go to Step 22.

The Sun Fire 6800-3800 Platform Setup panel displays this message:

This part of setup generates security keys used for communications between processes. A seed must be provided to initialize the keys.

Make sure you use the same seed for all the machines you install. You may like to keep record of this seed for future use.

Seed:

(Re-enter seed to confirm.)

**Note** – Ensure you store the seed password securely. It will be needed if you perform any modifications to your Sun Management Center installation.

- a. Enter a unique password for the seed if this is a first-time installation. If not, enter the seed used in previous versions of Sun Management Center.
- b. Reenter the seed to confirm.

#### 22. Click Next to continue.

The Sun Fire 6800-3800 Platform Setup panel displays this message:

```
Updating configuration files with module and discover table information...

Status:

Added module....
Added module....
Updated Discovery Table....
Update of configuration files complete.
```

#### 23. Click Next to continue.

The Sun Fire 6800-3800 Platform Setup panel displays this message:

Sun Fire 6800-3800 Platform Admin setup is complete.

The Sun Fire 6800-3800 Platform Setup panel displays this message:

The following products have been set up:

- Sun Fire Platform Administration

Click Next to invoke the Start Wizard now to the various Sun Management Center components.

## ▼ To Set Up the Domain Agent Using the Wizard GUI

Set up the Sun Fire 6800-3800 Domain Agent on any Sun Fire 6800-3800 Domain where you have installed it.

1. Type es-guisetup on a Sun Fire 6800-3800 Domain where the domain agent is installed to start the Sun Management Center Setup Wizard.

Once the Sun Management Center base software setup is complete, the Wizard displays the following message:

```
Click Next to set up the following products:
Sun Fire Domain Administration
```

#### 2. Click Next to start the Domain Agent setup.

The Sun Fire 6800-3800 Domain Agent Setup panel displays the following message:

```
Updating configuration files...

Status:

Updating configuration files...

Update of configuration files complete.
```

#### 3. Click Next to continue.

```
Sun Fire 6800-3800 Domain Agent setup is complete.
```

## Using Advanced Wizard Setup Options

The base Sun Management Center Setup Wizard provides these advanced setup options when the current Sun Management Center installation is already configured:

**Note** – Use the Reconfigure All option instead of the Remove Setup Configuration option at this time.

- Reconfigure All—Removes all current setup configurations and immediately reruns the Setup Wizard.
- Configure Add-on Products—Sets up the add-on products only.
- Recreate the Sun Management Center Database (server only)—Recreates the database. You are given the option to clear all data, or save and use the data in the recreated database.
- Remove Setup Configuration—Returns your Sun Management Center installation to the post-install and pre-setup state. All configuration and database information is removed. This is useful when you need to perform other tasks prior to rerunning the Setup Wizard.

Refer to the Sun Management Center 3.5 Installation and Configuration Guide for more information about using these options.

## 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 Fire 6800/4810/4800/3800 Platform Administration module, 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 Fire 6800/4810/4800/3800 Platform Administration module is installed on the target hosts.
- 2. Ensure that the Sun Fire 6800/4810/4800/3800 Platform Administration module is set up on the target hosts using either the es-setup or the es-guisetup script.

After this has been done, subsequent Platform Administration 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, you will 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 36
- "To Update From No Add-on Software or Sun Management Center 3.0 Platform Update 4 Add-on Software" on page 39

## ▼ 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 Fire 6800-3800 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 GUI 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 (see FIGURE 2-8), which allows you to distribute the Image File.

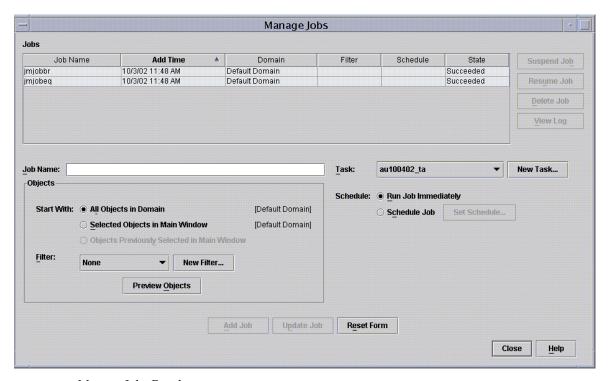


FIGURE 2-8 Manage Jobs Panel

#### 3. In the Manage Jobs panel, select the New Task... button.

The system displays the New Task panel (see FIGURE 2-9), which allows you to specify the Agent Update Image File to distribute.

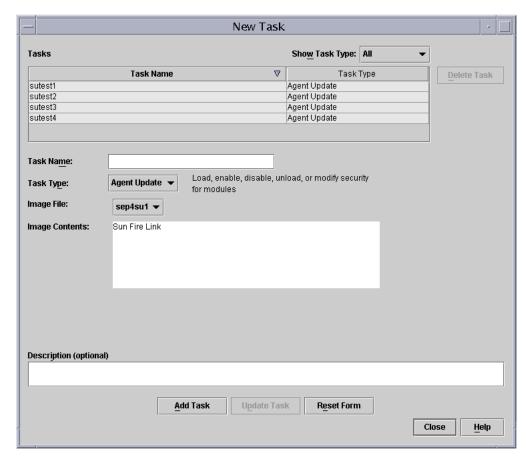


FIGURE 2-9 New Task Panel

- 4. In the New Task panel (FIGURE 2-9), 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 2-8), 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.

- 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 Addon 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.

**Note** – You need to re-run ./es-setup -F to set up the platform agent.

# Creating and Setting Up a Sun Fire 6800/4810/4800/3800 Platform Agent Instance

The default platform administration module can monitor one Sun Fire 6800/4810/4800/3800 system. To monitor more than one Sun Fire 6800/4810/4800/3800 system, you must create one platform agent instance for each additional Sun Fire 6800/4810/4800/3800 system.

### **▼** To Create a Platform Agent Instance

- 1. Become superuser by using the su command.
- 2. Go to the directory where Sun Management Center software is installed.

For example, if Sun Management Center software is installed in /opt/SUNWsymon, go to the directory /opt/SUNWsymon/sbin.

3. Run the es-platform script:

```
# ./es-platform -a instanceName
```

where *instanceName* is the name of a new platform agent instance.

This script asks for the port number for the new platform agent and the security seed. If you used a seed other than the default when setting up the Sun Management server, provide the same seed for this agent.

4. To set up this instance, go the Step 3 in the following procedure "To Set Up a Sun Fire 6800/4810/4800/3800 Platform Administration Module for a New Platform Agent Instance" on page 41

### ▼ To Create Multiple Platform Agent Instances

- 1. Become superuser by using the su command.
- 2. Go to the directory where Sun Management Center software is installed.

For example, if Sun Management Center software is installed in /opt/SUNWsymon, go to the directory /opt/SUNWsymon/sbin.

3. Run the es-platform script:

```
# ./es-platform -a instanceName
```

where *instanceName* is the name of a new platform agent instance.

This script asks for the port number for the new platform agent.

a. Enter a new, not previously used port number.

**Note** – Be sure you use this port number when you set up this instance and when you create this platform instance object on the Sun Management Center console.

The script asks for the security seed.

- b. If you used a seed other than the default when setting up the Sun Management server, provide the same seed for this agent.
- 4. Stop the Sun Management Center agent process.

```
# ./es-stop -A
```

- 5. To set up this instance, go the Step 3 in the following procedure "To Set Up a Sun Fire 6800/4810/4800/3800 Platform Administration Module for a New Platform Agent Instance" on page 41.
- ▼ To Set Up a Sun Fire 6800/4810/4800/3800 Platform Administration Module for a New Platform Agent Instance
  - 1. Become superuser by using the su command.
  - 2. Go to the directory where Sun Management Center software is installed.

For example, if Sun Management Center software is installed in /opt/SUNWsymon, go to the directory /opt/SUNWsymon/addons/SunFirePltAdmin/sbin.

**Note** — Before you perform Step 3, be sure you have stopped the Sun Management Center agent layer. To stop the agent layer, run the command /opt/SUNWsymon/sbin/es-stop -a.

#### 3. Type:

```
# ./es-setup.sh -I instanceName
```

where *instanceName* is the name of a new platform agent instance.

The es-setup.sh script asks for this information:

- IP Address of the Sun Fire 6800/4810/4800/3800 system controller.
- Write community strings for the system controller and all the domains. If the script cannot get the domain address from the system controller, then it asks for the IP address of all the domains.
- Port number of the Sun Management Center agents on all the domains.

This script can be run again to change the information provided in the previous setup.

4. To start the platform instance, go to the following procedure "To Start the Platform Instance" on page 42.

#### **▼** To Start the Platform Instance

When the platform instance is set up, you can start it.

• To start the platform instance, type:

```
# ./es-start -y instanceName
```

### ▼ To Stop the Platform Instance

• If you have a need to stop the platform instance, type:

```
# ./es-stop -y instanceName
```

For information about how to undo setups and delete platform agents, see "Undoing Setups and Deleting Platform Agents" on page 45.

## Starting Sun Management Center Software Using the Start Wizard

Use the es-guistart script to use the Start Wizard to start Sun Management Center software. Refer to Chapter 7, "Starting and Stopping Sun Management Center Software," in the Sun Management Center 3.5 Installation and Configuration Guide for detailed options and instructions.

## Stopping Sun Management Center Software Using the Stop Wizard

Use the es-guistop script to use the Stop Wizard to stop Sun Management Center software. Refer to Chapter 7, "Starting and Stopping Sun Management Center Software," in the Sun Management Center 3.5 Installation and Configuration Guide for detailed options and instructions.

## Uninstalling Sun Management Center Software Using the Uninstall Wizard

Use the es-guiuninst script to use the Uninstall Wizard to uninstall Sun Management Center software. Refer to Chapter 5, "Uninstalling Previous Versions of Sun Management Center Software," in the Sun Management Center 3.5 Installation and Configuration Guide for detailed options and instructions.

## Assigning Users to Groups

This section describes how to assign users to administrator and operator groups to give the users the type of access they will need to perform operations that are assigned to them.

## ▼ To Assign Users to Administrator and Operator Groups

If a user name is listed in the esusers file, that user can log onto that Sun Fire 6800/4810/4800/3800 system, where the user has read-only access for domain administration agents. In order to read and write platform or domain information under the platform agent, the user name must also be listed in the group file on the server.

The setup procedure creates up to 10 groups on the Sun Fire 6800/4810/4800/3800 server machine. These groups are:

TABLE 2-3	User	Groups
IADLE 2-3	USEI	GIUUDS

Group Name	User Category	Type of Access	
spltadm	Administrator	Platform	
sdaadm	Administrator	Domain A	
sdbadm	Administrator	Domain B	
sdcadm	Administrator	Domain C	
sddadm	Administrator	Domain D	
spltop	Operator	Platform	
sdaop	Operator	Domain A	
sdbop	Operator	Domain B	
sdcop	Operator	Domain C	
sddop	Operator	Domain D	

- 1. Become superuser by using the su command.
- 2. Add each user to the appropriate group in the file /etc/group.

- a. Add Sun Fire 6800/4810/4800/3800 platform administrators to spltadm, to allow them to administer the platform through the platform view of a platform agent.
- b. Add Sun Fire 6800/4810/4800/3800 *domain* administrators to the appropriate domain administrator group.

For example, adding the name of a domain administrator to sdaadm allows that domain administrator to administer domain A through the platform agent.

3. Add each user to the file /var/opt/SUNWsymon/cfg/esusers.

## Undoing Setups and Deleting Platform Agents

If you no longer need to monitor a Sun Fire 6800/4810/4800/3800 system, you can save system resources by undoing the setup for the corresponding platform agent or instance, and then deleting it.

- ▼ To Undo the Setup of the Sun Fire 6800/4810/4800/3800 Default Platform Administration Module
  - 1. Become superuser by using the su command.
  - 2. Go to the path/addons/SunFirePltAdmin/sbin directory, where path is the directory where Sun Management Center software is installed.

For example, if Sun Management Center software is installed in /opt/SUNWsymon, go to the directory /opt/SUNWsymon/addons/SunFirePltAdmin/sbin.

3. Undo the setup for the default platform agent by typing:

# ./es-setup.sh -u

## ▼ To Undo the Setup of a Sun Fire 6800/4810/4800/3800 Platform Administration Instance

- 1. Become superuser by using the su command.
- 2. Go to the path/addons/SunFirePltAdmin/sbin directory, where path is the directory where the Sun Management Center software is installed.

For example, if Sun Management Center software is installed in /opt/SUNWsymon, go to the directory /opt/SUNWsymon/addons/SunFirePltAdmin/sbin.

3. Undo the setup for a specific platform agent instance by typing:

```
# ./es-setup.sh -u -I instanceName
```

**Note** – Undoing this setup stops the Sun Management Center agent.

4. Restart the agent.

### ▼ To Delete a Platform Agent

- 1. Become superuser by using the su command.
- 2. Go to the directory path/sbin, where path is the directory where Sun Management Center software is installed.

For example, if Sun Management Center software is installed in /opt/SUNWsymon, go to the directory /opt/SUNWsymon/sbin.

3. Delete the platform agent instance by typing:

```
# ./es-platform -d instanceName
```

## Setting Up Domains

The instructions in this document deal with two types of domains:

- Sun Management Center administrative domain A collection of one or more host systems. For example, an administrative domain can include all the servers and workstations in a computer lab.
- Hardware domain A subset of components in a Sun Fire 6800/4810/4800/3800 platform. For example, a platform with multiple CPU boards and multiple I/O boards can be divided into multiple domains, each with one or more CPU boards and one or more network connections. Each hardware domain runs a separate copy of the Solaris Operating System.

## ▼ To Create a Hardware Domain

The Sun Fire 6800/4810/4800/3800 systems comes from the factory configured with one hardware domain, domain A. The system administrator has the option of creating additional hardware domains. A Sun Fire 6800 system can have up to four hardware domains. Sun Fire 4810, 4800, and 3800 systems can have up to two hardware domains.

• To create additional hardware domains on Sun Fire 6800/4810/4800/3800 systems, refer to the Sun Fire 6800/4810/4800/3800 Systems Platform Administration Manual.

# ▼ To Create Administrative Domains

• To create and populate an administrative domain, refer to the Sun Management Center 3.5 User's Guide.

# Platform and Domain Administration and Monitoring Using the Platform Agent

This chapter describes Platform Administration procedures and features for Sun Fire 6800/4810/4800/3800 systems.

The following topics are discussed:

- "Sun Fire 6800/4810/4800/3800 Platform Administration Module" on page 49
- "Accessing the Domain Tables in the Platform Administration Module" on page 55
- "Taking Action on a Domain Table" on page 64
- "Accessing the Platform Tables In the Platform Administration Module" on page 70
- "Taking Action on Platform Tables" on page 85
- "Physical View and Logical View of a Sun Fire 6800/4810/4800/3800 System" on page 95
- "Platform Administration Hardware Rules" on page 102
- "Data Acquisition Table" on page 107

# Sun Fire 6800/4810/4800/3800 Platform Administration Module

For Sun Fire 6800/4810/4800/3800 systems, platform administration procedures use the Sun Fire 6800/4810/4800/3800 Platform Administration module. This module is loaded under the Hardware category in the Browser tab of the Object Details window.

Only users with the correct access privileges can see the data in the corresponding views. For example, a user with access privileges for Platform and Domain A can view data only for Platform and Domain A, but not Domain B, Domain C, or Domain D. FIGURE 3-1 shows which tables a platform administrator can see and which tables a domain administrator can see.

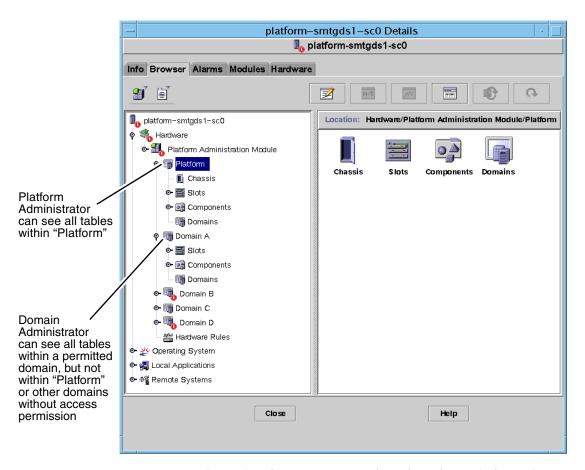


FIGURE 3-1 Details Window for a Sun Fire 6800/4810/4800/3800 Platform Object

**Note** – In the examples that follow, the figures show only a Sun Fire 6800/4810/4800/3800 object. In an actual situation, other types of objects may be present.

# ▼ To Create a Sun Fire 6800/4810/4800/3800 Domain Object Only

In the main console window menu bar select Edit > Create an Object.... > Node >
Sun Management Center Agent - Host.

The system displays the Create Topology Object window. By default, the window opens to the Node tab and Sun Management Center Agent -Host (FIGURE 3-2).

- 2. Do the following:
  - a. Enter the label name for the object
  - b. Enter the description of the object, if desired.
  - c. Enter the host name where the domain agent is running. (It should be a Sun Fire 6800/4810/4800/3800 machine.)
  - d. Enter the base agent port number. (The default base agent port number is 161.)
- 3. Complete this procedure with one of the following actions:
  - Click OK to accept the changes you have made and close this window.
  - Click Apply to apply your changes without closing this window.
  - Click Help to display the help page for this panel in the help browser.
  - Click Cancel to cancel your request.

If an error occurs, an error message is displayed in the status message field.

**Note** – Clicking the Help button displays the help page corresponding to object creation in Sun Management Center software.

# ▼ To Create a Sun Fire 6800/4810/4800/3800 Platform Object Only

1. In the main console window menu bar select Edit > Create an Object.... > Node > Sun Management Center Agent - Platform.

The system displays the Create Topology Object window. By default, the window opens to the Node tab and Sun Management Center Agent -Host (FIGURE 3-2).

- Change the object name to Sun Management Center Agent Platform.
- 2. Do the following:
  - a. Enter the label name for the object

- b. Enter the description of the object, if desired.
- c. Enter the host name where the platform agent is running. (It can be any machine.)
- d. Enter port number 166.
- 3. Complete this procedure with one of the following actions:
  - Click OK to accept the changes you have made and close this window.
  - Click Apply to apply your changes without closing this window.
  - Click Help to display the help page for this panel in the help browser.
  - Click Cancel to cancel your request.

If an error occurs, an error message is displayed in the status message field.

**Note** – Clicking the Help button displays the help page corresponding to object creation in Sun Management Center software.

# ▼ To Create a Sun Fire 6800/4810/4800/3800 Composite Object

Normally, a composite object includes a domain agent and a platform agent. This procedure describes how to create a composite object.

Sun Management Center 3.5 software does *not* support the creation of composite objects when the platform agent is running in a different domain than the system controller. This is because the SC firmware does not support domain name detection for Sun Management Center, because the SC can be configured with multiple IP/domain interfaces, and the SC firmware has no way to tell which domain Sun Management Center is monitoring.



**Caution** – If the platform agent and domain agent are running in different domains, the composite object is created without the domain agent, even though the domain agent is running. You can create a separate domain agent object by selecting Edit > Create an Object.... > Node > Agent-Host.

1. In the main console window menu bar select Edit > Create an Object.... > Composite > Sun Fire nnnn, where nnnn is the number of the Sun Fire 6800/4810/4800/3800 machine.

The system displays the Create Topology Object window with the Composite tab (see FIGURE 3-3).

2. Do the following:

- a. Enter the label name for the composite object
- b. Enter the description of the composite object, if desired.
- c. Enter the host name where the platform agent is running. (It can be any machine.)
- d. Enter the base agent port number. (The default base agent port number is 166.)
- 3. Complete this procedure with one of the following actions:
  - Click OK to accept the changes you have made and close this window.
  - Click Apply to apply your changes without closing this window.
  - Click Help to display the help page for this panel in the help browser.
  - Click Cancel to cancel your request.

If an error occurs, an error message is displayed in the status message field.

**Note** – Clicking the Help button displays the help page corresponding to object creation in Sun Management Center software.

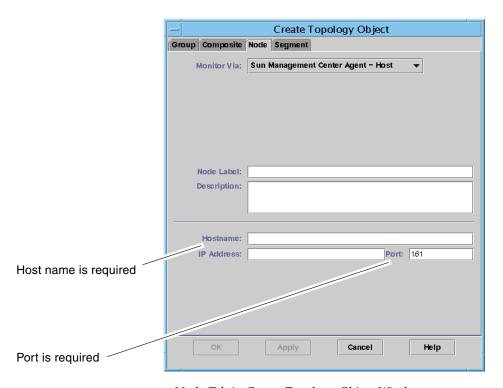


FIGURE 3-2 Node Tab in Create Topology Object Window

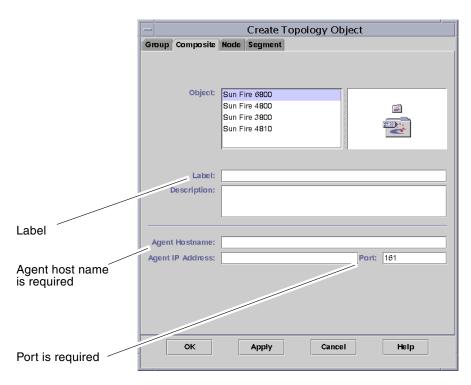
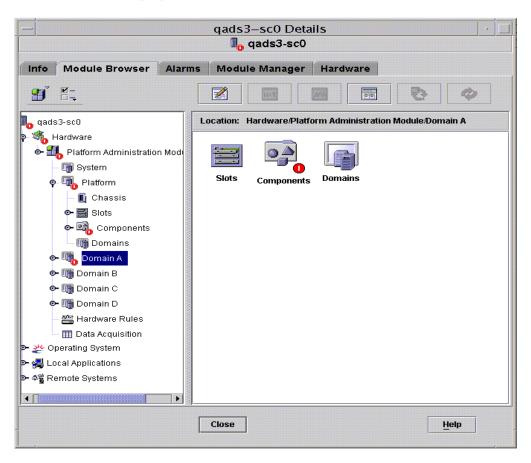


FIGURE 3-3 Composite Tab With Sun Fire 6800/4810/4800/3800 Systems

# Accessing the Domain Tables in the Platform Administration Module

A domain administrator can view all the tables for the corresponding domain node that the administrator administers. For example, the domain administrator for Domain A can view all tables under Domain A (FIGURE 3-4). The domain tables and their properties are summarized in this section.



