Sun Fire™ High-End Systems Software Overview Guide

Sun Microsystems, Inc.
www.sun.com

Part No. 819-4658-10
May 2006, Revision A

Submit comments about this document at: http://www.sun.com/hwdocs/feedback

Please
Recycle

Contents

Preface v

1. Introduction to Sun Fire High-End Software 1

New Features 2

2. Sun Fire High-End Systems Software Documentation Set 3

Audience for This Document Set 3

Where to Find Information About Sun Fire High-End System Software 5

Solaris OS Information 5

SMS Software Information 5

Dynamic Reconfiguration Software Information 6

Sun Management Center Software Information 6

3. Security 7

Secure By Default 7

Secure By Choice 7

4. Solaris Operating Systems for Sun Fire High-End Systems 9

5. System Management Services (SMS 1.6) Software 11

System Architecture 12

SMS Administration Environment 12

Management Network 13

Capacity on Demand 13

For More Information 14

6. Dynamic Reconfiguration Software for Sun Fire High-End Systems 15

System Board Slots and Logical Domains 16

DR Administration Models 16

SC State Models 17

`unavailable` 17

`available` 17

`assigned` 17

`active` 18

DR on I/O Boards 18

Automatic DR 18

For More Information 19

7. Sun Management Center Software for Sun Fire High-End Systems 21

Sun Management Center Add-On Sun Fire High-End Software Packages 21

Features of Sun Management Center Software 22

Sun Management Center Software Pricing 22

For More Information 23

Preface

This document provides an overview of the software that runs on Sun Fire™ high-end systems. It describes which related documents provide detailed information on the use of this software. This document also provides experienced system administrators with an overview of some key software that runs on these systems.

How This Book Is Organized

Chapter 1 provides an overview of the software that runs on Sun Fire high-end systems.

Chapter 2 describes the books that make up the Sun™ Management Center (SMS 1.6) software documentation set, as well as other Sun documentation that describes the software that runs on Sun Fire high-end systems.

Chapter 3 provides an overview of security on Sun Fire high-end systems.

Chapter 4 provides an overview of the Solaris™ Operating System as it applies to Sun Fire high-end systems.

Chapter 5 provides an overview of System Management Services (SMS) software.

Chapter 6 provides an overview of dynamic reconfiguration (DR) software.

Chapter 7 provides an overview of Sun Management Center software running on Sun Fire high-end systems

Using UNIX Commands

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

See the following for this information:

- Software documentation that you received with your system
- Solaris Operating System documentation, which is at

  `http://www.sun.com/documentation`

Shell Prompts

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

Typographic Conventions

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

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

Related Documentation

Application	Title	Part Number	Format
Issues, Limitations, and Bugs	*System Management Services (SMS) 1.6 Release Notes*	*819-4663-10*	*HTML, PDF*
Installation	*System Management Services (SMS) 1.6 Installation Guide*	*819-4659-10*	*HTML, PDF*
Usage	*System Management Services (SMS) 1.6 Administrator Guide*	*819-4660-10*	*HTML, PDF*
Reference	*System Management Services (SMS) 1.6 Reference Manual*	*819-4662-10*	*HTML, PDF*
Usage	*Sun Fire High-End and Midrange Systems Dynamic Reconfiguration User's Guide*	*819-1501-10*	*HTML, PDF*
Issues, Limitations, and Bugs	*Sun Management Center 3.5 Version 6 Release Notes for Sun Fire High-End Systems*	*819-0793-12*	*HTML, PDF*
Installation	*Sun Management Center Software Installation and Configuration Guide*	*816-2678-10*	*HTML, PDF*
Usage	*Sun Management Center Software User's Guide*	*816-2716-10*	*HTML, PDF*
Usage	*Sun Management Center 3.5 Version 6 Supplement for Sun Fire High-End Systems*	*819-0793-12*	*HTML, PDF*
Installation and Configuration	*Sun Fire 15K/12K Site Planning Guide*	*806-3510-12*	*HTML, PDF*
	Sun Fire E20K/E25K Site Planning Guide	*817-4137-11*	