**FIGURE 3-4** Domain *X* Tables

# Domain *X* Slot Tables

This section contains the slot tables for a specific domain, where X is the letter of the domain (A–D):

- Empty Slots
- CPU Boards
- I/O Boards
- Unknown Boards

# Domain *X* Empty Slots

TABLE 3-1 provides a brief description of the properties for empty slots on a specific domain for a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-1** Sun Fire 6800/4810/4800/3800 Domain X Empty Slots

Property	Rule (if any)	Description
Slot Name		Displays the names of empty slots, such as SB $x$ , where $x$ is the slot number.
Slot Power Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
Slot Board Type		Displays the board type: Empty
Slot State		Displays the slot state: Active, Assigned, Available, or, which means the board state does not apply to this slot
Slot Test Status	rspa1010	Displays the slot test status: Passed, NotTested, Unknown, Under Test, Start Test, Degraded, Failed, or Unusable
Slot Domain		Displays the domain to which the slot is assigned, such as Isolated or DomainA
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown

## Domain X CPU Boards

TABLE 3-2 provides a brief description of the properties for CPU boards on a specific domain for a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-2** Sun Fire 6800/4810/4800/3800 Domain *X* CPU Boards

Property	Rule (if any)	Description
CPU Board Name		Displays the name of the CPU board: $SBx$ , where $x$ is the slot number containing the CPU board
CPU Board Power Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
CPU Board Type		Displays the board type: CPU
CPU Board Slot State		Displays the slot state: Active, Assigned, Available, or, which means the board state does not apply to this slot
CPU Board Test Status	rspa1010	Displays the board test status: Passed, NotTested, Unknown, Under Test, Start Test, Degraded, Failed, or Unusable
CPU Board Domain		Displays the domain to which the board is assigned
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown
CPU Board Fru Index		Displays the field-replaceable unit (FRU) index for the CPU board
CPU Board Total CPU		Displays the total number of CPUs on this board, such as 4
CPU Board Total Dram Memory (MB)		Displays the total amount of dynamic random access memory (DRAM) in megabytes (MB) on this board, such as 4096
CPU Board Total Ecache Memory (MB)		Displays the total amount of external cache (Ecache) in megabytes (MB) on this board, such as 32
CPU Board Total WCI		Displays the total number of Sun Fire Link interfaces (WCIs) on the CPU board
CPU Board Temperature		Displays the CPU board temperature and range, such as $4 \mid 0:32:90:$ normal $\mid 0:33:9$
Is Cod Board?		States whether the CPU board is also a COD board or not (CodBoard or NonCodBoard)

## Domain X IO Boards

TABLE 3-3 provides a brief description of the properties for I/O boards on a specific domain for a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-3** Sun Fire 6800/4810/4800/3800 Domain *X* IO Boards

Property	Rule (if any)	Description
IO Board Name		Displays the board identifier: $/Nn/IBx$ , where $n$ is the node number and $x$ is the slot number containing the I/O board
IO Board Power Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
IO Board Type		Displays the board type: IO
IO Board Slot State		Displays the slot state: Active, Assigned, Available, or, which means the board state does not apply to this slot
IO Board Test Status	rspa1010	Displays the board test status: Passed, NotTested, Unknown, Under Test, Start Test, Degraded, Failed, or Unusable
IO Board Domain		Displays the domain to which the board is assigned
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown
IO Board Fru Index		Displays the field-replaceable unit (FRU) index for the $\rm I/O$ board
IO Board Type		Displays the sub-board type, such as PCI or CPCI
IO Board Total WCI		Displays the total number of Sun Fire Link interfaces (WCIs) on this IO board
IO Board Total ParoliCpciDca		Displays the total number of parallel optical link (Paroli) cards, compact PCI (cPCI) cards, and daughter-card assemblies (DCAs) on this IO board
IO Board Temperature		Displays the temperature and range of the I/O board, such as $2 \mid 0:46:90:normal \mid 0:35$

## Domain X Unknown Boards

TABLE 3-4 provides a brief description of the properties for unknown boards on a specific domain for a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-4** Sun Fire 6800/4810/4800/3800 Domain X Unknown Boards

Property	Rule (if any)	Description
Unknown Board Name		Displays the unknown board name, such as $SBx$ or $IBx$ , where $x$ is the slot number containing the board
Unknown Board Power Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
Unknown Board Type		Displays the board type: Unknown
Unknown Board Slot State		Displays the slot state: Active, Assigned, Available, or, which means the board state does not apply to this slot
Unknown Board Test Status	rspa1010	Displays the board test status: Passed, NotTested, Unknown, Under Test, Start Test, Degraded, Failed, or Unusable
Unknown Board Domain		Displays the domain to which the board is assigned
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown

# Domain *X* Component Tables

This section contains the component tables for a specific domain, where X is the letter of the domain (A-D):

- CPU Module
- DIMM
- Ecache
- WCI
- WCI Port

## Domain X CPU Module

TABLE 3-5 provides a brief description of the properties for CPU modules on a specific domain for a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-5** Sun Fire 6800/4810/4800/3800 Domain *X* CPU Modules

Property	Rule (if any)	Description
CPU Module Board Index		Displays the board index for the CPU module
CPU Module Index		Displays the index for the CPU module
CPU Module Description		Displays the description of the CPU module, such as UltraSPARC-III
CPU Module Temperature		Displays the temperature and range of the CPU module, such as 1 $\mid$ 0 : 62 : 93 : normal
CPU Module Status	rspa1008	Displays the status of the CPU module: Online or Idle. Displays CodDisabled if the CPU is disabled by COD.
CPU Module Model		Displays the model of the CPU module, such as sparcv9
CPU Module Speed (MHz)		Displays the speed of the CPU module in megahertz (MHz)
CPU Module Icache Size (KB)		Displays the size of the CPU module instruction cache (Icache) in kilobytes (KB)
CPU Module Dcache Size (KB)		Displays the size of the CPU module data cache (Dcache) in kilobytes (KB)
CPU Module Ecache Size (KB)		Displays the size of the CPU module external cache (Ecache) in kilobytes (KB)
CPU Module Wcache Size (KB)		Displays the size of the CPU module write cache (Wcache) in kilobytes (KB)
CPU Module Last Change		Displays the date and time of the last change
CPU Module Errors		Displays the number of error-correcting code (ECC) errors for the CPU module

## Domain X DIMM

TABLE 3-6 provides a brief description of the properties for a dual inline memory module (DIMM) on a specific domain for a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-6** Sun Fire 6800/4810/4800/3800 Domain *X* Components DIMM

Property	Rule (if any)	Description
DIMM CPU Board Index		Displays the CPU board index for the DIMM
DIMM CPU Module Index		Displays the CPU module index for the DIMM
DIMM Index		Displays the DIMM index
DIMM Fru Index		Displays the field-replaceable unit (FRU) index for the DIMM

### Domain X Ecache

TABLE 3-7 provides a brief description of the properties for external cache (Ecache) on a specific domain for a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-7** Sun Fire 6800/4810/4800/3800 Domain *X* Components Ecache

Property	Rule (if any)	Description
Ecache CPU Board Index		Displays the CPU board index for the Ecache
Ecache CPU Module Index		Displays the CPU module index for the Ecache
Ecache Index		Displays the Ecache index
Ecache Fru Index		Displays the field-replaceable unit (FRU) index for the Ecache

## Domain X WCI

TABLE 3-8 provides a brief description of the properties for the Sun Fire Link Interface (WCI) module for a specific domain on a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-8** Sun Fire 6800/4810/4800/3800 Domain *X* Components WCI

Property	Rule (if any)	Description
WCI Module Board Index		Displays the board index for the WCI module
WCI Module Index		Displays the index for the WCI module
WCI Module Description		Displays the description of the WCI module
WCI Module Status	rspa1008	Displays the status of the WCI module: Online or Idle
WCI Module Mode		Displays the mode of the WCI module: SSM (scalable shared memory), RSM (remote shared memory), and Unknown
WCI Module Temperature		Displays the temperature and range of the WCI module
WCI Module Total DIMM		Displays the total size of the DIMM on the WCI module
WCI Module Total MEM		Displays the size of total memory on the WCI module
WCI Module Total ParoliDCA		Displays the total number of parallel optical link (Paroli) cards and daughter-card assemblies (DCAs) on this module.
WCI Module Total Port		Displays the total number of ports for the WCI module
WCI Module Last Change		Displays the date and time of the last change
WCI Module Errors		Displays the number of error-correcting code (ECC) errors for the WCI module

## Domain X WCI Port

TABLE 3-9 provides a brief description of the properties for the Sun Fire Link Interface (WCI) port on a specific domain for a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-9** Sun Fire 6800/4810/4800/3800 Domain *X* Components WCI Port

Property	Rule (if any)	Description
WCI Port Board Index		Displays the board index for the WCI port
WCI Port Module Index		Displays the module index for the WCI port
WCI Port Index		Displays the index for the WCI port
WCI Port Fru Index		Displays the field-replaceable unit (FRU) index for the WCI port
WCI Port Status		Displays the status for the WCI port: Unknown, Installed, Connected, Unconfigured, and Error
WCI Port ParoliDCA		Displays the number of parallel optical link (Paroli) cards and daughter-card assemblies using this WCI port (1 or 2)
WCI Port Remote Location		Displays the remote location for the WCI port

# **Domains**

TABLE 3-28 provides a brief description of the properties for a specific domain, where X is the letter for the domain (A-D) on a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-10** Sun Fire 6800/4810/4800/3800 Domain X Domains

Property	Rule (if any)	Description	
Domain	Displays the domain: DomainA-D		
Domain Description		Displays a description of the domain	
Domain Log Host	rspa1006	Displays a log host name for the domain	
Domain Trap Hosts	rspa1006	Displays names or IP addresses of the SNMP trap hosts for this domain. Format is <i>host</i> [: <i>port</i> ].	
Domain ACL Description		Displays the slots in the domain's Access Control List (ACL); for example, SB0 SB1 SB3 SB5 IB6 I	

**TABLE 3-10** Sun Fire 6800/4810/4800/3800 Domain *X* Domains (*Continued*)

Property	Rule (if any)	Description
Domain Status	rspa1002	Displays the domain status; for example, RunningSolaris, PoweredOff, Standby, Running POST, Active, Active - OpenBoot PROM, Active - Booting, Active - Halted, Active - Reset, Active - Panicking, Active - Debugger, Not Responding, Paused due to an error
Domain Node Name		Displays the Solaris Operating System node name
Domain Ssm Mode		Displays the shared scalable memory (SSM) mode for the domain: Master, Slave, Local, and Unknown
Domain Ssm Master		Displays the host name of the scalable shared memory (SSM) master node
Domain Ssm Slave Nodes		Displays the host names of the hosts or nodes with slave shared scalable memory (SSM)
Domain KeySwitch	rspa1003	Displays the virtual keyswitch position for the domain: Unknown (default), Off, Standby, On, Diagnostic, Secure, OffToStandby, OffToOn, OffToDiag, OffToSecure, StandbyToOff, ActiveToOff, ActiveToStandby, RebootToOn, RebootToDiag, RebootToSecure, standbyToOn, standbyToDiag, standbyToSecure, onToOff, onToStandby, onToDiag, onToSecure, diagToOff, diagToStandby, diagToOn, diagToSecure, secureToOff, secureToStandby, secureToOn, secureToDiag, offToOff, standbyToStandby, onToOn, diagToDiag, and secureToSecure
Domain Contact		Displays the name of the person who is responsible for this domain
Slots Not in ACL		Displays the slots <i>not</i> in the domain's Access Control List (ACL); for example, SB2 SB4

# Taking Action on a Domain Table

When you right-click on an entry in a data table, a set of actions is displayed in a pop-up menu (FIGURE 3-5). In the menu, the list of actions varies, depending on the column values in the row that you select and on the type of entry.

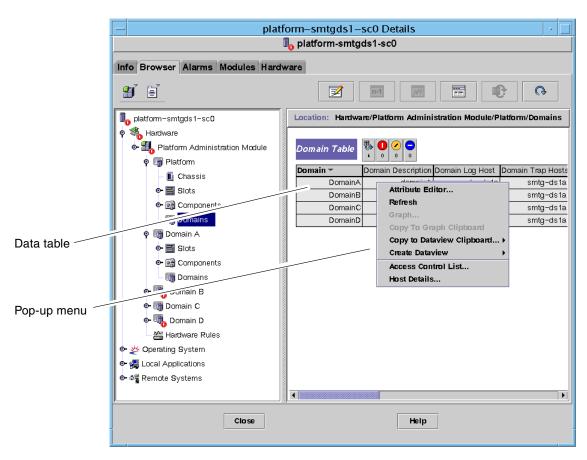


FIGURE 3-5 Browser Window Domains Table

TABLE 3-11 lists the types of entries that can appear in the menus, and the type of actions that can be taken.

TABLE 3-11 Table Action Menu Items for the Domain View

Table	Action
Slots and Components tables that have FRU Index entries	View FRU information
Domains	View and manage Keyswitch, Setup Loghost, and Host details

TABLE 3-12 lists some common actions and their corresponding functions.

**TABLE 3-12** Domain Table Actions

Action	Function
Keyswitch	Enables you to change the virtual keyswitch position of a domain. FIGURE 3-6 shows the panel that is displayed when you select Keyswitch
Setup Loghosts	Enables you to set up the SNMP Trap and Syslog hosts for a domain. FIGURE 3-7 shows the panel that is displayed when you select Setup Loghosts
FRU Information	Enables you to see the FRU information for the selected component. FIGURE 3-8 shows the panel that is displayed.
Table sorting	Enables you to sort the domain table according to different criteria. When you click on the domain table column headers, the table is sorted according to that criteria. For example, clicking the Status column, sorts the table Status. You can toggle the sort order, ascending and descending, by clicking on the same column header again. The current sorted column header is displayed in bold face and the current sort order is displayed as a down or up arrow. By default the domain table is in ascending order by domain IDs.
Host Details	Displays the host Details window of the corresponding domain.

The following sections explain how to implement these actions.

# ▼ To Change a Domain Keyswitch Setting

The Keyswitch menu item is available for the individual domains (Domain A, B, C, or D).

#### 1. Right-click in the data table to display a pop-up menu.

#### 2. Select Keyswitch...

In the Hierarchy view, the path to this command is Hardware > Platform Administration Module > Domain *X* > Domains > *data table menu* > Keyswitch....

The Keyswitch panel (FIGURE 3-6) is displayed. This panel shows the current position of the virtual keyswitch.



FIGURE 3-6 Keyswitch Panel

If the system controller is networked, you can change the keyswitch position to one of five modes. If the system controller is not networked, you cannot select an option.

The five modes are:

#### ■ On

If the domain is already powered on, clicking the On button only changes the position on the virtual keyswitch.

#### ■ Off

If the domain is running the Solaris Operating System, a confirmation panel is displayed when you select Off. Selecting this mode changes the board state of all the boards in the selected domain to Off and places the boards in low-power mode, allowing them to be physically removed from the chassis.

#### Diagnostic

If the domain is already powered on, Diagnostic only changes the position on the virtual keyswitch.

#### Secure

If the domain is already powered on, Secure only changes the position on the virtual keyswitch.

#### Standby

If the domain is running the Solaris Operating System, a confirmation panel is displayed when you select Standby. Selecting this mode changes the state of all boards in the selected domain to Standby, but does not put the boards in the low-power mode.

#### 3. Complete this procedure with one of the following actions:

- Click OK to accept the changes you made and close this window.
- Click Cancel to cancel your request.

If an error occurs, it is displayed in the status message field of the panel.

# **▼** To Set Domain Loghosts

- 1. Right-click in the data table to display a pop-up menu.
- 2. Select Setup Loghosts...

In the Hierarchy view, the paths to this command are:

- Select Hardware > Platform Administration Module > Domain X > Domains > data table menu > Setup Loghosts....
- Select Hardware > Platform Administration Module > Platform > Chassis > *data table menu* > Setup Loghosts....

The Setup Loghosts panel (FIGURE 3-7) is displayed.



FIGURE 3-7 Setup Loghosts Panel

3. You can change the values for SNMP Trap Hosts and Syslog Loghosts.

You can specify multiple loghosts by entering one IP address or node name per line.

- 4. Complete this procedure with one of the following actions:
  - Click OK to accept the changes you made and close this window.
  - Click Cancel to cancel your request.

If an error occurs, an error message is displayed in the status message field.

# ▼ To Display FRU Information

This panel displays FRU information for a specific component.

No information can be changed. The panel is read-only.

1. Right-click in the data table to display a pop-up menu.

#### 2. Select FRU Information...

In the Hierarchy view, the path is Select Hardware > Platform Administration Module > Platform (or Domain *X*) > Slots (or Components) > *category*, *data table menu* > FRU Information....

The FRU Information panel (FIGURE 3-8) is displayed.

#### 3. Click OK to close this window.

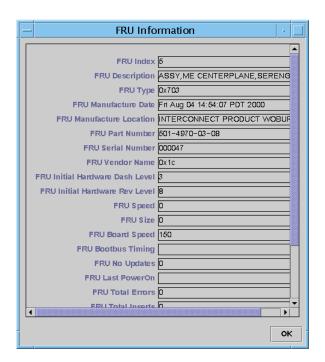


FIGURE 3-8 FRU Information Panel

# ▼ To Display Host Details

1. Right-click in the data table to display a pop-up menu.

#### 2. Select Host Details...

In the Hierarchy view, the path is Select Hardware > Platform Administration Module > Platform (or Domain *X*) > Domains > *data table menu* > Host Details....

The Host Details window of the corresponding hardware domain is displayed.

#### 3. Click OK to close this window.

# Accessing the Platform Tables In the Platform Administration Module

The platform administrator can view all the tables under the Platform Administration Module (FIGURE 3-9). The tables and their properties are summarized in this section.

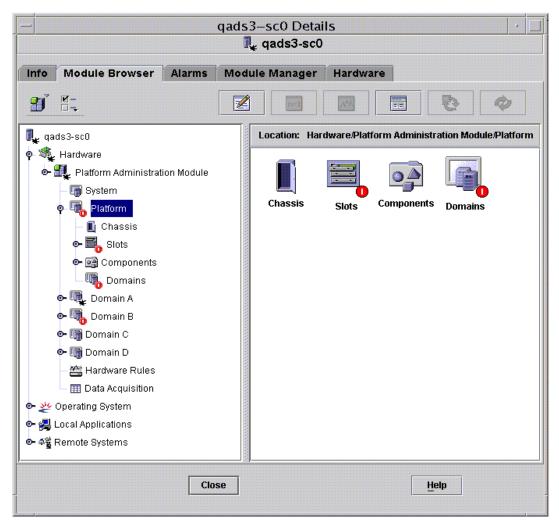


FIGURE 3-9 Platform Tables

# Platform System

TABLE 3-13 provides a brief description of the properties for a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-13** Sun Fire 6800/4810/4800/3800 System

Property	Rule (if any)	Description
Platform		Displays the description of platform, such as Sun-Fire-6800

# Platform Chassis

TABLE 3-14 provides a brief description of the properties for a chassis on a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-14** Sun Fire 6800/4810/4800/3800 Platform Chassis

Property	Rule (if any)	Description
Chassis Description		Displays the description of the chassis
Chassis Fru Index		Displays the chassis field-replaceable unit (FRU) index
Chassis SC Name		Displays the SC host name on the chassis
Chassis Location		Displays the location of the chassis
Chassis Contact		Displays the name of the person who is responsible for this chassis
Chassis Log Host	rspa1006	Displays the name or IP address of the SNMP log host for the chassis
Chassis Trap Hosts	rspa1006	Displays names or IP addresses of the SNMP trap hosts for this chassis. Format is <i>host</i> [: <i>port</i> ].
Chassis Slots		Displays the total number of slots on the chassis
Chassis CPU Slots		Displays the number of chassis slots used for CPU boards
Chassis IO Slots		Displays the umber of chassis slots used for IO boards
Chassis Uptime		Displays the time the chassis has been up
Chassis Model		Displays the chassis model, such as Sun Fire 6800
Chassis Domains		Displays the number of domains for this chassis, such as 4

**TABLE 3-14** Sun Fire 6800/4810/4800/3800 Platform Chassis (*Continued*)

Property	Rule (if any)	Description
Chassis Partition Mode		Displays the chassis partition mode: SinglePartition or DualPartition
Chassis DomainA Ethernet Address		Displays the domain A Ethernet address
Chassis DomainB Ethernet Address		Displays the domain B Ethernet address
Chassis DomainC Ethernet Address		Displays the domain C Ethernet address
Chassis DomainD Ethernet Address		Displays the domain D Ethernet address
Chassis MasterSC Ethernet Address		Displays the main SC Ethernet address
Chassis SlaveSC Ethernet Address		Displays the spare SC Ethernet address
Chassis System Serial Number		Displays the serial number of the chassis
Node Name		Displays the Solaris Operating System node name
Machine		Displays the machine name of the chassis
Platform		Displays the platform name, such as Sun-Fire-6800

# Platform Slot Tables

This section contains slot tables for the platform:

- Empty Slots
- CPU Boards
- I/O Boards
- L2 Repeaters
- Fan Trays
- Power Supply
- SC
- Unknown Boards

# Platform Empty Slots

TABLE 3-15 provides a brief description of the properties for empty slots on a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-15** Sun Fire 6800/4810/4800/3800 Platform Empty Slots

Property	Rule (if any)	Description
Slot Name		Displays the names of empty slots, such as SB2, SB4
Slot Power Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
Slot Board Type		Displays the board type: Empty
Slot State		Displays the slot state: Active, Assigned, Available, or, which means the board state does not apply to this slot
Slot Test Status	rspa1010	Displays the slot test status: Passed, NotTested, Unknown, Under Test, Start Test, Degraded, Failed, or Unusable
Slot Domain		Displays the domain to which the slot is assigned, such as Isolated or DomainA
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown

## Platform CPU Boards

TABLE 3-16 provides a brief description of the properties for CPU boards on a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-16** Sun Fire 6800/4810/4800/3800 Platform Slots CPU Boards

Property	Rule (if any)	Description
CPU Board Name		Displays the name of the CPU board: $SBx$ , where $x$ is the slot number containing the CPU board
CPU Board Power Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
CPU Board Type		Displays the board type: CPU
CPU Board Slot State		Displays the board slot state: Active, Assigned, Available, or, which means the board state does not apply to this slot

 TABLE 3-16
 Sun Fire 6800/4810/4800/3800 Platform Slots CPU Boards (Continued)

Property	Rule (if any)	Description
CPU Board Test Status	rspa1010	Displays the board test status: Passed, NotTested, Unknown, Under Test, Start Test, Degraded, Failed, or Unusable
CPU Board Domain		Displays the domain to which the board is assigned, such as DomainA or DomainB
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown
CPU Board Fru Index		Displays the field-replaceable unit (FRU) index for the CPU board
CPU Board Total CPU		Displays the total number of CPUs on this CPU board, such as 4
CPU Board Total Dram Memory (MB)		Displays the total amount of dynamic random access memory (DRAM) in megabytes (MB) on the CPU board, such as 4096
CPU Board Total Ecache Memory (MB)		Displays the total amount of external cache (Ecache) memory on the CPU board, such as 32
CPU Board Total WCI		Displays the total number of Sun Fire Link interfaces (WCIs) on the CPU board
CPU Board Temperature		Displays the CPU board temperature and range, such as $4 \mid 0:36:90:$ normal $\mid 0:37:9$
Is Cod Board?		States whether the CPU board is also a COD board or not (CodBoard or NonCodBoard)
Node Name		Displays the Solaris Operating System node name

## Platform I/O Boards

TABLE 3-17 provides a brief description of the properties for I/O boards on a Sun Fire 6800/4810/4800/3800 system.