All SMS 1.6 manuals are available online at:

http://www.sun.com/products-n-solutions/hardware/docs/

Documentation, Support, and Training

Sun Function	URL
Documentation	http://www.sun.com/documentation/
Support	http://www.sun.com/support/
Training	http://www.sun.com/training/

Third-Party Web Sites

Sun is not responsible for the availability of third-party web sites mentioned in this document. Sun does not endorse and is not responsible or liable for any content, advertising, products, or other materials that are available on or through such sites or resources. Sun will not be responsible or liable for any actual or alleged damage or loss caused by or in connection with the use of or reliance on any such content, goods, or services that are available on or through such sites or resources.

Sun Welcomes Your Comments

Sun is interested in improving its documentation and welcomes your comments and suggestions. You can submit your comments by going to:

`http://www.sun.com/hwdocs/feedback`

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

Sun Fire High-End Systems Software Overview Guide, part number 819-4658-10

CHAPTER 1

Introduction to Sun Fire High-End Software

Sun Fire high-end systems are members of the Sun Fire high-end server system family known collectively as the Sun Fire E25K/E20K/15K/12K systems. Sun Fire high-end system software, System Management Services (SMS) 1.6, runs on the server domains and system controllers (SCs) with the Solaris Operating System (Solaris OS). See Chapter 4 for more information about the Solaris OS.

A Sun Fire high-end system is often referred to as the *platform*. System boards within the platform can be logically grouped together into separately bootable systems called *dynamic system domains*, or simply *domains*. Up to 18 domains can exist simultaneously on a single platform for Sun Fire E25K and 15K systems; up to 9 domains can exist on the Sun Fire E20K and 12K systems.

The system controller (SC) in the Sun Fire high-end system provides critical services and resources required for the operation and control of a Sun Fire system. SMS software installed on the SC provides for control and monitoring of the domains, as well as the platform itself. SMS provides a command-line interface (CLI) for the various functions and features it contains. SMS software is factory-installed on new systems, and users of pre-existing systems are encouraged to upgrade. See Chapter 5 for more information about SMS software.

An alternative graphical user interface (GUI) for many of the commands in SMS is provided by Sun Management Center software. See Chapter 7 for more information about Sun Management Center software.

Dynamic reconfiguration (DR) software enables you to reconfigure a domain dynamically, so that currently installed system boards can be logically attached to, or detached from, the operating system, while the domain continues running in multiuser mode. A system board can be physically swapped in and out when it is not attached to a domain, even while the system continues running in multiuser mode. See Chapter 6 for more information about dynamic reconfiguration software.

New Features

SMS 1.6 provides support for the following new features:

- Solaris 10 OS on both domains and SCs
- Solaris™ Security Toolkit 4.2
- UltraSPARC® IV+ 1800 MHz processors
- System firmware version 5.20
- Availability Feature Set 2 (FS-2) support (requires Solaris 10 5/06 software)
- PCI-X support

CHAPTER 2

Sun Fire High-End Systems Software Documentation Set

Sun Fire high-end systems software documentation contains three categories of documents:

- Usage, reference, installation, and release note documents for software that runs only on Sun Fire high-end systems. This category includes System Management Services (SMS) software documents.
- Sun software documentation that applies to other systems and workstations as well as to Sun Fire high-end systems. This category includes Solaris OS usage, reference, installation, and release documents, as well as individual man page commands.
- Documentation for Sun software products that run on other Sun hardware platforms but require additional information and instructions when running on Sun Fire high-end systems. This category includes Sun Management Center software documents.

In addition, some hardware and service documents are shipped with the Sun Fire high-end systems hardware. Two of these, the *Sun Fire 15K/12K System Site Planning Guide* and the *Sun Fire E25K/E20K System Site Planning Guide*, contain preinstallation checklists that include necessary steps for allocating a range of Internet Protocol (IP) addresses to be used by Management Network software.