TABLE 3-17Sun Fire 6800/4810/4800/3800 Platform Slots IO Boards

Property	Rule (if any)	Description
IO Board Name		Displays the name of the I/O board: $IOx$ , where $x$ is the slot number containing the I/O board.
IO Board Power Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
IO Board Type		Displays the board type: IO
IO Board Slot State		Displays the board slot state: Active, Assigned, Available, or, which means the board state does not apply to this slot
IO Board Test Status	rspa1010	Displays the board test status: Passed, NotTested, Unknown, Under Test, Start Test, Degraded, Failed, or Unusable
IO Board Domain		Displays the domain to which the board is assigned, such as DomainA or DomainB
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown
IO Board Fru Index		Displays the field-replaceable unit (FRU) index for the $\rm I/O$ board
IO Board Type		Displays the board type: PCI, CPCI, or WPCI
IO Board Total WCI		Displays the total number of Sun Fire Link interfaces (WCIs) on this board.
IO Board Total ParoliCpciDca		Displays the total number of parallel optical link (Paroli) cards, compact PCIs (CPCIs), and daughter card assemblies (DCAs) on this board.
IO Board Temperature		Displays the I/O board temperature and range, such as $2 \mid 0:30:90:max 0:32$
Node Name		Displays the Solaris Operating System node name

# Platform L2 Repeaters

TABLE 3-18 provides a brief description of the properties for L2 repeaters on a Sun Fire 6800/4810/4800/3800 system.

TABLE 3-18Sun Fire 6800/4810/4800/3800 Platform Slots L2 Repeaters

Property	Rule (if any)	Description
L2 Repeater Name		Displays the L2 Repeater name: $RP0x$ , where $x$ is the slot number containing the repeater
L2 Repeater Power Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
L2 Repeater Board Type		Displays the board type: L2
L2 Repeater Slot State		Displays, which means the board state does not apply to this slot
L2 Repeater Test Status		Displays the repeater test status: Passed or NotTested
L2 Repeater Domain		Displays the domain to which the repeater is assigned, such as Isolated or DomainA
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown
L2 Repeater Fru Index		Displays the field-replaceable unit (FRU) index for the L2 repeater
L2 Repeater Domains		Displays the domains to which the repeater is available, such as ${\tt A}{\tt ,B}$
L2 Repeater Temperature		Displays the L2 repeater temperature and range, such as $2 \mid 0:28:90:normal \mid 0:30:90$
Node Name		Displays the Solaris Operating System node name

# Platform Fan Trays

TABLE 3-19 provides a brief description of the properties for fan trays on a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-19** Sun Fire 6800/4810/4800/3800 Platform Slots Fan Trays

Property	Rule (if any)	Description
Fan Name		Displays the fan tray name: $FTx$ , where $x$ is the slot number containing the fan tray $(0-3)$
Fan Power Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
Fan Board Type		Displays the board type: Fan
Fan Slot State		Displays, which means the board state does not apply to this slot
Fan Test Status		Displays the fan test status: Passed or NotTested
Fan Domain		Displays the domain to which the repeater is assigned, such as Isolated or DomainA
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown
Fan Fru Index		Displays the field-replaceable unit (FRU) index for the fan tray
Fan Speed		Displays the fan speed: Off, Low, or High
Node Name		Displays the Solaris Operating System node name

# Platform Power Supply

TABLE 3-20 provides a brief description of the properties for power supplies on a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-20** Sun Fire 6800/4810/4800/3800 Platform Slots Power Supply

Property	Rule (if any)	Description
Power Supply Name		Displays the power supply name: $PSx$ , where $x$ is the slot number containing the power supply
Power Supply Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
Power Supply Board Type		Displays the board type: PowerSupply
Power Supply Slot State		Displays, which means the board state does not apply to this slot

**TABLE 3-20** Sun Fire 6800/4810/4800/3800 Platform Slots Power Supply (*Continued*)

Property	Rule (if any)	Description
Power Supply Test Status		Displays the power supply test status: Passed or NotTested
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown
Power Supply Fru Index		Displays the field-replaceable unit (FRU) index for the power supply
Power Supply Readings		Displays the power supply readings, such as 56.59   5.84   33.48
% Power Supply Used		Displays the percentage of the power supply that is used, such as 20, 17, 16, 37, or 42
Power Supply Low/High Input		Displays the power supply input as High or Low
Power Supply Primary Temperature		Displays the power supply primary temperature and range, such as $1 \mid -1:23:78:normal \mid$
Node Name		Displays the Solaris Operating System node name

# Platform System Controller (SC)

TABLE 3-21 provides a brief description of the properties for an SC on a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-21** Sun Fire 6800/4810/4800/3800 Platform Slots SC

Property	Rule (if any)	Description
SC Name		Displays the SC name: SSC0 or SSC1
SC Power Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
SC Board Type		Displays the board type: SC
SC Slot State		Displays either Main or Spare if you have redundant system controllers. Otherwise, displays, which means the board state does not apply to this slot.
SC Test Status	rspa1010	Displays the SC test status: Passed, Failed, OK, Under Test, NotTested, Degraded, or Unknown
SC Domain		Displays the domain to which the SC is assigned, such as Isolated
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown

**TABLE 3-21** Sun Fire 6800/4810/4800/3800 Platform Slots SC (*Continued*)

Property	Rule (if any)	Description
SC Master Slave	rspa1004	Displays whether the SC is the main SC (Master) or the spare SC (Slave)
SC Fru Index		Displays the field-replaceable unit (FRU) index for the SC
SC Version	rspa1009	Displays the firmware version, such as 5.14.0; raises an alarm if less than 5.12.5
SC TimeZone		Displays the standard abbreviation for this SC's time zone, such as PST for Pacific Standard Time
SC Date		Displays current date and time for the SC
SC Network Configuration		Displays the network configuration, such as Fixed or Unknown
SC Hostname		Displays the host name of the SC
SC IP Address	rspa1005	Displays the IP address of the SC
SC Netmask		Displays the netmask for the SC
SC Default Routers		Displays the address of the default routers for the SC
SC DNS Domain		Displays the domain name for the SC
SC DNS Resolvers		Displays the resolver addresses for the SC
SC Number Connections		Displays the number of the connections for the SC
Node Name		Displays the Solaris Operating System node name

# Platform Unknown Boards

TABLE 3-22 provides a brief description of the properties for unknown boards on a Sun Fire 6800/4810/4800/3800 system.

 TABLE 3-22
 Sun Fire 6800/4810/4800/3800 Platform Slots Unknown Boards

Property	Rule (if any)	Description
Unknown Board Name		Displays the unknown board name, such as SB $x$ or IB $x$ , where $x$ is the slot number containing the board
Unknown Board Power Status	rspa1011	Displays the power status: PoweredOff or PoweredOn
Unknown Board Type		Displays the board type: Unknown

TABLE 3-22 Sun Fire 6800/4810/4800/3800 Platform Slots Unknown Boards (Continued)

Property	Rule (if any)	Description
Unknown Board Slot State		Displays the board slot state: Active, Assigned, Available, or, which means the board state does not apply to this slot
Unknown Board Test Status	rspa1010	Displays the SC test status: Passed, Failed, OK, Under Test, NotTested, Degraded, or Unknown
Unknown Board Domain		Displays the domain to which the board is assigned
Slot Status	rspa1000	Displays the slot status: OK, Failed, OverTemp, UnderTemp, or Unknown

# Platform Component Tables

This section contains component tables for the platform:

- CPU Module
- DIMM
- Ecache
- WCI
- WCI Port

## Platform CPU Module

TABLE 3-23 provides a brief description of the properties for CPU modules on a Sun Fire 6800/4810/4800/3800 system.

TABLE 3-23 Sun Fire 6800/4810/4800/3800 Platform Components CPU Modules

Property	Rule (if any)	Description
CPU Module Board Index		Displays the board index for the CPU module
CPU Module Index		Displays the index for the CPU module
CPU Module Description		Displays the description of the CPU module, such as UltraSPARC-III+
CPU Module Temperature		Displays the temperature and range of the CPU module, such as $1 \mid 0:62:93:normal$

**TABLE 3-23** Sun Fire 6800/4810/4800/3800 Platform Components CPU Modules (*Continued*)

Property	Rule (if any)	Description
CPU Module Status	rspa1008	Displays the status of the CPU module: Online or Idle. Displays CodDisabled if the board is disabled by COD.
CPU Module Model		Displays the model of the CPU module, such as sparcv9
CPU Module Speed (MHz)		Displays the speed of the CPU module in megahertz (MHz)
CPU Module Icache Size (KB)		Displays the size of the CPU module instruction cache (Icache) in kilobytes (KB)
CPU Module Dcache Size (KB)		Displays the size of the CPU module data cache (Dcache) in kilobytes (KB)
CPU Module Ecache Size (KB)		Displays the size of the CPU module external cache (Ecache) in kilobytes (KB)
CPU Module Wcache Size (KB)		Displays the size of the CPU module write cache (Wcache) in kilobytes (KB)
CPU Module Last Change		Displays the date and time of the last change
CPU Module Errors		Displays the number of error-correcting code (ECC) errors for the CPU module
Node Name		Displays the Solaris Operating System node name

## Platform DIMM

TABLE 3-24 provides a brief description of the properties for a dual inline memory module (DIMM) on a Sun Fire 6800/4810/4800/3800 system.

 TABLE 3-24
 Sun Fire 6800/4810/4800/3800 Platform Components DIMM

Property	Rule (if any)	Description
DIMM CPU Board Index		Displays the CPU board index for the DIMM
DIMM CPU Module Index		Displays the CPU module index for the DIMM

TABLE 3-24 Sun Fire 6800/4810/4800/3800 Platform Components DIMM (Continued)

Property	Rule (if any)	Description
DIMM Index		Displays the DIMM index
DIMM Fru Index		Displays the field-replaceable unit (FRU) index for the DIMM
Node Name		Displays the Solaris Operating System node name

## Platform Ecache

TABLE 3-25 provides a brief description of the properties for external cache (Ecache) on a Sun Fire 6800/4810/4800/3800 system.

 TABLE 3-25
 Sun Fire 6800/4810/4800/3800 Platform Components Ecache

Property	Rule (if any)	Description
Ecache CPU Board Index		Displays the CPU board index for the Ecache
Ecache CPU Module Index		Displays the CPU module index for the Ecache
Ecache Index		Displays the Ecache index
Ecache Fru Index		Displays the field-replaceable unit (FRU) index for the Ecache
Node Name		Displays the Solaris Operating System node name

# Platform WCI

TABLE 3-26 provides a brief description of the properties for Sun Fire Link interface (WCI) on a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-26** Sun Fire 6800/4810/4800/3800 Platform Components WCI

Property	Rule (if any)	Description
WCI Module Board Index		Displays the board index for the WCI module
WCI Module Index		Displays the index for the WCI module
WCI Module Description		Displays the description of the WCI module

 TABLE 3-26
 Sun Fire 6800/4810/4800/3800 Platform Components WCI (Continued)

Property	Rule (if any)	Description
WCI Module Status	rspa1008	Displays the status of the WCI module: Online or Idle
WCI Module Mode		Displays the mode of the WCI module: SSM (scalable shared memory), RSM (remote shared memory), and Unknown
WCI Module Temperature		Displays the temperature and range of the WCI module
WCI Module Total DIMM		Displays the total size of the DIMM on the WCI module
WCI Module Total Memory		Displays the size of total memory on the WCI module
WCI Module Total ParoliDCA		Displays the total number of parallel optical link (Paroli) cards and daughter-card assemblies (DCAs) on the WCI module
WCI Module Total Port		Displays the total number of ports for the WCI module
WCI Module Last Change		Displays the date and time of the last change
WCI Module Errors		Displays the number of error-correcting code (ECC) errors for the WCI module
Node Name		Displays the Solaris Operating System node name

### Platform WCI Port

TABLE 3-27 provides a brief description of the properties for Sun Fire Link Interface (WCI) port on a Sun Fire 6800/4810/4800/3800 system.

 TABLE 3-27
 Sun Fire 6800/4810/4800/3800 Platform Components WCI Port

Property	Rule (if any)	Description
WCI Port Board Index		Displays the board index for the WCI port
WCI Port Module Index		Displays the module index for the WCI port
WCI Port Index		Displays the index for the WCI port
WCI Port Fru Index		Displays the field-replaceable unit (FRU) index for the WCI port

TABLE 3-27 Sun Fire 6800/4810/4800/3800 Platform Components WCI Port (Continued)

Property	Rule (if any)	Description
WCI Port Status		Displays the status for the WCI port: Unknown, Installed, Connected, Unconfigured, and Error
WCI Port ParoliDCA		Displays the number of parallel optical link (Paroli) cards and daughter-card assemblies using this WCI port (1 or 2)
WCI Port Remote Location		Displays the remote location for the WCI port
Node Name		Displays the Solaris Operating System node name

# Platform Domains

TABLE 3-28 provides a brief description of the properties for platform domains on a Sun Fire 6800/4810/4800/3800 system.

**TABLE 3-28** Sun Fire 6800/4810/4800/3800 Platform Domains

Property	Rule (if any)	Description
Domain		Displays the domains on this system: DomainA-D
Domain Description		Displays a description of the domain
Domain Log Host	rspa1006	Displays a log host name for the domain
Domain Trap Hosts	rspa1006	Displays names or IP addresses of the SNMP trap hosts for this domain. Format is <i>host</i> [: <i>port</i> ].
Domain ACL Description		Displays the slots in the domain's Access Control List (ACL); for example, SB0 SB1 SB3 SB5 IB6 I
Domain Status	rspa1002	Displays the domain status; for example, RunningSolaris, PoweredOff, Standby, Running POST, Active, Active - OpenBoot PROM, Active - Booting, Active - Halted, Active - Reset, Active - Panicking, Active - Debugger, Not Responding, Paused due to an error
Domain Node Name		Displays the Solaris Operating System node name
Domain Ssm Mode		Displays the shared scalable memory (SSM) mode for the domain: Master, Slave, Local, and Unknown
Domain Ssm Master		Displays the host name of the scalable shared memory (SSM) master node
Domain Ssm Slave Nodes		Displays the host names of the hosts or nodes with slave shared scalable memory (SSM)

**TABLE 3-28** Sun Fire 6800/4810/4800/3800 Platform Domains (*Continued*)

Property	Rule (if any)	Description
Domain KeySwitch	rspa1003	Displays the virtual keyswitch position for the domain: Unknown (default), Off, Standby, On, Diagnostic, Secure, OffToStandby, OffToOn, OffToDiag, OffToSecure, StandbyToOff, ActiveToOff, ActiveToStandby, RebootToOn, RebootToDiag, RebootToSecure, standbyToOn, standbyToDiag, standbyToSecure, onToOff, onToStandby, onToDiag, onToSecure, diagToOff, diagToStandby, diagToOn, diagToSecure, secureToOff, secureToStandby, secureToOn, secureToDiag, offToOff, standbyToStandby, onToOn, diagToDiag, and secureToSecure
Domain Contact		Displays the name of the person who is responsible for this domain
Slots Not in ACL		Displays the slots <i>not</i> in the domain's Access Control List (ACL); for example, SB2 SB4

# Taking Action on Platform Tables

When you right-click an entry in the table, a set of actions is displayed in a pop-up menu. The list of actions varies, depending on the column values in the row that you selected and the type of entity.

TABLE 3-29 lists the various entries and actions that you can take.

**TABLE 3-29** Table Action Menu Items for the Platform View

Table	Action
Chassis	<ul><li>Set up Loghosts</li><li>FRU information</li></ul>
Slots > Empty Slots	<ul><li>None, if board is unavailable</li><li>Assign or unassign, if board is available</li></ul>
Slots > CPU Boards	<ul><li> Test</li><li> FRU information</li><li> Power on/off</li><li> Assign or unassign, if board is available</li></ul>

 TABLE 3-29
 Table Action Menu Items for the Platform View (Continued)

Table	Action
Slots > I/O Boards	<ul><li>FRU information</li><li>Power on/off</li><li>Assign or unassign, if board is available</li></ul>
Slots > L2 Repeater	• FRU information
Slots > Fan Trays	<ul><li>Power on/off</li><li>FRU information</li></ul>
Slots > Power Supply	<ul><li>Power on/off</li><li>FRU information</li></ul>
Slots > SC	<ul><li>SC Network Setup</li><li>FRU information</li></ul>
Slots > UNKNOWN Boards	<ul><li>Power on/off</li><li>Assign or unassign, if board is available</li></ul>
Domains	<ul><li> ACL</li><li> Host Details</li></ul>
Components > all tables	None

TABLE 3-30 lists all of the available actions and their corresponding functions.

TABLE 3-30 Platform Table Actions Menu

Action	Function	
Assign/Unassign	Enables you to Assign or Unassign a board. FIGURE 3-10 shows the panel that is displayed when you select the Assign menu item. FIGURE 3-11 shows the panel that is displayed when you select the Unassign menu item. Depending on the board status, the Assign or Unassign menu item is available. If the board is already in the assign state, the Assign action menu item is not available. If the board is in the active state, this option is not available.	
Power On/Power Off	Enables you to power the board on and off. FIGURE 3-12 shows the confirmation panel that is displayed to confirm this action. If the board is in the active state, this option is not available.	
Test	Enables you to test a board. FIGURE 3-13 shows the confirmation panel that is displayed to confirm this action. If the board is in the active state, this option is not available.	
Host Details	The host Details window of the corresponding domain is displayed.	
System Controller Setup	Enables you to view or modify SC setup information. FIGURE 3-14 shows the panel that is displayed when you select System Controller Setup	

 TABLE 3-30
 Platform Table Actions Menu (Continued)

Action	Function
Setup Loghosts	Enables you to set up the loghosts and trap hosts for a chassis. FIGURE 3-15 shows the panel that is displayed when you select Setup Loghosts
FRU Information	Enables you to see the FRU information of the selected component. FIGURE 3-16 shows the panel that is displayed when you select FRU Information
ACL	Enables you to manipulate the Access Control List (ACL). FIGURE 3-17 shows the panel that is displayed.
Table Sorting	Enables you to sort the table rows. This action only affects table columns. Selecting a slot table column header sorts the rows in ascending order of that column. For example, selecting the Power column sorts the table with the powered-off boards at the top and powered-on boards at the bottom. You can toggle the sorting order, ascending and descending, by clicking on the same column header again. The header of the current sorted column is bold face. A down or an up arrow indicate the current sort order of the column. By default, the slot table is ordered in ascending order by slot numbers.

If an error occurs, an error message is displayed in the status message field of the Object Details Browser window.

# ▼ To Assign Available Boards

- 1. Right-click a board entry in the data table to display a pop-up menu.
- 2. Select Assign.

**Note** – A board can be assigned to only one domain.

The Assign panel (FIGURE 3-10) is displayed.

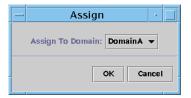


FIGURE 3-10 Assign Panel

- 3. Right-click the Assign To Domain button to see a pull-down list of all domains.
- 4. Select a domain from the domain list, then click the OK button to assign the selected board to that domain.
- 5. Complete this procedure with one of the following actions:
  - Click OK to assign the selected board to the domain and close this window.
  - Click Cancel to cancel your request.

If this action fails, an error message is displayed in the status message field of the Assign panel.

# ▼ To Unassign Boards

- 1. Right-click a board entry in the data table to display a pop-up menu.
- 2. Select Unassign.

The Unassign panel (FIGURE 3-11) is displayed.

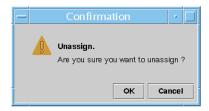


FIGURE 3-11 Unassign Panel

#### 3. Complete this procedure with one of the following actions:

- Click OK to unassign the selected board from the domain and close this window.
- Click Cancel to cancel your request.

If this action fails, an error message is displayed in the status message field of the Unassign panel.

## ▼ To Power On or Off Boards

#### 1. Right-click a board entry in the data table to display a pop-up menu.

The board power status is either Powered On or Powered Off, and can be toggled from one state to the other.

#### 2. Select Power Off (or Power On).

The appropriate panel is displayed. FIGURE 3-12 shows the Power Off panel.



FIGURE 3-12 Power Off Panel

#### 3. Complete this procedure with one of the following actions:

- Click OK to power off (or power on) the selected board for the domain and close this window.
- Click Cancel to cancel your request.

If this action fails, an error message is displayed in the status message field of the Power Off (or Power On) panel.

### ▼ To Test a Board

1. Right-click in the data table to display a pop-up menu.

#### 2. Select Test.

The Test panel is displayed. FIGURE 3-13 shows the Test Board panel for a selected board and a message about the test time.



FIGURE 3-13 Test Board Panel

**Note** – This panel is displayed only for boards that are assigned but disconnected or for boards that are available.

3. Click the Start button to start a test, or click the Cancel button to close the panel without taking any action.

The test status is displayed in the status message field at the bottom of the panel. The test may take a long time. While the test is in progress, the panel shows a busy cursor.

If the test action fails, an error message is displayed in the status message field.

# ▼ To Set Up the System Controller

- 1. Right-click in the data table to display a pop-up menu.
- 2. Select System Controller Setup.

The System Controller Network Setup panel (FIGURE 3-14) is displayed.

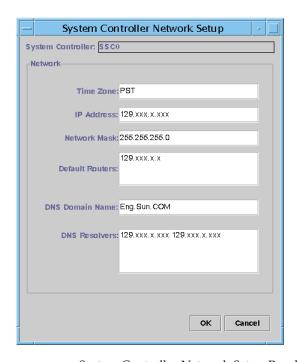


FIGURE 3-14 System Controller Network Setup Panel

3. Modify the information as needed by editing the individual fields.

**Note** – There is no validation of the changes that you make.

- 4. Choose one of the following actions:
  - Click OK to accept the changes you made and close this window.
  - Click Cancel to cancel your request.

If any error is encountered while retrieving any information, an error message is displayed in the status message field.

#### 5. If you have changed an IP address:

a. Reboot the system controller.

The IP address change does not take effect until the system controller is rebooted.

b. Rerun the setup procedure for the Sun Fire 6800/4810/4800/3800 platform administration module on the agent machine.

See "To Set Up the Platform Agent Using the Setup Wizard" on page 20.

# ▼ To Set Up Loghosts

You can use the Setup Loghosts panel to set up SNMP trap and Syslog hosts for a system.

- 1. Right-click in the data table to display a pop-up menu.
- 2. Select Setup Loghosts.

The Setup Loghosts panel (FIGURE 3-15) is displayed.

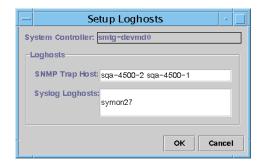


FIGURE 3-15 Setup Loghosts Panel

- 3. Right-click the System Controller button to display a list of system controllers.
- 4. Select a system controller.

Information about the SNMP trap host and Syslog hosts for the selected system controller is displayed.

5. You can add or change the entry for Syslog Loghost.

You can enter multiple Syslog hosts, one per line.

- 6. Complete this procedure with one of the following actions:
  - Click OK to accept the changes you made and close this window.
  - Click Cancel to cancel your request.

If an action fails, an error message is shown in the status message field at the bottom of the panel.

# ▼ To Display FRU Information

This panel displays the FRU information of a specific component. This panel is readonly, and *no* information can be changed.

#### 1. Select FRU Information...

The FRU Information panel (FIGURE 3-16) is displayed.

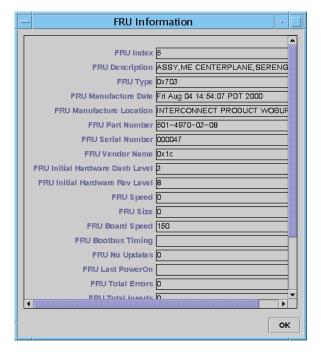


FIGURE 3-16 FRU Information Panel

#### 2. Click OK to close this window.

# ▼ To Display Host Details

- 1. Right-click in the data table to display a pop-up menu.
- 2. Select Host Details.

The Host Details window of the corresponding hardware domain is displayed.

3. Click OK to close this window.

# ▼ To Change a Domain Access Control List

#### 1. Select ACL...

The Access Control List (FIGURE 3-17) panel is displayed.

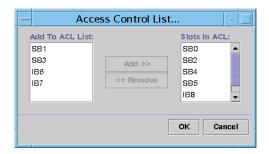


FIGURE 3-17 Access Control List Panel

A list of slots that are not present in the ACL of a selected domain is displayed in the Add to ACL List pane. A list of slots that are present in the ACL of a selected domain is displayed in the Slots in ACL pane.

Select one or more entries in the Add to ACL List pane and click the Add >> button.

The selected boards are added to the Slot in ACL list.

3. Select one or more entries in the Slots ACL List pane, and click the << Remove button.

The selected boards are removed from the Slot in ACL list.

- 4. Complete this procedure with one of the following actions:
  - Click OK to accept the changes you made and close this window.
  - Click Cancel to cancel your request.

If an operation fails, an error message is displayed in the status message field.

# Physical View and Logical View of a Sun Fire 6800/4810/4800/3800 System

These views can be seen by both the platform administrator and the domain administrator. The properties and values shown in the Physical View and the Logical View are produced by the Config-Reader. To view tables of available properties and values, see "Accessing Tables in the Domain Config-Reader Module" on page 119. For a description of platform administration alarm rules, see "Platform Administration Hardware Rules" on page 102.

For general information on the physical and logical views, refer to the *Sun Management Center 3.5 User's Guide*.

# ▼ To See Physical and Logical Views

1. In the Sun Management Center console, double-click a Sun Fire 6800/4810/4800/3800 system icon.

The Details window is displayed (FIGURE 3-18).

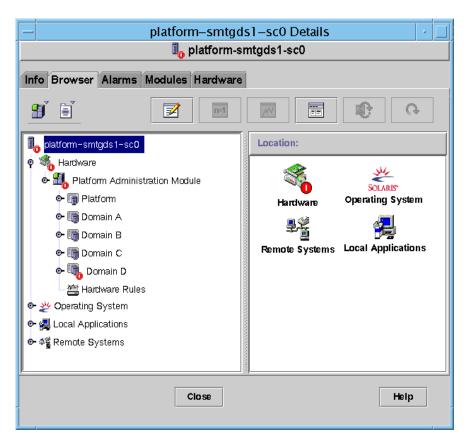


FIGURE 3-18 Platform Details Window

#### 2. Select the Hardware tab in the Details window.

The Hardware Summary table is displayed (FIGURE 3-19).

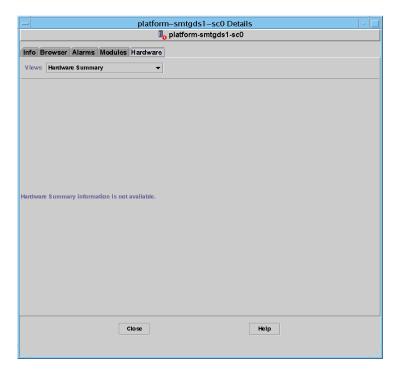


FIGURE 3-19 Hardware Tab and Hardware Summary Table

3. In the Views pull-down menu (FIGURE 3-20), select "system" under either "Physical View" or "Logical View."

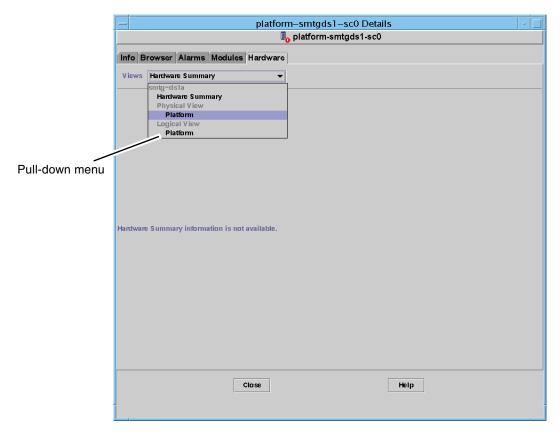


FIGURE 3-20 Views Pull-Down Menu

The selected view is displayed.

■ If you selected the Physical View (FIGURE 3-21), slowly move the cursor over the image of the system. Field-replaceable units (FRUs) are highlighted as the cursor passes over them, and if you hold the cursor still for several seconds, the corresponding properties and values are displayed in the Properties window.

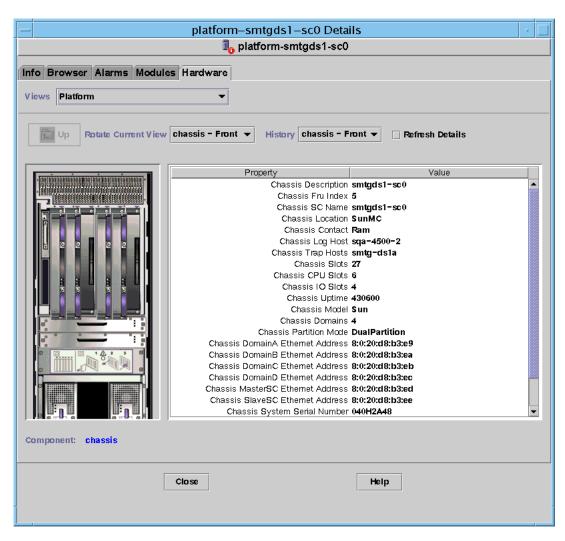


FIGURE 3-21 Physical View (Rear View of Sun Fire 6800 System)

■ If you selected the Logical View (FIGURE 3-22), click an icon to display its properties in the Properties window. You can double-click some icons to see various component parts, or click the Expand All button to see all the component parts in the system. Various properties and values are displayed in the Properties window.

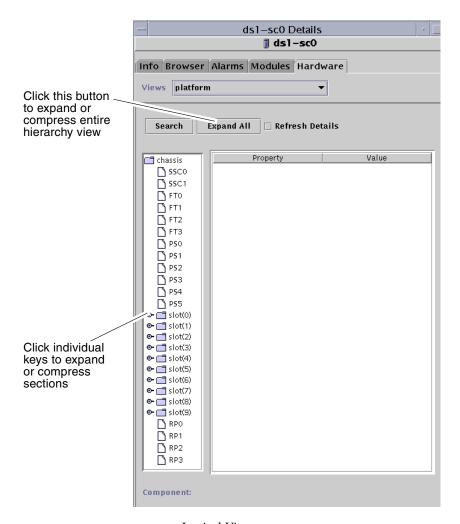


FIGURE 3-22 Logical View

The Logical View has three additional buttons, marked Search, Expand All, and Refresh Details.

■ The Search button launches a pop-up Search window (FIGURE 3-23). To use the Search window, enter a component name or path, then click the Find button to find the first instance of the term. The Search feature expands the Logical View if necessary, and highlights the term it has located. To find additional instance of the same term, click the Next button. To close the Search window, click the Cancel button.



FIGURE 3-23 Search Button in the Details Window Logical View

**Tip** – The Search function is case-sensitive. The error message "Node not found" is displayed at the bottom of the Details window if the search does not locate the component in your system.

The Search function stops searching when it reaches the bottom of the Logical View window, and the error message "Node not found" is displayed at the bottom of the Details window.

**Tip** — You can use the Browser tab displays to compare data for all similar components. You can use the Hardware tab Physical and Logical views to see data for an individual component in the system. For example, double-click the DIMM table icon in the Browser tab to see a table that lists properties for all DIMMs in the system. To see properties for dimm(0), use the Search Button in the Logical view.

- The Expand All button expands all icons displayed the Logical View, allowing you to see all components and subassemblies, and so forth. The button name toggles to "Recover Default," and you can click the button to recompress the icon display.
- The Refresh Details button updates the Property/Value table (in the right side of the viewing window).

# Platform Administration Hardware Rules

This section describes the alarm rules for the Platform Administration module. The system provides a message with the alarms telling what the current property is and what the limit is.

## Slot Status Rule (rspa1000)

The slot status rule generates an alarm when the slot status of a board is not OK, Unknown, or null. If field-replaceable unit (FRU) information is available, the alarm message includes the FRU information.

TABLE 3-31 Sun Fire 6800/4810/4800/3800 Platform Admin Slot Status Rule

Slot Status	Alarm Level	Meaning
OverTemp	Info	Temperature is over the upper limit.
UnderTemp	Info	Temperature is under the lower limit.
Failed	Critical/Error	Board failed.

#### Action:

Check to see if the hardware needs replacing.

# System Frequency Clock Rule (rspa1001)

The system frequency clock rule generates an alarm if the clock fails over to the spare system controller.

TABLE 3-32 Sun Fire 6800/4810/4800/3800 Platform Admin System Frequency Clock Rule

Alarm Level	Meaning
Info	System frequency clock failed over to the spare system controller.

#### Action:

This alarm is for your information; you may need to check the original clock status.

## Domain Status Rule (rspa1002)

The domain status rule generates a critical alarm if the domain status is not either Active or RunningSolaris.

TABLE 3-33 Sun Fire 6800/4810/4800/3800 Platform Admin System Domain Status Rule

Alarm Level	Meaning
Critical/Error	Domain is in a critical status.

#### Action:

When a domain is running the power-on self-test (POST) and is coming up, the alarm is generated. If the alarm does not disappear for a long time, the domain may be hung. You need to check the domain status and the booting slice.

# Domain Keyswitch Rule (rspa1003)

The domain keyswitch rule generates an information alarm when the domain keyswitch changes from one state to another.

**TABLE 3-34** Sun Fire 6800/4810/4800/3800 Platform Admin System Domain Keyswitch Rule

Alarm Level	Meaning	
Info	Domain keyswitch changed to a new state.	

#### Action:

This alarm is for your information; no action is necessary.

# System Controller Failover Rule (rspa1004)

The system controller failover rule generates an information alarm when the SC fails over from the main SC to the spare SC.

**TABLE 3-35** Sun Fire 6800/4810/4800/3800 Platform Admin System Controller Failover Rule

Alarm Level	Meaning	
Info	System controller failed over from the main SC to the spare SC.	

#### Action:

This alarm is for your information only; no action is needed.

# System Controller Change Rule (rspa1005)

The system controller change rule generates information alarms for certain changes in the SC.

**TABLE 3-36** Sun Fire 6800/4810/4800/3800 Platform Admin System Controller Change Rule

Value	Alarm Level	Meaning
1	Info	System controller has come up.
2	Info	System controller's IP address has changed.

#### Action:

This alarm is for your information only; no action is needed.

# Log or Trap Host Change Rule (rspa1006)

The log or trap host change rule generates an information alarm if platform or domain log or trap hosts change.

**TABLE 3-37** Sun Fire 6800/4810/4800/3800 Platform Admin Log or Trap Host Change Rule

Alarm Level	Meaning	
Info	Change has been made to the domain log host (domainloghost), the domain trap host (domaintraphost), the platform log host (chassisloghost), or the platform trap host (chassistraphost).	

#### Action:

This alarm is for your information only; no action is needed.

# System Controller Not Responding Rule (rspa1007)

The system controller not responding rule generates a critical alarm if the SC is not responding or if the SNMP agent on the main SC is not responding.

TABLE 3-38 Sun Fire 6800/4810/4800/3800 Platform Admin System Controller Not Responding Rule

Value	Alarm Level	Meaning
0	Critical	System controller is not responding.
1	Critical	Main SC's SNMP agent is not responding.

#### Action:

Contact your Sun service personnel.

### CPU Module Status Rule (rspa1008)

The CPU module status rule generates a critical alarm when any CPU module is in a state other than Idle or Online.

**TABLE 3-39** Sun Fire 6800/4810/4800/3800 Platform Admin Log or Trap Host Change Rule

Alarm Level	Meaning	
Critical	Status of the CPU module is critical.	

#### Action:

Contact your Sun service personnel.

# System Controller Firmware Version Rule

The system controller firmware (SCApp) version rule generates a critical alarm if the SC firmware is *before* version 5.12.5.

TABLE 3-40 Sun Fire 6800/4810/4800/3800 Platform Admin SC Firmware Version Rule

Alarm Level	Meaning	
Critical	Version of SCApp firmware is older than 5.12.5.	

#### Action:

Update the system controller firmware (SCApp).

### System Board Test Status Rule (rspa1010)

The system board test status rule generates alarms if the test status is *not* Unknown, NoTested, or Passed (TABLE 3-41).

TABLE 3-41 Sun Fire 6800/4810/4800/3800 Platform Admin System Board Test Status Rule

Test Status	Alarm Level	Meaning
UnderTest	Info	POST is testing the board.
StartTest	Info	POST is starting to test the board.
Degraded	Warning	Board is running in a degraded mode.

TABLE 3-41 Sun Fire 6800/4810/4800/3800 Platform Admin System Board Test Status Rule (Continued)

Test Status	Alarm Level	Meaning
Failed	Critical	Board failed in POST testing.
Unusable	Critical	Board is not usable in this system.
	Critical	Test Status is indeterminate.

#### Action:

- If the board test status is UnderTest or StartTest, the alarm is for your information only; no action is needed.
- If the board test status is Degraded, check the root cause of the degrade. For example, it could be caused by an insufficient COD license.
- If the board test status is Failed or Unusable, the board needs to be replaced.

## Domain or Board Power State Rule (rspa1011)

The domain or board power state rule generates an information alarm when any component is powered off (PoweredOff).

**TABLE 3-42** Sun Fire 6800/4810/4800/3800 Platform Admin Domain or Board Power State Rule

Alarm Level	Meaning	
Info	Component is powered off.	

#### Action:

This alarm is for your information only; no action is needed.

# Data Acquisition Table

The Data Acquisition Table allows you to refresh the table for each property to keep your data current. The Data Acquisition Table has 15 properties, each of which represents one table of data in the SC database:

- Chassis
- Slots
- CPU Board
- I/O Board
- Address Repeater Board

- CPU Module
- DIMM
- Ecache
- WCI
- WCI Port
- Domains
- Fan
- Power Supply
- System Controller
- FRU

You can right-click on a property, and left-click on Refresh in the pop-up menu. The values in the table for that property are refreshed. The value for each property in this table is a localized timestamp indicating when the data in the table for that property was last acquired successfully from the SC database (FIGURE 3-24). This allows you to ensure that your data is current.

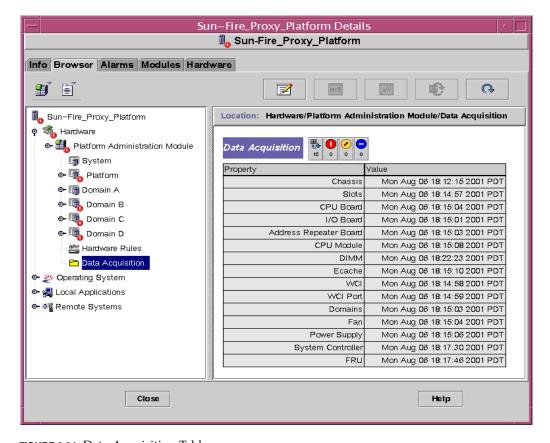


FIGURE 3-24 Data Acquisition Table

The members of the following security access groups may view the contents of the Data Acquisition table:

- spltop
- spltadm
- sdaop
- sdaadm
- sdbop
- sdbadm
- sdcop
- sdcadm
- sddop
- sddadm

See TABLE 2-3 for definitions of the User Groups.

# Domain Administration Using the Domain Agent

This chapter describes Sun Management Center 3.5 domain administration through the domain agent for Sun Fire 6800/4810/4800/3800 systems.

This chapter contains the following topics.

- "Setting Up Administrative Domains" on page 111
- "Starting and Stopping Agents" on page 111
- "Creating a Node" on page 112
- "Config-Reader Module" on page 112
- "Accessing Tables in the Domain Config-Reader Module" on page 119
- "Domain Config-Reader Rules" on page 126
- "Sun Fire 6800/4810/4800/3800 System Rules" on page 129
- "Physical and Logical Views of a Domain" on page 136

# Setting Up Administrative Domains

This is a general procedure. For instructions, refer to the *Sun Management Center 3.5 User's Guide*.

# Starting and Stopping Agents

Refer to the Sun Management Center 3.5 User's Guide.

# Creating a Node

This is a general procedure. For instructions, refer to the *Sun Management Center 3.5 User's Guide*.

# Config-Reader Module

A Config-Reader module, Config-Reader-Sun Fire(3600-6800), is automatically loaded during installation. You can use the Config-Reader module to see the physical view and logical view of your host.

In addition, the Config-Reader module monitors your hardware and alerts you whenever there is a problem. For example, this module checks for dual inline memory module (DIMM) errors.

The Config-Reader icon is located under the Hardware icon in the Details window (see FIGURE 4-3).

# ▼ To Use the Config-Reader Module

1. In the Sun Management Center console, double-click a Sun Fire 6800/4810/4800/3800 system icon.

The Details window is displayed (FIGURE 4-1).

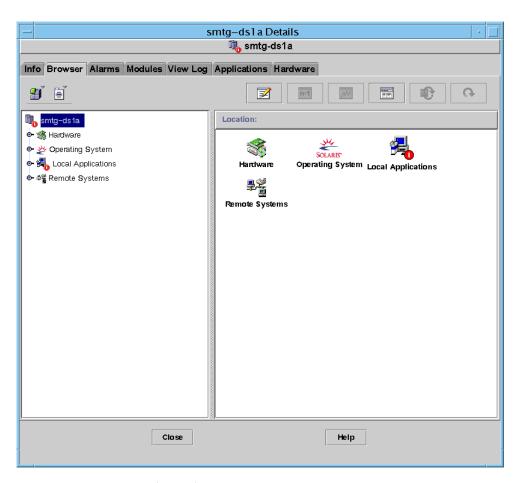


FIGURE 4-1 Domain Details Window

#### 2. Double-click the Hardware icon in the Details window.

The Config-Reader-Sun Fire (3800-6800) and the Sun Fire (3800-6800)-Rules icons are displayed (FIGURE 4-2).

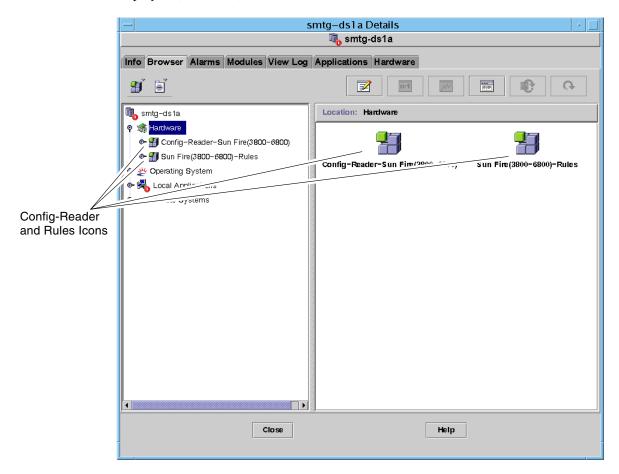


FIGURE 4-2 Config-Reader and Rules Icons

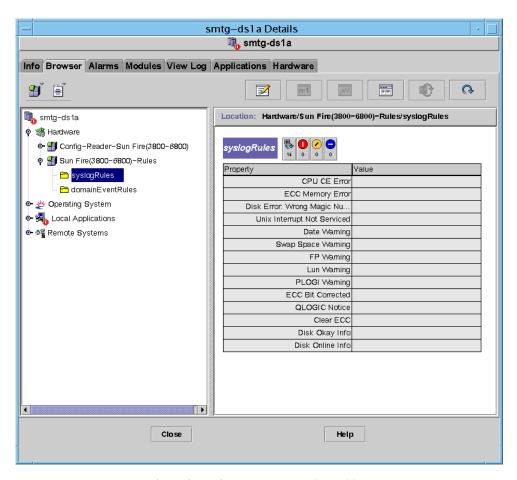
#### 3. You can now choose either to:

- Double-click the Config-Reader-Sun Fire(3800-6800) icon to display all devices in the system (FIGURE 4-3), and then double-click a device icon to display properties and values for that device.
- Double-click the Sun Fire(3800-6800)-Rules icon to display rules icons (FIGURE 4-4), and then double-click a rules icon to display properties and values.

To see the properties and values that are available, see "Accessing Tables in the Domain Config-Reader Module" on page 119. For a list of failures that trigger Config Reader alarms, see "Sun Fire 6800/4810/4800/3800 System Rules" on page 129.



FIGURE 4-3 Config-Reader Devices



**FIGURE 4-4** Sun Fire 6800/4810/4800/3800 Systems Rules Tables

# Loading the Config-Reader Module

If the icon for the Config-Reader-Sun Fire(3800-6800) module or the Sun Fire(3800-6800)-Rules module is not displayed in the Browser tab of the Details window for your Sun Fire 6800/4810/4800/3800 system, the corresponding module is not loaded. In that case, you can manually load one or both modules, as shown below.

## ▼ To Load a Module

1. In the Sun Management Center console, double-click the Sun Fire 6800/4810/4800/3800 system icon.

The Details window is displayed (FIGURE 4-1).

2. Click the Modules tab in the Details window.

The Modules data is displayed (FIGURE 4-5).

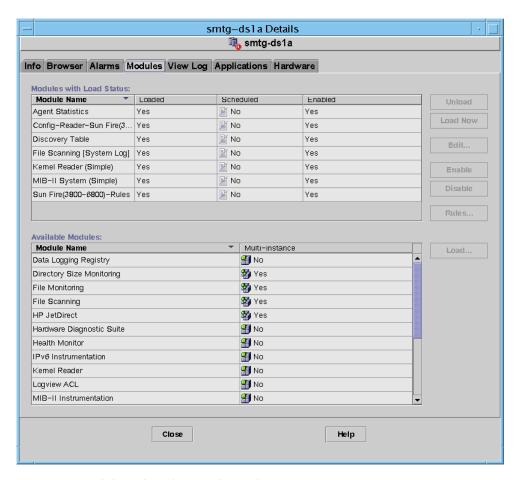


FIGURE 4-5 Modules Tab in the Details Window

3. Select Config-Reader-Sun Fire(3800-6800) or Sun Fire(3800-6800)-Rules in the Available Modules list, then click Load.

The Module Loader pop-up window is displayed.

4. Click OK in the Module Loader pop-up window.

If you have sufficient access privileges, the pop-up window closes, and the module moves into the Modules with Load Status list.

If you do not have sufficient access privileges, the pop-up window displays an error message. See "Assigning Users to Groups" on page 44 for information about access privileges.

## Accessing Tables in the Domain Config-Reader Module

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

- "Domain System" on page 119
- "Domain Boards" on page 120
- "Domain CPU Units" on page 121
- "Domain DIMMs" on page 122
- "Domain I/O Controllers" on page 122
- "Domain Sun Fire Link ASIC" on page 123
- "Domain Sun Fire Link Paroli DCA" on page 123
- "Domain I/O Devices" on page 124
- "Domain Disk Devices" on page 125
- "Domain Tape Devices" on page 125
- "Domain Network Devices" on page 126
- "Domain Memory Controller" on page 126

The following tables describe the data properties contained in each of the domain Config-Reader 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*.

## Domain System

TABLE 4-1 provides a brief description of the properties for the Sun Fire 6800/4810/4800/3800 system that contains the domain.

**TABLE 4-1** Sun Fire 6800/4810/4800/3800 Domain System

Property	Rule (if any)	Description
Name		Displays the instance name
Operating System		Displays the operating system running on the machine
Operating System Version		Displays the operating system version
System Clock Frequency		Displays the clock frequency in megahertz (MHz)
Architecture		Displays the architecture of the machine
Hostname Of The System		Displays the host name of the system

**TABLE 4-1** Sun Fire 6800/4810/4800/3800 Domain System (*Continued*)

Property	Rule (if any)	Description
Machine Name		Displays the machine type
System Platform		Displays the hardware platform of the system
Serial Number		Displays the serial number of the machine
Timestamp		Displays the time stamp value
Raw Timestamp		Displays the raw time stamp value
Total Disks		Displays the total number of disks present in the system
Total Memory		Displays the total memory present in the system in megabytes (MB)
Total Processors		Displays the total processors present in the system
Total Tape Devices		Displays the total tape devices present in the system

## Domain Boards

TABLE 4-2 provides a brief description of the properties for boards on a Sun Fire 6800/4810/4800/3800 domain.

**TABLE 4-2** Sun Fire 6800/4810/4800/3800 Domain Boards

Property	Rule (if any)	Description
Name		Displays the system name and slot number for this board, such as board(1), board(3), or board(8)
Label Name		Displays the label name and slot number for this unit, such as system board (SB1 or SB3), or I/O board (IB8)
Board No		Displays the board slot number, such as 1, 3, or 8
Fru		Indicates whether the unit is a field-replaceable unit (yes or no)
Hot Plugged		Indicates whether the board has or has not been hot-plugged into the system (yes or no)
Hot Pluggable		Indicates whether the board is or is not hot-pluggable (yes or no) $$

**TABLE 4-2** Sun Fire 6800/4810/4800/3800 Domain Boards (*Continued*)

Property	Rule (if any)	Description
Memory Size		Displays the memory size in megabytes (MB)
Condition	rcrse301	Displays the board condition: OK, UNKNOWN, or FAILED
Туре		Displays the board type, such as CPU_Board, CPCI I/O board, or PCI_I/O_Board. Includes whether a CPU board is also a COD board (COD_CPU_Board) and whether the board is unknown, such as unknown IO board

## Domain CPU Units

TABLE 4-3 provides a brief description of the properties for CPU units on a Sun Fire 6800/4810/4800/3800 domain.

TABLE 4-3 Sun Fire 6800/4810/4800/3800 Domain CPU Units

Property	Rule (if any)	Description
Name		Displays the system name and slot number for this unit, such as cpu-unit(4) or cpu-unit(5)
Board No.		Displays the number of the board where this processor is located
Clock Frequency		Displays the frequency of the timer in megahertz (MHz)
Сри Туре		Displays the processor machine type
Dcache Size		Displays the size of data cache (Dcache) in kilobytes (KB)
Ecache Size		Displays the size of external cache (Ecache) megabytes (MB)
Fru		Indicates whether the unit is a field-replaceable unit (yes or no)
Icache Size		Displays the size of instruction cache (Icache) in kilobytes (KB)
Model		Displays the processor model
Processor ID		Displays the identification number of the processor
Status	rcrse207	Displays the CPU unit status: OK, online,, noncritical, or offline
Unit		Displays the identification number of the unit

## Domain DIMMs

TABLE 4-4 provides a brief description of the properties for dual inline memory modules (DIMMs) on a Sun Fire 6800/4810/4800/3800 domain.

**TABLE 4-4** Sun Fire 6800/4810/4800/3800 Domain DIMMs

Property	Rule (if any)	Description
Name		Displays the system name and slot number for this unit, such as dimm(0) or dimm(1)
Physical Bank No		Displays the physical bank number where this DIMM is located
Bank Size		Displays the bank size in megabytes (MB)
Bank Status		Displays the operating status: pass, unpopulated, or fail
Fru		Indicates whether the unit is a field-replaceable unit (yes or no)
Dimm Size		Displays the size of the DIMM in megabytes (MB)

## Domain I/O Controllers

TABLE 4-5 provides a brief description of the properties for I/O controllers on a Sun Fire 6800/4810/4800/3800 domain.

**TABLE 4-5** Sun Fire 6800/4810/4800/3800 Domain I/O Controllers

Property	Description
Name	Displays the system name and slot number for this unit, such as pcisch(8) or pcisch(9)
Device Type	Displays the device type: pci
Instance Number	Displays the instance number
Model	Displays the device model
Reg	Displays the register address
Port id	Displays the port identifier
Version Number	Displays the version number

## Domain Sun Fire Link ASIC

TABLE 4-6 briefly describes the Sun Fire Link ASIC (WCI) properties for a Sun Fire 6800/4810/4800/3800 domain. Refer to the *Sun Fire Link Fabric Administrator's Guide* for more information about the Sun Fire Link system.

**TABLE 4-6** Sun Fire 6800/4810/4800/3800 Domain Sun Fire Link ASIC (WCI)

Property	Description
Name	Displays the system name for this unit, such as $wci(1d)$ or $wci(1f)$
Number of Parolis	Displays the number of Paroli daughter-card assembly (DCA) cards

## Domain Sun Fire Link Paroli DCA

TABLE 4-7 briefly describes the Sun Fire Link Paroli daughter card assembly (DCA) properties for a Sun Fire 6800/4810/4800/3800 domain. Refer to the *Sun Fire Link Fabric Administrator's Guide* for more information about the Sun Fire Link system.

**Note** – Paroli card presence can be determined only if the domain is part of a Sun Fire Link cluster. If the domain is not part of a Sun Fire Link cluster, the Paroli card table will be empty; however, this is not an indication that there is no Paroli card in the domain.

TABLE 4-7 Sun Fire 6800/4810/4800/3800 Domain Sun Fire Link Paroli DCA

Property	Description
Name	Displays the name of the Paroli card, such as paroli(0) or paroli(1)
Fru	Indicates whether the unit is a field-replaceable unit (yes or no)
Link Number	Identifies the port number link to the Paroli card (0 or 2)
Link Validity	Indicates whether the link is VALID or INVALID to the Paroli card

TABLE 4-7 Sun Fire 6800/4810/4800/3800 Domain Sun Fire Link Paroli DCA (Continued)

Property	Description
Link State	Displays the current state of the link: LINK UP, LINK DOWN, LINK NOT PRESENT, WAIT FOR SC LINK TAKEDOWN, WAIT FOR SC LINK UP, SC ERROR WAIT FOR LINK DOWN, OR UNKNOWN
Remote Link Number	Identifies the link to the remote Paroli card (0-2)
Remote Cluster Member	Displays the host name of the cluster member at the remote end of the link

## Domain I/O Devices

TABLE 4-8 provides a brief description of the properties for I/O devices on a Sun Fire 6800/4810/4800/3800 domain.

**TABLE 4-8** Sun Fire 6800/4810/4800/3800 Domain IO Devices

Property	Description
Name	Displays the system name for this unit
Device Type	Displays the device type
Disk Count	Displays the number of drives attached to this unit
Instance Number	Displays the instance number
Model	Displays the model
Network Count	Displays the number of networks attached to this unit
Reg	Displays the register address
Tape Count	Displays the number of drives attached to this unit

## Domain Disk Devices

TABLE 4-9 provides a brief description of the properties for disk devices on a Sun Fire 6800/4810/4800/3800 domain.

**TABLE 4-9** Sun Fire 6800/4810/4800/3800 Domain Disk Devices

Property	Description	
Name	Displays the system name for this unit, such as $sd(x)$ , where $x$ is the development index of the disk device	
Device Type	Displays the device type, such as disk or CD-ROM	
Disk Name	Displays the controller name, such as c110d0 or c210d0	
Fru	Indicates whether the unit is a field-replaceable unit (yes or no)	
Instance Number	Displays the instance number	
Disk Target	Displays the disk target	

## Domain Tape Devices

TABLE 4-10 provides a brief description of the properties for tape devices on a Sun Fire 6800/4810/4800/3800 domain.

**TABLE 4-10** Sun Fire 6800/4810/4800/3800 Domain Tape Devices

Property	Rule (if any)	Description
Name		Displays the system name for this unit, such as $st(x)$ , where $x$ is the development index of the tape device
Device Type		Displays the device type, such as tape drive
Fru		Indicates whether the unit is a field-replaceable unit (yes or no)
Instance Number		Displays the instance number
Model		Displays the model
Tape Name		Displays the tape name
Status	rcrse225	Displays the operating status, including OK, ok, or drive present, but busy
Tape Target		Displays the tape target number

### Domain Network Devices

TABLE 4-11 provides a brief description of the properties for network devices on a Sun Fire 6800/4810/4800/3800 domain.

**TABLE 4-11** Sun Fire 6800/4810/4800/3800 Domain Network Devices

Property	Description
Name	Displays the system name for this unit, such as hme(5)
Device Type	Displays the device type: network
Ethernet Address	Displays the Ethernet address
Internet Address	Displays the Internet address
Interface Name	Displays the interface name
Symbolic Name	Displays the symbolic name

## Domain Memory Controller

TABLE 4-12 provides a brief description of the properties for a memory controller on a Sun Fire 6800/4810/4800/3800 domain.

**TABLE 4-12** Sun Fire 6800/4810/4800/3800 Domain Memory Controller

Property	Description
Name	Displays the system name for this unit, such as memory-controller (14,400000)
Compatible	Displays compatible software packages
Device Type	Displays the device type: memory-controller
Port Id	Displays the port identifier
Reg	Displays the register address

## Domain Config-Reader Rules

This section describes the alarm rules for the domain Config-Reader module. The system provides a message with the alarms telling what the current property is and what the limit is.

### CPU Unit Status Rule (rcrse207)

The CPU unit status rule generates a critical alarm when the CPU unit status is not OK, online, --, or noncritical.

TABLE 4-13 Sun Fire 6800/4810/4800/3800 Domain Config-Reader CPU Unit Status Rule

Alarm Level	Meaning
Critical	CPU unit is in a critical status.

Action:

Contact your Sun service personnel.

## Tape Status Rule (rcrse225)

The tape status rule generates a critical alarm when the tape status is not OK, ok, or drive present, but busy.

TABLE 4-14 Sun Fire 6800/4810/4800/3800 Domain Config-Reader Tape Status Rule

Alarm Level	Meaning
Critical	Tape is in a critical status.

Action:

Contact your Sun service personnel.

## System Board Condition Rule (rcrse301)

The system board condition rule generates an information alarm when the system board condition is not OK.

**TABLE 4-15** Sun Fire 6800/4810/4800/3800 Domain Config-Reader System Board Condition Rule

Alarm Level	Meaning
Info	System board condition is not OK.

Action:

This alarm is for your information only; no action is needed.

## Attachment Point Status Rule (rLnkVld)

The attachment point status rule generates a information alarm if the state is not VALID.

**TABLE 4-16** Sun Fire 6800/4810/4800/3800 Domain Config-Reader Attachment Point Status Rule

Alarm Level	Meaning
Info	Attachment point state is not VALID.

#### Action:

This alarm is for your information only; no action is needed.

# Sun Fire 6800/4810/4800/3800 System Rules

This section describes the alarm rules for the Sun Fire 6800/4810/4800/3800 system. The system provides a message with the alarms telling what the current property is and what the limit is.

## CPU Error Message Rule–Solaris 8, Update 5 and Later (rsr1000)

The CPU error message rule generates a critical alarm, when a CPU correctable error is detected. This alarm applies to Solaris 8, Update 5 Operating Environment and later.

TABLE 4-17 Sun Fire 6800/4810/4800/3800 System CPU Error Message Rule

Alarm Level	Meaning
Critical	CPU correctable error was detected in the /var/adm/messages file.

Action:

Contact your Sun service personnel.

## CPU Error Message Rule–Pre-Solaris 8, Update 5 (rsr1001)

The CPU error message rule generates a critical alarm, when a error-correcting code (ECC) memory error is detected. This alarm applies to Operating Environments earlier than Solaris 8, Update 5.

TABLE 4-18 Sun Fire 6800/4810/4800/3800 System CPU Error Message Rule

Alarm Level	Meaning
Critical	ECC memory error was detected in the /var/adm/messages file.

Action:

## SCSI Warning Message Rule (rsr1002)

The Small Computer System Interface (SCSI) warning message rule generates a warning alarm when a warning is detected because of an invalid magic number.

TABLE 4-19 Sun Fire 6800/4810/4800/3800 System SCSI Warning Message Rule

Alarm Level	Meaning
Warning	SCSI warning was detected in the /var/adm/messages file because of an invalid magic number.

#### Action:

Contact your Sun service personnel.

## UNIX Warning Message Rule (rsr1003)

The UNIX warning message rule generates a warning alarm when a warning is detected, because an interrupt has not been serviced.

TABLE 4-20 Sun Fire 6800/4810/4800/3800 System UNISX Warning Message Rule

Alarm Level	Meaning
Warning	UNIX warning was detected in the /var/adm/messages file because an interrupt has not been serviced.

#### Action:

## Genunix Date Warning Message Rule (rsr1004)

The Genunix date warning message rule generates a warning alarm when a warning is detected, because the last shutdown time was later than the time on the time-of-day chip.

TABLE 4-21 Sun Fire 6800/4810/4800/3800 System Genunix Date Warning Message Rule

Alarm Level	Meaning
Warning	Genunix date warning was detected in the /var/adm/messages file, because the last shutdown time was later than the time on the time-of-day chip.

#### Action:

Contact your Sun service personnel.

## Genunix Clock Warning Message Rule (rsr1005)

The Genunix clock warning message rule generates a warning alarm when a warning is detected, because the maximum swap space is less than the free space.

TABLE 4-22 Sun Fire 6800/4810/4800/3800 System Genunix Clock Warning Message Rule

Alarm Level	Meaning
Warning	Genunix clock warning was detected in the /var/adm/messages file, because the maximum swap space is less than the free space.

#### Action:

## Fan Plane Warning Message Rule (rsr1006)

The fan plane warning message rule generates a warning alarm when a warning is detected.

TABLE 4-23 Sun Fire 6800/4810/4800/3800 System Fan Plane Warning Message Rule

Alarm Level	Meaning
Warning	Fan plane warning was detected in the /var/adm/messages file.

#### Action:

Contact your Sun service personnel.

### LUN Failure Rule (rsr1007)

The logical unit number (LUN) failure rule generates a critical alarm when a LUN failure is detected.

**TABLE 4-24** Sun Fire 6800/4810/4800/3800 System LUN Failure Rule

Alarm Level	Meaning	
Critical	LUN failure was detected in the /var/adm/messages file.	

#### Action:

Contact your Sun service personnel.

## PLOGI Failure Rule (rsr1008)

The PLOGI failure rule generates a critical alarm when a PLOGI failure is detected.

**TABLE 4-25** Sun Fire 6800/4810/4800/3800 System PLOGI Failure Rule

Alarm Level	Meaning
Critical	PLOGI failure was detected in the /var/adm/messages file.

#### Action:

Contact your Sun service personnel.

## ECC Correction Rule (rsr1009)

The ECC correction rule generates an information alarm if the ECC had an error and the ECC data bit has been corrected.

**TABLE 4-26** Sun Fire 6800/4810/4800/3800 System ECC Correction Rule

Alarm Level	Meaning
Info	ECC data bit is corrected.

#### Action:

This alarm is for your information only; no action is needed.

## Qlogic Error Rule (rsr1010)

The Qlogic error rule generates an alarm when a Qlogic loop error is detected.

**TABLE 4-27** Sun Fire 6800/4810/4800/3800 System Qlogic Error Rule

Value	Alarm Level	Meaning
OFFLINE	Warning	Qlogic loop went offline.
Others	Info	Qlogic loop went online

#### Action:

- Contact your Sun service personnel if you see the Warning alarm.
- The Info alarm is for your information only; no action is needed.

### Kernel Correction Rule (rsr1011)

The kernel correction rule generates a warning if a clear ECC warning is detected.

TABLE 4-28 Sun Fire 6800/4810/4800/3800 System Kernel Correction Rule

Alarm Level	Meaning
Warning	Clear ECC warning is detected in the /var/adm/messages file, and the kernel cleared an ECC error.

#### Action:

Contact your Sun service personnel.

## SCSI Info Event Rule (rsr1012)

The SCSI information event rule generates an information alarm when a SCSI information event is detected.

**TABLE 4-29** Sun Fire 6800/4810/4800/3800 System SCSI Info Event Rule

Alarm Level	Meaning
Info	SCSI disk okay and related messages were detected in the /var/adm/messages file.

#### Action:

This alarm is for your information only; no action is needed.

### SCSI Disk Online Rule (rsr1013)

The SCSI disk online rule generates a info alarm when a SCSI disk goes online.

**TABLE 4-30** Sun Fire 6800/4810/4800/3800 System SCSI Disk Online Rule

Alarm Level	Meaning
Info	SCSI disk went online.

#### Action:

This alarm is for your information only; no action is needed.

## Temperature State Rule (rsr1014)

The temperature state rule generates an alarm when the temperature state value is not 1.

TABLE 4-31 Sun Fire 6800/4810/4800/3800 System Temperature State Rule

Value	Alarm Level	Meaning
1		Temperature state is okay.
2	Warning	Component temperature crosses the warning level.
Others	Critical	Component temperature crosses the error level.

#### Action:

Contact your Sun service personnel.

## Power State Rule (rsr1015)

The power state rule generates an alarm when the power state value is not 1.

 TABLE 4-32
 Sun Fire 6800/4810/4800/3800 System Temperature State Rule

Value	Alarm Level	Meaning
1		Power state is okay.
2	Warning	Power supply crosses the warning voltage threshold.
Others	Critical	Power supply fails.

#### Action:

## Physical and Logical Views of a Domain

The Hardware tab in the Details window allows you to view physical and logical hardware configurations of Sun Fire 6800/4810/4800/3800 systems. For instructions, see "Physical View and Logical View of a Sun Fire 6800/4810/4800/3800 System" on page 95.

If the system is divided into multiple domains, as a domain administrator you can see detailed information only for domains to which you can access. If you attempt to view a domain to which you do not have access privilege, the message "Insufficient security privilege to load console info" is displayed at the bottom of the Console window.

FIGURE 4-6 shows a physical view of Paroli cards in a domain. Access this view by clicking on the Hardware tab, clicking on the Views list box, and clicking system under Domain. Be sure you have system - Rear in the Rotate Current View list box.



FIGURE 4-6 Domain Physical View of Paroli Cards (Rear)

# Dynamic Reconfiguration From the Domain

This chapter describes how to perform dynamic reconfiguration (DR) operations from a Sun Fire 15K/12K or 6800/4810/4800/3800 domain using the Sun Management Center 3.5 GUI and the Dynamic Reconfiguration module. The dynamic reconfiguration operations include such operations as attaching a board to a Sun Fire domain, detaching a board from a Sun Fire domain, and configuring a board on a Sun Fire domain. Some other management operations that you might want to perform either as part of a dynamic reconfiguration operation or as part of another operation are testing a board or powering a board off or on.

## Prerequisites

You need to be familiar with dynamic reconfiguration operations before you use the Sun Management Center 3.5 GUI to perform DR operations. Refer to the following documents to learn more about dynamic reconfiguration operations on Sun Fire systems:

- Sun Fire 15K/12K Dynamic Reconfiguration User Guide, which describes the underlying Sun Fire 15K/12K operations for the DR module. For the latest general issues, known limitations, and known bugs about dynamic reconfiguration operations for Sun Fire 15K/12K systems, refer to the System Management Services (SMS) 1.3 Installation Guide and Release Notes.
- Sun Fire 6800/4810/4800/3800 Systems Dynamic Reconfiguration User's Guide, which describes the underlying Sun Fire 6800/4810/4800/3800 operations for the DR module.
- cfgadm(1M) man page, which describes the underlying command for the DR module.

## Dynamic Reconfiguration Module

The Dynamic Reconfiguration module enables you to perform dynamic reconfiguration operations from the domain on the attachment points in the tables. You can perform the operations in the same manner that you would with the cfgadm(1M) command only using the Sun Management Center 3.5 GUI. This module works on Sun Fire 15K/12K or 6800/4810/4800/3800 systems.

During the software installation, this module is automatically installed. You need to load this module to use it the first time. You can unload the module, if desired. For specific information about loading and unloading Sun Management Center modules, refer to the *Sun Management Center 3.5 User's Guide*.

FIGURE 5-1 shows the icon for the module—Dynamic Reconfiguration Sun Fire (3800-15K)—as it is displayed in the host Details window on a domain under the Browser tab and Hardware icon.

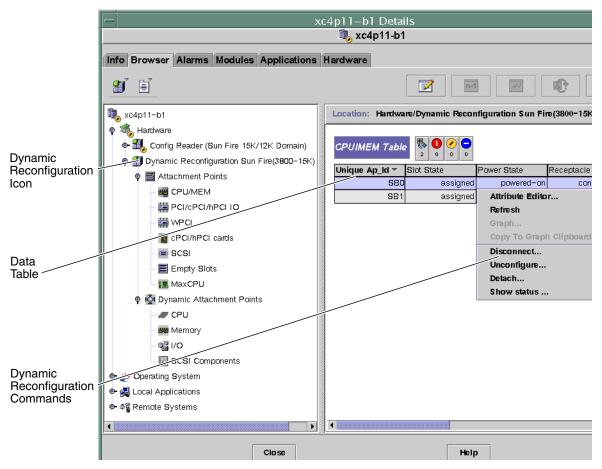


FIGURE 5-1 Dynamic Reconfiguration Features

## Dynamic Reconfiguration Properties

Use the Dynamic Reconfiguration data tables in the right half of a Details window to find the last-known state of a dynamically reconfigurable board or device.

There are two sections of tables:

- Attachment Points—single attachment points for larger assemblies such as system boards and I/O boards
- Dynamic Attachment Points—dynamic attachment points for individual devices and components such as CPU modules, DIMMs, and SCSI drives

## **Attachment Points**

An attachment point is a collective term for a board and its slot. The Attachment Points tables show information about the following types of board slots:

- CPU/MEM
- PCI/cPCI/hPCI I/O
- WPCI
- cPCI/hPCI Cards
- SCSI
- **■** Empty Slots
- MaxCPU (Sun Fire 15K/12K systems only)

## CPU/MEM

The following table provides a brief description of the attachment point properties for a CPU/memory board (TABLE 5-1):

 TABLE 5-1
 Attachment Point Properties for a CPU/MEM Board

Property	Rule (if any)	Description
Unique Ap_Id		Unique logical attachment point ID from cfgadm: SB $x$ , where $x$ is the number of the centerplane slot containing the board (0–17)
Slot State		Slot availability state: assigned or unassigned
Power State		Power state: powered-on or powered-off
Receptacle		Receptacle state: connected, disconnected, or empty
Occupant		State of the occupant, which is the combination of the board and its attached devices: configured or unconfigured
Туре		Board type: CPU
Condition		Board condition: ok, unknown, failed, or unusable
Information		General board type information; for example, powered-on, assigned

 TABLE 5-1
 Attachment Point Properties for a CPU/MEM Board (Continued)

Property	Rule (if any)	Description
When		Date and time when the board was configured into the domain
Busy		y (yes) indicates a state, availability, or condition change operation is in progress; n (no) indicates <i>no</i> state, availability, or condition change operation is in progress
Phys_Id		Physical attachment point ID: /devices/pseudo/dr@0:SBx, where x is the number of the centerplane slot containing the board (0–17)

## PCI/cPCI/hPCI IO

The following table provides a brief description of the attachment point properties for a PCI/cPCI/hPCI IO board (TABLE 5-2). For a Sun Fire 3800, 4800, 4810, or 6800 system, the table shows properties *only* for PCI and cPCI IO boards. For a Sun Fire 15K/12K system, the table shows properties *only* for hPCI IO boards.

 TABLE 5-2
 Attachment Point Properties for a PCI/cPCI/hPCI IO Board

Property	Rule (if any)	Description
Unique Ap_Id		Unique logical attachment point ID from cfgadm: IO $x$ , where $x$ is the number of the centerplane slot containing the board (0–17)
Slot State		Slot availability state: assigned or unassigned
Power State		Power state: powered-on or powered-off
Receptacle		Receptacle state: connected, disconnected, or empty
Occupant		State of the occupant, which is the combination of the board and its attached devices: configured or unconfigured
Туре		Board type, such as PCI, CPI, HPCI, or HPCI+
Condition		Board condition: ok, unknown, failed, or unusable
Information		General board type information; for example, powered-on, assigned

 TABLE 5-2
 Attachment Point Properties for a PCI/cPCI/hPCI IO Board (Continued)

Property	Rule (if any)	Description
When		Date and time when the board was configured into the domain
Busy		y (yes) indicates a state, availability, or condition change operation is in progress; n (no) indicates <i>no</i> state, availability, or condition change operation is in progress
Phys_Id		Physical attachment point ID: $/devices/pseudo/dr/@0:IOx$ , where $x$ is the number of the centerplane slot containing the board $(0-17)$

### **WPCI**

The following table provides a brief description of the attachment point properties for a WPCI board (TABLE 5-3). Refer to the *Sun Fire Link Fabric Administrator's Guide* for more information about the Sun Fire Link system.

 TABLE 5-3
 Attachment Point Properties for a WPCI Board

Property	Rule (if any)	Description
Unique Ap_Id		Unique logical attachment point ID from cfgadm: IO $x$ , where $x$ is the number of the centerplane slot containing the board (0–17)
Slot State		Slot availability state: assigned or unassigned
Power State		Power state: powered-on or powered-off
Receptacle		Receptacle state: connected, disconnected, or empty
Occupant		State of the occupant, which is the combination of the board and its attached devices: configured or unconfigured
Туре		Board type: WPCI
Condition		Board condition: ok, unknown, failed, or unusable
Information		General board type information; for example, powered-on, assigned

 TABLE 5-3
 Attachment Point Properties for a WPCI Board (Continued)

Property	Rule (if any)	Description
When		Date and time when the board was configured into the domain
Busy		y (yes) indicates a state, availability, or condition change operation is in progress; n (no) indicates <i>no</i> state, availability, or condition change operation is in progress
Phys_Id		Physical attachment point ID: $/devices/pseudo/dr/@0:IOx$ , where $x$ is the number of the centerplane slot containing the board $(0-17)$

## cPCI/hPCI cards

The following table provides a brief description of the attachment point properties for the cPCI/hPCI card (TABLE 5-4). For a Sun Fire 3800, 4800, 4810, or 6800 system, the table shows properties *only* for cPCI cards. For a Sun Fire 15K/12K system, the table shows properties *only* for hPCI cards.

TABLE 5-4 Attachment Point Properties for a cPCI/hPCI card

Property	Rule (if any)	Description
Unique Ap_Id		Unique logical attachment point ID from cfgadm, such as pcisch2:e04b1slot3
Slot State		Slot availability state: assigned or unassigned
Power State		Power state: powered-on or powered-off
Receptacle		Receptacle state: connected, disconnected, or empty
Occupant		State of the occupant, which is the combination of the board and its attached devices: configured or unconfigured
Туре		Type, such as pci-pci/hp
Condition		Board condition: ok, unknown, failed, or unusable
Information		General information; for example, unknown

 TABLE 5-4
 Attachment Point Properties for a cPCI/hPCI card (Continued)

Property	Rule (if any)	Description
When		Date and time when the board was configured into the domain
Busy		y (yes) indicates a state, availability, or condition change operation is in progress; n (no) indicates <i>no</i> state, availability, or condition change operation is in progress
Phys_Id		Physical attachment point ID, such as /devices/pci@9d,7000000:e04b1slot3

## **SCSI**

The following table provides a brief description of the attachment point properties for a SCSI (TABLE 5-5):

 TABLE 5-5
 Attachment Point Properties for a SCSI

Property	Rule (if any)	Description
Unique Ap_Id		Unique logical attachment point ID from cfgadm, such as pcisch3:e04b1slot2
Slot State		Slot availability state: assigned or unassigned
Power State		Power state: powered-on or powered-off
Receptacle		Receptacle state: connected, disconnected, or empty
Occupant		State of the occupant, which is the combination of the board and its attached devices: configured or unconfigured
Туре		Type, such as scsi/hp
Condition		Component condition: ok, unknown, failed, or unusable
Information		General component information, such as unknown

 TABLE 5-5
 Attachment Point Properties for a SCSI (Continued)

Property	Rule (if any)	Description
When		Date and time when the component was configured into the domain
Busy		y (yes) indicates a state, availability, or condition change operation is in progress; n (no) indicates <i>no</i> state, availability, or condition change operation is in progress
Phys_Id		Physical attachment point ID, such as /devices/pci@9d,600000:e04b1slot2

## **Empty Slots**

The following table provides a brief description of the attachment point properties for empty slots (TABLE 5-6):

 TABLE 5-6
 Attachment Point Properties for Empty Slots

Property	Rule (if any)	Description
Unique Ap_Id		Unique logical attachment point ID from cfgadm, such as pcisch0:e17b1slot1
Slot State		Slot availability state: assigned or unassigned
Power State		Power state: powered-on or powered-off
Receptacle		Receptacle state: connected, disconnected, or empty
Occupant		State of the occupant, which is the combination of the board and its attached devices: configured or unconfigured
Туре		Board type: unknown
Condition		Component condition: ok, unknown, failed, or unusable
Information		General board type information: assigned or unknown
When		Date and time when the slot was configured into the domain
Busy		n (no) indicates <i>no</i> state, availability, or condition change operation is in progress
Phys_Id		Physical attachment point ID, such as /devices/pci@9d, 6000000:e17b1slot1

### MaxCPU

The following table provides a brief description of the attachment point properties for a MaxCPU board (TABLE 5-7). This table appears *only* for a Sun Fire 15K/12K system.

 TABLE 5-7
 Sun Fire 15K/12K Attachment Point Properties for a MaxCPU Board

Property	Rule (if any)	Description
Unique Ap_Id		Unique logical attachment point ID from cfgadm for the MaxCPU board
Slot State		Slot availability state: assigned or unassigned
Power State		Power state: powered-on or powered-off
Receptacle		Receptacle state: connected, disconnected, or empty
Occupant		State of the occupant, which is the combination of the board and its attached devices: configured or unconfigured
Туре		Board type: MCPU
Condition		Board condition: ok, unknown, failed, or unusable
Information		General board type information; for example, powered-on, assigned
When		Date and time when the board was configured into the domain
Busy		y (yes) indicates a state, availability, or condition change operation is in progress; n (no) indicates <i>no</i> state, availability, or condition change operation is in progress
Phys_Id		Physical attachment point ID for the MaxCPU board

## **Dynamic Attachment Points**

Dynamic attachment points refer to components on the system boards, such as CPUs, memory, and I/O devices. The dynamic attachment points are created by the DR driver. Refer to the dr(7D) man page in the Sun Solaris 8 or 9 Reference Manual Collection for more details about the DR driver. The Dynamic Attachment Point tables show information about the following types of components:

- CPU
- Memory
- I/O
- SCSI Components

## **CPU Components**

The following table provides a brief description of the dynamic attachment point properties for CPU components (TABLE 5-8):

**TABLE 5-8** Dynamic Attachment Point Properties for CPU Components

Property	Rule (if any)	Description
Unique Ap_Id		Unique logical attachment point identifier from cfgadm: SB $x$ : cpu $y$ , where $x$ is the number of the centerplane slot containing the board (0–17) and $y$ is the CPU number (0–3)
Slot State		Slot availability state: assigned or unassigned
Power State		Power state: powered-on or powered-off
Receptacle		Receptacle state: connected
Occupant		State of the occupant, which is the combination of the board and its attached devices: configured or unconfigured
Туре		Component type: cpu
Condition		Component condition: ok, unknown, or failed
Information		General CPU type information: for example, cpuid 2, speed 750 MHz, ecache 8 MBytes. Refer to the cfgadm_sbd(1M) man page in the Solaris 8 or 9 Reference Manual Collection for descriptions of the fields.

 TABLE 5-8
 Dynamic Attachment Point Properties for CPU Components (Continued)

Property	Rule (if any)	Description
When		Date and time when the components were configured into the domain
Busy		y (yes) indicates a state, availability, or condition change operation is in progress; n (no) indicates <i>no</i> state, availability, or condition change operation is in progress
Phys_Id		Physical attachment point ID: $/devices/pseudo/dr@0:SBx::cpuy$ , where $x$ is the number of the centerplane slot containing the board $(0-17)$ , and $y$ is the CPU number $(0-3)$

## Memory Components

The following table provides a brief description of the dynamic attachment point properties for memory components (TABLE 5-9):

 TABLE 5-9
 Dynamic Attachment Point Properties for Memory Components

Property	Rule (if any)	Description
Unique Ap_Id		Unique logical attachment point identifier from cfgadm: such as SBx::memory, where x is the number of the centerplane slot containing the board (0–17)
Slot State		Slot availability state: assigned or unassigned
Power State		Power state: powered-on or powered-off
Receptacle		Receptacle state: connected
Occupant		State of the occupant, which is the combination of the board and its attached devices: unconfigured or configured
Туре		Component type: memory
Condition		Component condition: ok, unknown, or failed
Information		General information for the memory type, as appropriate; for example, base address 0x0, 2097 152 KBytes total, 420920 KBytes permanent. Refer to the cfgadm_sbd(1M) man page in the Solaris 8 or 9 Reference Manual Collection for descriptions of the fields.

 TABLE 5-9
 Dynamic Attachment Point Properties for Memory Components (Continued)

Property	Rule (if any)	Description	
When		Date and time when the components were configured into the domain	
Busy		y (yes) indicates a state, availability, or condition change operation is in progress; n (no) indicates <i>no</i> state, availability, or condition change operation is in progress	
Phys_Id		Physical attachment point ID: $/devices/pseudo/dr@0:SBx::memory, where x is the number of the centerplane slot containing the board (0-17)$	

## I/O Components

The following table provides a brief description of the dynamic attachment point properties for I/O components (TABLE 5-10):

 TABLE 5-10
 Dynamic Attachment Point Properties for I/O Components

Property	Rule (if any)	Description
Unique Ap_Id		Unique logical attachment point identifier from cfgadm: IOx::pciy, where $x$ is the number of the centerplane slot containing the board (0–17) and $y$ is the PCI number (0–3)
Slot State		Slot availability state: assigned or unassigned
Power State		Power state: powered-on or powered-off
Receptacle		Receptacle state: connected
Occupant		State of the occupant, which is the combination of the board and its attached devices: configured or unconfigured
Туре		Component type: io
Condition		Component condition: ok, unknown, or failed
Information		General information for the io type; for example, device/pci@23d,700000 referenced. Refer to the cfgadm_sbd(1M) man page in the Solaris 8 or 9 Reference Manual Collection for descriptions of the fields.

 TABLE 5-10
 Dynamic Attachment Point Properties for I/O Components (Continued)

Property	Rule (if any)	Description
When		Date and time when the components were configured into the domain
Busy		y (yes) indicates a state, availability, or condition change operation is in progress; n (no) indicates <i>no</i> state, availability, or condition change operation is in progress
Phys_Id		Physical attachment point ID: $/devices/pseudo/dr@0:IOx::pciy$ , where $x$ is the number of the centerplane slot containing the board $(0-17)$ and $y$ is the PCI number $(0-3)$

## SCSI Components

The following table provides a brief description of the dynamic attachment point properties for SCSI components (TABLE 5-11):

 TABLE 5-11
 Dynamic Attachment Point Properties for SCSI Components

Property	Rule (if any)	Description
Unique Ap_Id		Unique logical attachment point identifier from cfgadm for the SCSI component
Slot State		Slot availability state: assigned or unassigned
Power State		Power state: powered-on or powered-off
Receptacle		Receptacle state: connected
Occupant		State of the occupant, which is the combination of the board and its attached devices: configured or unconfigured
Туре		Component type: disk, CD-ROM, or tape
Condition		Component condition: ok, unknown, or failed
Information		General information for the type
When		Date and time when the components were configured into the domain
Busy		y (yes) indicates a state, availability, or condition change operation is in progress; n (no) indicates <i>no</i> state, availability, or condition change operation is in progress
Phys_Id		Physical attachment point ID for the SCSI component

# Dynamic Reconfiguration Operations From the Domain

This section describes how to perform dynamic reconfiguration operations from the domain from a Sun Fire domain using the Sun Management Center 3.5 Dynamic Reconfiguration module. The dynamic reconfiguration operations from the domain are based on the cfgadm(1M) command. Refer to the cfgadm(1M) command in the Sun Solaris 8 or 9 Reference Manual Collection for more information about the various cfgadm options.

There are both logical and physical aspects of Sun Fire domains:

- The *logical* domain is the set of slots—either containing or not containing system boards—grouped as belonging to a specific domain.
- The physical domain is the set of boards in the logical domain that are physically interconnected.

A slot—whether occupied or empty—can be a member of a logical domain, while not being part of a physical domain. After boot, a board or empty slot can be assigned to or unassigned from a logical domain. A board becomes part of a physical domain when the Solaris Operating System requests it. An empty slot is never part of a physical domain.

The following dynamic reconfiguration and other management operations from the domain are described in this section of the supplement:

- Assigning a board
- Unassigning a board
- Attaching a board
- Detaching a board
- Connecting a board
- Disconnecting a board
- Configuring a board or components
- Unconfiguring a board, components, or memory
- Powering on a board
- Powering off a board
- Testing a board
- Showing status

## cfgadm Options Supported

TABLE 5-12 describes the cfgadm(1M) options that are supported by the Dynamic Reconfiguration module. Refer to the cfgadm(1M) command in the Sun Solaris 8 or 9 Reference Manual Collection for more information about the various cfgadm options.

TABLE 5-12 cfgadm Options Supported by Dynamic Reconfiguration

cfgadm Option	Sun Management Center GUI Menu Item	Description
-c configure	Attach	Attach a board
-c disconnect	Detach	Detach a board
-x assign	Assign	Assign a board
-c disconnect -x unassign	Unassign	Unassign a board
-c connect	Connect	Connect a board
-c disconnect	Disconnect	Disconnect a board
-c configure	Configure	Configure a board or another component
-c unconfigure	Unconfigure	Unconfigure a board or another component
-x poweron	Power On	Power on a board
-x poweroff	Power Off	Power off a board
-t	Test	Test a board

## Showing Domain Information From the Domain

Before you perform any dynamic reconfiguration operations from a Sun Fire domain, look at the Attachment Points and Dynamic Attachment Points tables in the Dynamic Reconfiguration module under Hardware.

## Ensure Boards Are in a Domain's ACL

Before you can perform certain dynamic reconfiguration operations on a system board from a domain, the board must be in the domain's ACL.

### Assigning a Board

This operation adds a system board to the logical domain.

### ▼ To Assign a Board

- 1. Log in as a member of the esadm group to the domain to which you want to assign a system board.
- 2. Right-click on the Unique Ap\_Id for the system board you want to assign in the appropriate board table.

The system displays a menu of board operations.

3. Left-click on the Assign menu selection.

The system displays the Assign confirmation box with this message:

```
Assign a slot.
Are you sure you want to assign?
```

4. Left-click on the OK button to assign the selected board. Otherwise, left-click on the Cancel button to cancel the assign operation.

## Unassigning a Board

This operation removes a system board from the logical domain.

# ▼ To Unassign a Board

- 1. Log in as a member of the esadm group to the domain from which you want to unassign a system board.
- 2. Right-click on the Unique Ap\_Id for the system board you want to unassign in the appropriate board table.

The system displays a menu of board operations.

3. Left-click on the Unassign menu selection.

The system displays the Unassign confirmation box with this message:

```
Unassign.
Are you sure you want to unassign?
```

4. Left-click on the OK button to unassign the selected board. Otherwise, left-click on the Cancel button to cancel the unassign operation.

## Attaching a System Board

This operation attaches the specified system board to the Solaris Operating System running in the specified domain. The process of attaching a system board involves a series of automatic steps performed by the Dynamic Reconfiguration module:

- Assigns the system board to the logical domain.
- Powers on the system board.
- Tests the system board.
- Connects the system board to the domain physically through the system controller.
- Configures the components on the system board in the Solaris Operating System running on the domain, so that applications running on the domain can use the components.

Some of the automatic steps are not performed depending on the initial state of the system board and other components or whether hardware problems prohibit the successful completion of the attach operation.

# ▼ To Attach a System Board

- 1. Log in as a member of the esadm group to the domain to which you want to attach a system board.
- 2. Right-click on the Unique Ap\_Id for the system board you want to attach in the appropriate board table.

The system displays a menu of board operations.

3. Left-click on the Attach menu selection.

The system displays the Attach Confirmation box with this message:

Attach a board.

Attach will connect and configure the selected board.

Are you sure you want to attach?

4. Left-click on the OK button to connect and configure the selected board. Otherwise, left-click on the Cancel button to cancel the attach operation.

## Detaching a System Board

This operation detaches the specified system board from the Solaris Operating System running in the specified domain. The process of detaching a system board involves a series of automatic steps performed by the Dynamic Reconfiguration module:

- Unconfigures the components on the system board from the Solaris Operating System running on the domain, so that applications running on the domain can no longer use the components.
- Communicates with the system controller to physically disconnect the system board from the domain. After this step, the system board is no longer part of the physical domain, although it is still part of the logical domain.
- Powers off the system board.

Some of the automatic steps are not performed depending on the initial state of the system board and other components or whether hardware problems prohibit the successful completion of the detach operation.

## ▼ To Detach a System Board

- 1. Log in as a member of the esadm group to the domain from which you want to detach a system board.
- 2. Right-click on the Unique Ap\_Id for the system board you want to detach in the appropriate board table.

The system displays a menu of board operations.

3. Left-click on the Detach menu selection.

The system displays the Detach confirmation box (FIGURE 5-2).



FIGURE 5-2 Detach Confirmation Box

4. Left-click on the OK button to unconfigure, disconnect, and power off the selected board. Otherwise, left-click on the Cancel button to cancel the detach operation.

### Connecting a Board

This operation performs the following steps:

- Assigns the system board to a logical domain if the board is available and is not part of the logical domain
- Powers on the system board
- Tests the system board
- Connects the system board to the physical domain

### ▼ To Connect a System Board

- 1. Log in as a member of the esadm group to the domain in which you want to connect a system board.
- 2. Right-click on the Unique Ap\_Id for the system board you want to connect in the appropriate board table.

The system displays a menu of board operations.

3. Left-click on the Connect menu selection.

The system displays the Connect confirmation box with this message:

```
Connect
Are you sure you want to connect?
```

4. Left-click on the OK button to connect the selected board. Otherwise, left-click on the Cancel button to cancel the connect operation.

**Note** – Sun Fire 15K/12K systems allow you to click on an Abort button to stop the operation prematurely.

### Disconnecting a Board

This operation performs the following steps:

- Unconfigures the system board, if necessary
- Disconnects the system board from the physical domain

# ▼ To Disconnect a System Board Other Than a SCSI Board

- 1. Log in as a member of the esadm group to the domain in which you want to disconnect a system board.
- 2. Right-click on the Unique Ap\_Id for the system board you want to disconnect in the appropriate board table.

The system displays a menu of board operations.

3. Left-click on the Disconnect menu selection.

The system displays the Disconnect panel (FIGURE 5-3).



FIGURE 5-3 Disconnect Panel

- 4. Left-click on the radio button beside the Power State option you want the board to be in *after* it is disconnected.
- 5. Left-click on the radio button beside the Slot State option you want the board to be in *after* it is disconnected.
- 6. Left-click on the Use Force Option box to force the disconnect operation. Otherwise, leave the Use Force Option box blank.
- 7. Left-click on the OK button to disconnect the selected board. Otherwise, left-click on the Cancel button to cancel the disconnect operation.

**Note** – Sun Fire 15K/12K systems allow you to click on an Abort button to stop the operation prematurely.

### ▼ To Disconnect a SCSI Board

Log in as a member of the esadm group to the domain in which you want to disconnect a SCSI board.

1. Right-click on the Unique Ap\_Id for the SCSI board you want to disconnect in the appropriate board table.

The system displays a menu of board operations.

2. Left-click on the Disconnect menu selection.

The system displays the Disconnect panel with this message:

Disconnect
Are you sure you want to continue?

3. Left-click on the OK button to disconnect the SCSI board. Otherwise, left-click on the Cancel button to cancel the disconnect operation.

## Configuring a Board, a Component, or Memory

This operation performs the following steps:

- Connects the system board, if necessary.
- Configures a system board or a component or memory on a board into the Solaris Operating System running in the domain, so that applications running on the domain can use the board or the component or memory on the board.

# ▼ To Configure a System Board, a Component, or Memory

- 1. Log in as a member of the esadm group to the domain in which you want to configure a system board, a component, or memory.
- 2. Right-click on the Unique Ap\_Id for the system board, component, or memory you want to configure in the appropriate board table.

The system displays a menu of board, component, or memory operations.

3. Left-click on the Configure menu selection.

The system displays the Configure confirmation box with this message:

Configure
Are you sure you want to configure?

4. Left-click on the OK button to configure the selected board, component, or memory. Otherwise, left-click on the Cancel button to cancel the configure operation.

**Note** – Sun Fire 15K/12K systems allow you to click on an Abort button to stop the operation prematurely.

# Unconfiguring a Board, a Component, or Memory

This operation unconfigures a system board, a component on a board, or memory so that applications running on the domain can no longer use the board, component, or memory.

# ▼ To Unconfigure a System Board or a Component

- 1. Log in as a member of the esadm group to the domain in which you want to unconfigure a system board or component.
- 2. Right-click on the Unique Ap\_Id for the system board or component you want to unconfigure in the appropriate board table.

The system displays a menu of board or component operations.

3. Left-click on the Unconfigure menu selection.

The system displays the Unconfigure panel with this message:

```
Select Force Option
The force option will force the selected action.
Select check box to use the force option.
```

- 4. Select the Use Force Option check box to force the unconfigure operation. Otherwise, leave the Use Force Option box blank.
- 5. Left-click on the OK button to unconfigure the selected board or component. Otherwise, left-click on the Cancel button to cancel the unconfigure operation.

**Note** – Sun Fire 15K/12K systems allow you to click on an Abort button to stop the operation prematurely.

# ▼ To Unconfigure Memory

- 1. Log in as a member of the esadm group to the domain in which you want to unconfigure memory.
- 2. Right-click on the Unique Ap\_Id for the memory component you want to unconfigure in the Memory component table.

The system displays a menu of memory component operations.

3. Left-click on the Unconfigure menu selection.

The system displays the Unconfigure Memory panel (FIGURE 5-4).

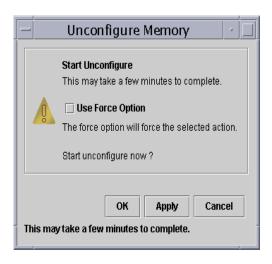


FIGURE 5-4 Unconfigure Memory Panel

- 4. Select the Use Force Option box to force the unconfigure operation. Otherwise, leave the Use Force Option box blank.
- 5. Left-click on the OK button to start unconfiguring memory. Otherwise, left-click on the Close button to cancel the unconfigure operation.

### Powering on a Board

This operation powers on a system board. The board must be assigned to the logical domain, but *not* be in the physical domain.

### ▼ To Power on a Board

- 1. Log in as a member of the esadm group to the domain in which you want to power on a system board.
- 2. Right-click on the Unique Ap\_Id for the system board you want to power on in the appropriate board table.

The system displays a menu of board operations.

3. Left-click on the Power On menu selection.

The system displays the Power On confirmation box with this message:

```
Power On a board.
Are you sure you want to power on?
```

4. Left-click on the OK button to power on a system board. Otherwise, left-click on the Cancel button to cancel the power on operation.

### Powering off a Board

This operation powers off a system board. The board must be assigned to the logical domain, but *not* be in the physical domain.

### ▼ To Power off a Board

- 1. Log in as a member of the esadm group to the domain in which you want to power off a system board.
- 2. Right-click on the Unique Ap\_Id for the system board you want to power off in the appropriate board table.

The system displays a menu of board operations.

3. Left-click on the Power Off menu selection.

The system displays the Power Off confirmation box with this message:

```
Power Off a board.
Are you sure you want to power off?
```

4. Left-click on the OK button to power off a system board. Otherwise, left-click on the Cancel button to cancel the power off operation.

### Testing a Board

This operation tests system boards. The board must be assigned to the logical domain, but *not* be in the physical domain.

### ▼ To Test a Board

- 1. Log in as a member of the esadm group to the domain in which you want to test a system board.
- 2. Right-click on the Unique Ap\_Id for the system board you want to test in the appropriate board table.

The system displays a menu of board operations.

3. Left-click on the Test menu selection.

The system displays the Test Board panel (FIGURE 5-5).

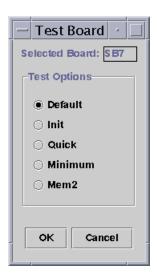


FIGURE 5-5 Test Board Panel

- 4. Left-click on the radio button beside the Test Option you want.
- 5. After ensuring that you have selected the correct board to test and have the correct option checked, left-click on the OK button to start the test. Otherwise, left-click on the Cancel button to cancel the test.

**Note** – Sun Fire 15K/12K systems allow you to click on an Abort button to stop the operation prematurely.

### **Showing Status**

This operation shows the status of the last dynamic reconfiguration command executed for that board or slot. The status display is dynamically updated with the status of the command currently being executed. If the command being executed halts on an error, an error message from the cfgadm(1M) program is displayed. The message "No status from the agent" is displayed if no command has been executed, or if a command finishes execution without errors.

### **▼** To Show Status

- 1. Log in as a member of the esadm group to the domain in which you want to show status for a system board or slot.
- 2. Right-click on the Unique Ap\_Id for the system board or slot for which you want to show status in the appropriate board table.

The system displays a menu of board or slot operations.

3. Left-click on the Show status menu selection.

The system displays the Status box showing the execution status of the most current dynamic reconfiguration command, if any.

For example, if an operation fails, the status shows this type of message (FIGURE 5-6):



FIGURE 5-6 Unsuccessful Operation in Show Status for Domain DR Operation

For another example, after the configure operation finishes successfully—or if no command has been executed—the status shows this message (FIGURE 5-7):

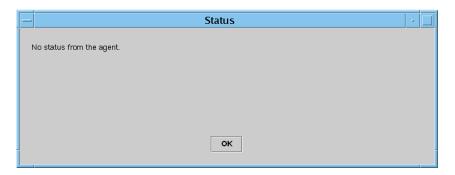


FIGURE 5-7 Successful Operation in Show Status for Domain DR Operation

4. Left-click on the OK button when you are finished looking at the status.

# Using the CLI to Install, Set up, Uninstall, Start, and Stop Sun Management Center Software

This appendix describes how to install, set up, uninstall, start, and stop Sun Management Software from the command line interface (CLI). For more details, refer to the *Sun Management Center 3.5 Software and Installation Configuration Guide*.

# Installing the Software

First ensure that Sun Management Center 3.5 software is installed on your system. Refer to the *Sun Management Center 3.5 Installation and Configuration Guide* for instructions about installing this software. A soft copy of the installation guide is on the *Sun Management Center 3.5 CD, disk 3 of 3*.

Also ensure that any required patches are installed on your system. Refer to the *Sun Management Center 3.5 Release Notes* for any required patches for this release.

# ▼ To Install the Supplement Software Using the CLI

The supplement software and document are on three CDs, which include the full Sun Management Center 3.5 software package. The CDs are labelled:

- Sun Management Center 3.5, disk 1 of 3
- Sun Management Center 3.5, disk 2 of 3
- Sun Management Center 3.5, disk 3 of 3

- 1. Install the Sun Management Center 3.5 software package on the Sun Fire 6800/4810/4800/3800 domains.
  - a. To install only the Sun Fire supplement software, run the es-inst command in the sbin directory, in either the update CD or the directory where the Sun Management Center 3.5 software package was installed.

The es-inst script prompts you for a source directory.

b. Enter the source directory.

If you run the es-inst command from the installation directory and the CD is mounted on /cdrom/cdrom0, specify /cdrom/cdrom0/image as the source directory.

Refer to the Sun Management Center 3.5 Installation and Configuration Guide for information about the es-inst command and its options.



**Caution** – If the general Sun Management Center 3.5 software package is already installed, and you are installing *only* the Sun Fire supplement software, enter n (for no) when you are prompted to begin the setup process. Entering y (for yes) may cause the loss of any customized setup information, such as security keys.

**Note** – If you are installing the full Sun Management Center 3.5 software package, you have the option of running the setup script at the end of the installation procedure. If you choose not to run the setup script at that time, you can run it later. The setup script (es-setup) is in *path*/sbin, where *path* is the directory where the Sun Management Center software is installed. This step sets up all Sun Management Center agents, including the platform agent.

Install the Sun Management Center 3.5 software package on any systems (agent machines) that you will use for platform administration on the Sun Fire 6800/4810/4800/3800 systems. Read the Caution and Note in Step 1 above.

### The system displays the following message:

Sun Management Center Product Selection
The following Add-On Products are available for your selection:
Sun Fire domain Administration  Dynamic Reconfiguration for Sun Fire 3800/4800/4810/6800/15000 platforms  Sun Fire Platform Administration
Do you want to install the product: Sun Fire Domain Administration? $[y n q]$ Do you want to install the product: Dynamic Reconfiguration for Sun Fire $3800/4800/4810/6800/1500$ platforms? $[y n q]$ Do you want to install the product: Sun Fire Platform Administration? $[y n q]$

### 2. Type y for those products you want to install.

If you type **y** for all the add-ons, the system displays this message:

The following Add-On Products will be installed: Sun Fire domain Administration Dynamic Reconfiguration for Sun Fire 3800/4800/4810/6800/15000 platforms Sun Fire Platform Administration Do you want to proceed? [y|n|q]

3. Type y to continue installing the add-on products.

# Setting Up the Sun Fire 6800/4810/4800/3800 Platform Administration Module Using the CLI

The setup has three parts:

■ System controller setup — See "Setting Up the Sun Fire 6800/4810/4800/3800 Platform Administration Module Using the CLI" on page 171.

- Agent layer setup See "To Set Up the Sun Fire 6800/4810/4800/3800 Platform Administration Module on an Agent Machine" on page 175.
- Server layer setup See "To Set Up the Sun Fire 6800/4810/4800/3800 Platform Administration Module Server Layer Only on the Server" on page 176.

### Setting Up SNMP on the System Controller

Setting up the Simple Network Management Protocol (SNMP) on the system controller involves configuring SNMP on the platform and the domain. This section contains both procedures, and you need to do both:

- Configuring SNMP on the platform
- Configuring SNMP on the domain

## **▼** To Configure SNMP on the Platform

**Note** – Do not set up multiple Platform Administration Agents to manage the same Sun Fire 6800/4810/4800/3800 system controller. Doing so causes the system to run slowly or even hang.

1. Access the system controller by using the telnet(1) command as shown in CODE EXAMPLE A-1.

CODE EXAMPLE A-1 Accessing the System Controller With telnet and Entering the Platform Shell

```
% telnet schostname
System Controller schostname:SC>
Type 0 for Platform Shell
Type 1 for domain A
Type 2 for domain B
Type 3 for domain C
Type 4 for domain D
Input: 0
schostname: SC>
```

where *schostname* is the system controller host name.

2. At the system controller main menu, type 0 (or alternatively P or p) to enter the platform shell as shown in CODE EXAMPLE A-1.

The platform shell prompt, *schostname*: SC, is displayed.

3. Type setupplatform -p snmp, and answer the questions as shown in CODE EXAMPLE A-2.

### **CODE EXAMPLE A-2** Configuring an SNMP Agent on a Platform

```
schostname:SC> setupplatform -p snmp

SNMP
----
Platform Description [description]: your_description
Platform Contact [contactname]: contact_name
Platform Location [location]: your_platform_location
Enable SNMP Agent? [no]: yes
Trap Hosts [hostname]: server_name
Public Community String [string]: your_string1
Private Community String [string]: your_string2
```

For Trap Hosts, enter the host name of the Sun Management Center server from which you will perform platform administration.

- 4. Press and hold the CTRL key while pressing the ] key, to get to the telnet> prompt.
- 5. Type q to exit from telnet.

# ▼ To Configure SNMP on a Domain

1. Access the system controller by typing the telnet command as shown in CODE EXAMPLE A-3.

# CODE EXAMPLE A-3 Accessing the System Controller With telnet and Entering the Domain Shell

```
% telnet schostname
System Controller schostname:SC>

Type 0 for Platform Shell

Type 1 for domain A
Type 2 for domain B
Type 3 for domain C
Type 4 for domain D
```

### **CODE EXAMPLE A-3** Accessing the System Controller With telnet and Entering the Domain Shell (Continued)

```
Input: 1
schostname: A>
```

where schostname is the system controller host name. In CODE EXAMPLE A-3, domain A is shown as an example.

2. Enter a domain. Type 1, 2, 3, or 4 (or alternatively a, b, c, d, or A, B, C, D) to enter the proper domain shell as shown in CODE EXAMPLE A-3.

The domain shell prompt, *schostname*: *X*, is displayed, where *X* is the domain that vou have selected.

- 3. If the domain is active and the domain keyswitch is set to on, diag, or secure (you are running the Solaris operating environment, you are in OpenBoot PROM mode, or you are running POST), perform the following steps:
  - a. Press and hold the CTRL key while pressing the ] key, to get to the telnet> prompt.
  - b. At the telnet> prompt type send break.

CODE EXAMPLE A-3 shows a connection to domain A.

4. Type setupdomain -p snmp, and answer the questions as shown in CODE EXAMPLE A-4.

### **CODE EXAMPLE A-4** Configuring an SNMP Agent on a Domain

```
schostname:A> setupdomain -p snmp
SNMP
Domain Description [description]: your_description
Domain Contact [contactname]: contact_name
Trap Hosts [hostname]: server_name
Public Community String [string1]: your_string1
Private Community String [string2]: your_string2
```

For Trap Hosts, enter the host name of the Sun Management Center server from which you will perform platform administration.

For Public and Private Community Strings, enter a different string for each domain and platform.

- 5. Type disconnect to exit the connection to the domain shell.
- 6. Repeat Step 2 through Step 5 for each additional domain, if any.

- 7. Press and hold the CTRL key while pressing the ] key, to get to the telnet> prompt.
- 8. Type q to exit from telnet.

## Setting Up the Agent and Server Layers

This section describes how to set up the agent and server layers.

# ▼ To Set Up the Sun Fire 6800/4810/4800/3800 Platform Administration Module on an Agent Machine

If the agent machine has both server and agent layers, this procedure automatically sets up both layers.

- 1. Become superuser by using the su command.
- 2. Go to the *PUn\_path*/addons/SunFirePltAdmin/sbin directory, where *n* is the number of the Platform Update, and *PUn\_path* is the directory where Sun Management Center software is installed.

For example, if Sun Management Center software is installed in /opt/SUNWsymon, go to the directory /opt/SUNWsymon/addons/SunFirePltAdmin/sbin.

3. Run the es-setup.sh script:

To set up this module for the default platform agent instance, type:

# ./es-setup.sh

The script asks for this information:

- The IP Address of the Sun Fire 6800/4810/4800/3800 system controller.
- The Write community strings for the system controller and all the domains. If the script cannot get the domain address from the system controller, then it asks for the IP address of all the domains.
- The port number of the Sun Management Center agents on all the domains.

**Tip** – This script can be run again to change the information provided in the previous setup.

The Sun Management Center 3.0 software ships with one platform agent named "platform."

When the module has been set up, you can start the appropriate agent. For more on how to start, see "Starting Sun Management Center Components" on page 185.

# ▼ To Set Up the Sun Fire 6800/4810/4800/3800 Platform Administration Module Server Layer Only on the Server

This procedure sets up *only* the server layer. To set up the server, agent, and console layers on a server, see "To Set Up the Sun Fire 6800/4810/4800/3800 Platform Administration Module on an Agent Machine" on page 175.

**Note** – If you chose to set up only the server layer (without a console or agent layer), user groups are not automatically added to the /etc/group file unless you use the -S option, as shown in this procedure. For a list of user groups, see TABLE A-1.

- 1. Become superuser by using the su command.
- 2. Go to the *PUn\_path*/addons/SunFirePltAdmin/sbin directory, where *n* is the number of the Platform Update, and PUn\_path is the directory where Sun Management Center software is installed.

For example, if Sun Management Center software is installed in /opt/SUNWsymon, go to the directory /opt/SUNWsymon/addons/SunFirePltAdmin/sbin.

3. Run the es-setup.sh script with the -S option:

# ./es-setup.sh -S

When the module has been set up, you can start the appropriate agent. The Sun Management Center 3.0 software ships with one platform agent named "platform. For more on how to start, see "Starting Sun Management Center Components" on page 185.

# Creating and Setting Up a Sun Fire 6800/4810/4800/3800 Platform Agent Instance

The default platform administration module can monitor one Sun Fire 6800/4810/4800/3800 system. To monitor more than one Sun Fire 6800/4810/4800/3800 system, you must create one platform agent instance for each additional Sun Fire 6800/4810/4800/3800 system.

## ▼ To Create a Platform Agent Instance

- 1. Become superuser by using the su command.
- 2. Go to the directory where Sun Management Center software is installed.

For example, if Sun Management Center software is installed in /opt/SUNWsymon, go to the directory /opt/SUNWsymon/sbin.

3. Run the es-platform script:

# ./es-platform -a instanceName

where *instanceName* is the name of a new platform agent instance.

This script asks for the port number for the new platform agent and the security seed. If you used a seed other than the default when setting up the Sun Management server, provide the same seed for this agent.

- ▼ To Set Up a Sun Fire 6800/4810/4800/3800 Platform Administration Module for a New Platform Agent Instance
  - 1. Become superuser by using the su command.
  - 2. Go to the directory where Sun Management Center software is installed.

For example, if Sun Management Center software is installed in /opt/SUNWsymon, go to the directory /opt/SUNWsymon/addons/SunFirePltAdmin/sbin.

### 3. Type:

```
# ./es-setup.sh -I instanceName
```

where *instanceName* is the name of a new platform agent instance.

The es-setup.sh script asks for this information:

- IP Address of the Sun Fire 6800/4810/4800/3800 system controller.
- Write community strings for the system controller and all the domains. If the script cannot get the domain address from the system controller, then it asks for the IP address of all the domains.
- Port number of the Sun Management Center agents on all the domains.

**Note** – This script can be run again to change the information provided in the previous setup.

When the module has been set up, you can start the appropriate agent. For more on how to start, see "Starting Sun Management Center Components" on page 185.

# ▼ To Assign Users to Administrator and Operator Groups

If your user name is listed in the esusers file, you can log onto the Sun Fire 6800/4810/4800/3800 system, where you have read-only access for domain administration agents. In order to read and/or write platform or domain information under the platform agent, your user name must also be listed in the group file on the server.

The setup procedure creates up to 10 groups on the Sun Fire 6800/4810/4800/3800 server machine. These groups are:

TABLE A-1 User Groups

Group Name	User Category	Type of Access	
spltadm	Administrator	Platform	
sdaadm	Administrator	Domain A	
sdbadm	Administrator	Domain B	
sdcadm	Administrator	Domain C	
sddadm	Administrator	Domain D	

 TABLE A-1
 User Groups (Continued)

Group Name	User Category	Type of Access	
spltop	Operator	Platform	
sdaop	Operator	Domain A	
sdbop	Operator	Domain B	
sdcop	Operator	Domain C	
sddop	Operator	Domain D	

- 1. Become superuser by using the su command.
- 2. Add each user to the appropriate group in the file /etc/group.
  - Add Sun Fire 6800/4810/4800/3800 *platform* administrators to spltadm, to allow them to administer the platform through the platform view of a platform agent.
  - Add Sun Fire 6800/4810/4800/3800 *domain* administrators to the appropriate domain administrator group. For example, adding the name of a domain administrator to sdaadm allows that domain administrator to administer domain A through the platform agent.
- 3. Add each user to the file /var/opt/SUNWsymon/cfg/esusers.

# Setting Up the Software Using the CLI

- ▼ To Set Up the Domain Administration Module on the Sun Management Center Server
  - As superuser, type:

```
# ./es-setup -p SunFireDomAdmin
```

### The system displays:

```
This script will help you to setup Sun (TM) Management Center 3.5.

Setting up Addon[s]
```

### ▼ To Set Up the Platform Administration Module on the Platform

### 1. As superuser, type:

```
# ./es-setup -p SunFirePltAdmin
```

### The system displays:

```
This script will help you to setup Sun (TM) Management Center 3.5. Setting up Addon[s] For setting up Sun Fire (6800/4810/4800/3800) platform administration module you need to provide SC IP address, community strings, port numbers for domain agent etc. Do you want to setup Sun Fire (6800/4810/4800/3800) platform administration module [y|n|q]
```

2. Type y to set up the platform administration module; or type n to *not* set up the module now.

One of the following occurs:

- If you type **n**, the setup script ends.
- If you type **y**, the system displays:

Enter the IP address of System Controller

3. Type the IP address of the System Controller (for example, 10.8.28.209).

The system displays:

Enter the read community for platform

4. Type the read community for platform (for example, P-public).

The system displays:

Enter the write community for platform

5. Type the write community for platform (for example, P-private).

The system displays:

Enter the write community for domainX

where X is the domain letter (A-R).

Type the write community for each domain (for example, use A-private for domainA).

When you have finished entering the write community for each domain, the system displays (in our example):

Please wait, Pinging the host 10.8.23.209. Host 10.8.38.209 is networked. Please wait, getting domain info from system controller Enter the Sun Management Center agent Port for domainX

where X is the domain letter (A-R).

### 7. Type the port number for each domain (for example, use 161 for each domain).

When you have finished entering the port number for each domain, the system displays:

```
Updating the configuration, Please Wait... Done. .... .... .... .... Do you want to start Sun Management Center agent and server components now? [y|n|q]
```

# Uninstalling Software Using the CLI

You can uninstall:

- All the Sun Management Center software (see "To Uninstall All Sun Management Center Software Using the CLI" on page 182)
- One, two, or all three modules of the Sun Fire 6800/4810/4800/3800 add-on software (see "To Uninstall Individual Add-on Modules" on page 184)

# ▼ To Uninstall All Sun Management Center Software Using the CLI

1. As superuser, type:

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

#### The system displays the following message:

# 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

a. Type y to change your selection.

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

b. Type n to not change your selection.

The system displays the following message:

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

**Note** – If you answer  $\mathbf{y}$  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 the following 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  $\mathbf{y}$  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 the following 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

Sun Fire Domain Administration

Dynamic Reconfiguration for Sun Fire 15K-3800 pl

None

Sun Fire Platform Administration

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 the following message

```
Do you want to uninstall Sun Fire Domain Administration? [y|n|q] Do you want to uninstall Dynamic Reconfiguration for Sun Fire 15K-3800 platforms? [y|n|q] Do you want to uninstall Sun Fire Platform Administration? [y|n|q]
```

3. Type y beside each module you do want to uninstall and n beside each module you do *not* want to uninstall.

The system displays the modules that will be uninstalled and the following message:

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

- 4. Do one of the following:
  - a. Type y to change the selections.

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

b. Type  ${\tt n}$  to not change your selections.

The system displays the following 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  $\mathbf{y}$  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.

# Starting Sun Management Center Components

The es-start script has three options:

- The -A option starts all Sun Management Center components, except the console.
- The -1 option starts the default platform agent.
- The -y option starts only the specified agent.

### ▼ To Start the Default Platform Agent

- 1. Become superuser by using the su command.
- 2. Go to the *path*/sbin directory, where *path* is the directory where the Sun Management Center software is installed.
- 3. Start the default platform agent by typing:

```
# ./es-start -l
```

### **▼** To Start a Platform Agent Instance

- 1. Become superuser by using the su command.
- 2. Go to the *path*/sbin directory, where *path* is the directory where the Sun Management Center software is installed.
- 3. Start a specific platform agent instance by typing:

```
# ./es-start -y instanceName
```

For example, if P1 is the name of the platform agent instance, type:

```
# ./es-start -y P1
```

# ▼ To Start All Sun Management Center Components

- 1. Become superuser by using the su command.
- 2. Go to the path/sbin directory, where path is the directory where the Sun Management Center software is installed.
- 3. Start all Sun Management Center components, except the console, by typing:

```
# ./es-start -A
```

# Stopping Sun Management Center Components

The es-stop script has three options:

- The -A option stops all Sun Management Center components, except the console.
- The -1 option stops the default platform agent.
- The -y option stops only the specified agent.

## ▼ To Stop the Default Platform Agent

- 1. Become superuser by using the su command.
- 2. Go to the path/sbin directory, where path is the directory where the Sun Management Center software is installed.
- 3. Stop the default platform agent by typing:

```
# ./es-stop -1
```

### ▼ To Stop a Platform Agent Instance

- 1. Become superuser by using the su command.
- 2. Go to the path/sbin directory, where path is the directory where the Sun Management Center software is installed.
- 3. Stop a specific platform agent instance by typing:

```
# ./es-stop -y instanceName
```

For example, if P1 is the name of the platform agent instance, type:

```
# ./es-stop -y P1
```

# ▼ To Stop All Sun Management Center Components

- 1. Become superuser by using the su command.
- 2. Go to the path/sbin directory, where path is the directory where the Sun Management Center software is installed.
- 3. Stop all Sun Management Center components, except the console, by typing:

# ./es-stop -A

# Glossary

Access Control List List of available boards that can be assigned to a domain.

ACL See Access Control List.

Administrative

domain A Sun Management Center administrative domain consists of one or more

host systems. It should not be confused with other uses of the term

"domain" in this book. See also hardware domain.

ASIC application-specific integrated circuit

path The path to the directory where Sun Management Center software is installed.

For example, if Sun Management Center software is installed in

/opt/SUNWsymon, the directory is

/opt/SUNWsymon/addons/SunFirePltAdmin/sbin.

**CLI** command-line interface

**COD** Capacity on Demand option

DCA daughter card assembly for Paroli

Dcache data cache

default platform

agent When the Sun Management Center 3.5 supplement software is installed, a

platform administration module agent is created. This default platform administration module can monitor one Sun Fire 6800/4810/4800/3800 system. To monitor more than one Sun Fire 6800/4810/4800/3800 system, you must create an additional platform agent instance for each additional

Sun Fire 6800/4810/4800/3800 system.

**DIMM** dual inline memory module

**Domain** See administrative domain and hardware domain.

### Domain

### administration

In this book, "domain administration" refers to the administration of a hardware domain. (See *hardware domain*.) Domain administration uses procedures that deal with hardware resources *within* a host system, as well as with the software and applications running on those hardware resources. In other documents, such as the *Sun Management Center 3.5 User's Guide*, the term "domain administration" has a second meaning, which is the administration of a group of multiple host systems. (See *administrative domain*.)

**DR** See Dynamic reconfiguration.

### Dynamic

### reconfiguration

Dynamic reconfiguration software is a part of the Solaris Operating System and provides the ability to safely remove or install system boards or compact PCI I/O cards into a system while the Solaris Operating System is running. Dynamic reconfiguration software also provides the ability to transfer system boards or compact PCI I/O cards from one domain to another, while the Solaris Operating System is running

Ecache external cache

ECC error-correcting code

FRU field-replaceable unit

FT fan tray

GUI graphical user interface

#### Hardware domain

A Sun Fire 6800/4810/4800/3800 domain is a logical grouping of system boards and other devices that are contained within a single host system. In this book, this type of domain is called a "hardware domain," not to be confused with an "administrative domain." See also *administrative domain*.

HPCI, hPCI, or hsPCI hot-swap PCI assembly

HPCI+, hPCI+, or

hsPCI+ hot-swap PCI plus assembly

IB6 - IB9 I/O assemblies

Icache internal cache

IP Internet Protocol

LUN logical unit number

Paroli parallel optical link

Platform

administration The management and monitoring of a complete Sun Fire 6800/4810/4800/3800

system. Platform administration includes the ability to divide the Sun Fire 6800/4810/4800/3800 system components into multiple hardware domains.

Individual hardware domains can be managed and monitored by domain administrators, while the platform administrator retains the ability to manage and monitor all individual hardware domains in addition to the entire platform.

Platform agent instance

The default platform administration module can monitor one Sun Fire 6800/4810/4800/3800 system. To monitor more than one Sun Fire 6800/4810/4800/3800 system, you must create an additional platform agent instance for each additional Sun Fire 6800/4810/4800/3800 system.

PCI peripheral component interconnect

POST power-on self-test

**Proxy** A copy of a default platform agent. The default platform administration module can monitor one Sun Fire 6800/4810/4800/3800 system. To monitor more than one Sun Fire 6800/4810/4800/3800 system, you must create one platform agent instance or proxy for each additional Sun Fire 6800/4810/4800/3800 system.

PS power supply

**RP0 - RP3** repeater boards

**RSM** remote shared memory

SB0 - SB5 CPU/memory boards

**SC** system controller

**SCSI** small computer system interface

**SNMP** Simple Network Management Protocol

SSC Sun Fire 6800/4810/4800/3800 system controller

SSM scalable shared memory

Sun Fire 6800-3800

**Systems** *same as* Sun Fire 6800/4810/4800/3800 Systems

**Uncompress** To expand an icon to display hidden subsections below the level of that icon.

V volts or voltage

Wcache write cache

WCI Sun Fire Link interface ASIC

**WPCI** Sun Fire Link PCI

# Index

A	set up loghosts, 86
access control list (ACL)	system controller setup, 86
ensuring boards are in domain's ACL, 154	table sorting, 86
access control list, changing, 94	test, 86
access for users, 44, 178	composite view of a Sun Fire system, 54
access privileges, 50	Config-Reader module
ACL, See access control list	displays physical and logical views of system, 112
administrative domain defined, 3	icon location, 112
administrators	Config-Reader property tables, 119
domain administrator and platform	configure, from domain
administrator compared, 1	board, 161
alarm generation rules, 129	component, 161
assign available boards, 88	memory, 161
assign board, from domain, 155	configuring SNMP
assigning users to groups, 44, 178	domain, 17, 173
attach board, from domain, 156	platform, 16, 172
	connect board, from domain, 158
	console
В	setting up, 21, 22, 26, 27, 28, 29, 30, 32, 33
board can be assigned to only one domain, 88	CPU components, properties dynamic attachment points, 149
,	CPU/memory board, properties
	attachment points, 142
С	creating an object, 51
change a domain access control list (ACL), 94	
change a domain virtual keyswitch setting, 66	
chassis information table	D
assign, unassign, 86	
FRU information, 86	data acquisition table, 107 detach board, from domain, 157
move, 86	disconnect, from domain
power on and off, 86	disconnect, moni domani

board, 159	ACL, 66	
SCSI, 160	Domain Administration, 66	
display FRU information, 93	keyswitch, 66	
displaying	Setup Loghosts, 66	
alarm rules, 114	Table sorting, 66	
all devices in system, 114	_	
logical view of system, 95		
physical view of system, 95	-	
documentation	E	
ordering copies, xxv	empty slots, properties	
	attachment points, 147 es-platform procedure, 40,177 es-setup procedure, 175,176	
domain access, 55		
domain administrator access, 1		
Domain Dynamic Reconfiguration	es-start options, 185	
assign board, 155	es-stop options, 187	
attach board, 156	es-scop options, 107	
attachment points, 141		
cfgadm options supported, 154		
configure board, component, or memory, 161	G	
connect board, 158	generating system alarms, 129	
detach board, 157	granting user access to machines, 44, 178	
disconnect board, 159	granting user access to macrimes, 44, 170	
disconnect SCSI, 160		
dynamic attachment points, 141, 149		
icon, 140	Н	
logical, definition, 153	hardware	
physical, definition, 153	modules relating to, 112	
power off board, 164	helpful hints	
power on board, 163	Search function is case-sensitive, 101	
properties		
CPU components, 149	hPCI, properties	
CPU/memory, 142	board	
empty slots, 147	I/O, 143	
hPCI cards, 145	card	
hPCI I/O, 143	attachment points, 145	
I/O components, 151		
MaxCPU, 148		
memory components, 150	1	
SCSI, 146	I/O components properties	
SCSI components, 152	I/O components, properties	
WPCI, 144 show status, 166	dynamic attachment points, 151	
test board, 165	icons for Sun Fire systems (picture), 5	
unassign board, 155	installation and setup	
~	administrative domain, creating, 47	
unconfigure board or component, 162	agent instance, undoing setup, 46	
unconfigure memory, 162	default platform administration module	
domain types defined, 3	undoing setup, 45	
domains defined, 189	hardware domain, creating, 47	
domains table actions	installing supplement software, 169	

platform agent instance, creating additional, 40,	P
177	path, SunMC software location, 45
platform agent instance, setting up, 41, 177 specific platform agent, deleting, 46	physical view displayed by Config-Reader module, 112
users, assigning to groups, 44, 178	Platform Administration module, 49
	Platform Administration property tables, 56
	platform administrator access, 2
K	platform agents
keyswitch, See virtual keyswitch	all agents, starting, 186 all platform agents, stopping, 188 default platform agent, stopping, 187
L	default platform agents, starting, 186
loading modules, 117	specific agent instance, starting, 186 specific platform agent, stopping, 187
loghosts	"platform", default name for platform agent, 176
entering multiple loghosts, 68	power off
setting, 68	board
logical view displayed by Config-Reader	from domain, 164
module, 112	power on
	board
	from domain, 163
M	prerequisites, xxi, 139
machine access for users, 44, 178	PUn_path, SunMC software location, 175, 176
MaxCPU board, properties attachment points, 148	
memory components, properties	R
dynamic attachment points, 150 module	rules, alarm generation, 129
hardware, 112	
loading, 117	
modules	S
Domain Dynamic Reconfiguration, 140	SCSI components, properties dynamic attachment points, 152
	SCSI, properties
N	attachment points, 146
node view of a Sun Fire system, 53	set domain loghosts, 68
	set up loghosts, 92
	set up system controller, 172, 182
0	set up the system controller, 91
	setup common network location, 21, 22, 26, 27, 28, 29,
ordering Sun documentation, xxv	30, 32, 33 workstations, 21, 22, 26, 27, 28, 29, 30, 32, 33
	setupdomain command, 18, 174
	setupplatform command, 16,173

show status, from domain, 166 slot, definition, 153 SNMP, configuring on domain, 17, 173 on platform, 16, 172 starting a specific platform agent instance, 186 all platform agents, 186 default platform agent, 186 stopping a specific platform agent, 187 all platform agents, 188 default platform agent, 187 Sun Fire object, 50 Sun Fire supplement software defined, 1 system controller setup, 172, 182

### T

test a board, 90 test board from domain, 165

### U

unassign board, from domain, 155 unassign boards, 88 unconfigure, from domain board, 162 component, 162 memory, 162 users assigning to groups, 44, 178 granting access, 44, 178

### V

views composite view, 54 node view, 53 views, displaying system, 95 virtual keyswitch, 66 virtual keyswitch modes
Diagnostic, 67
Off, 67
On, 67
Secure, 67
Standby, 67

### W

WPCI board, properties domain DR, 144