Audience for This Document Set

Sun Fire high-end systems are used in mission-critical data centers. The intended audience for the Sun Fire high-end systems software documentation set is experienced system administrators who configure and maintain these high-end systems.

Sun Fire high-end system administrators should be able to qualify as Sun-Certified System Administrators for the Solaris OS and as Sun-Certified Network Administrators for the Solaris OS. These certifications, available from Sun Microsystems, are for system administrators responsible for performing essential system administration procedures on the Solaris OS, and for technical application support staff responsible for administering a networked system running the Solaris OS.

Sun Microsystems publishes guidelines to help you understand the certification process. The guidelines contain the following information needed to learn how to prepare and register for Solaris OS certification examinations:

- Certification requirements
- Examination details
- Supporting courseware
- Testing objectives

For these guidelines and more information about the certification process, click the Certification link at:

`http://suned.sun.com`

Certification often accompanies coursework, and Sun Fire high-end system administrators should be familiar with the contents of the standard Sun Educational Services courses in Solaris OS administration and network administration, especially:

- The Solaris Operating System Administrator I course, which provides information about the essential tasks of standalone installation, file system management, backup procedures, process control, user administration, and device management.
- The Solaris Operating System Administrator II course, which provides students with the skills necessary to administer Sun systems running Solaris software in a network environment. Students are taught how to maintain Sun systems, configure and troubleshoot NFS, and configure the Network Information Service (NIS) environment.
- The Solaris Operating System TCP/IP Network Administration course, which teaches students the advanced administration skills required to plan, create, administer, and troubleshoot a local area network (LAN). This course provides hands-on experience with network planning, configuration, and troubleshooting, as well as Internet Protocol (IP) routing, Domain Name Service (DNS), and Dynamic Host Configuration Protocol (DHCP).

For more information about these courses and their contents, look for Solaris OS courses at:

`http://suned.sun.com/`

Because some system administration procedures are delegated to operators who may be less familiar with the Solaris OS and with Sun Fire high-end systems, step-by-step procedures such as installation and configuration are written more simply, with a single step for each action the operator must take, and ample examples of the messages the operator will see after these steps.

Where to Find Information About Sun Fire High-End System Software

The software documentation for Sun Fire high-end systems includes user guides, reference manuals (including individual man pages that can be viewed separately using the `man` command), installation guides, release notes, and README files.

For production software releases, these software documents are also available on the Sun Microsystems Web site. You can navigate to them by clicking the High-End Servers link at:

`http://www.sun.com/products-n-solutions/hardware/docs/Servers/`

Solaris OS Information

Refer to the Solaris OS installation documents and release notes included in your Solaris OS media kit for installing or upgrading the Solaris OS on any Sun Fire high-end system domains.

SMS Software Information

Refer to the *System Management Services (SMS 1.6) Administrator Guide* for platform administration information.

Refer to the *System Management Services (SMS 1.6) Reference Manual,* and the individual SMS man pages it contains, for information about individual SMS command usage and syntax.

Refer to the *System Management Services (SMS 1.6) Installation Guide* for upgrading or reinstalling SMS software on a main or spare system controller.

Dynamic Reconfiguration Software Information

Refer to the *Sun Fire High-End and Midrange Systems Dynamic Reconfiguration User Guide* to perform DR operations from the system controller as a platform administrator.

Refer to the `cfgadm`(1M) and `dr`(7) man pages for the usage and syntax of DR operations performed while logged in to an individual domain.

Refer to the *Sun Management Center 3.5 Version 6 Supplement for Sun Fire High-End Systems* for information about performing DR and other system management operations in the Sun Management Center environment.

Sun Management Center Software Information

Refer to the *Sun Management Center Software User's Guide* and *Sun Management Center 3.5 Version 6 Supplement for Sun Fire High-End Systems* for information about using Sun Management Center on Sun Fire high-end systems.

Refer to the *Sun Management Center Software Installation Guide, Sun Management Center 3.5 Version 6 Supplement for Sun Fire High-End Systems*, and *Sun Management Center Software Release Notes* for information about installing, upgrading, or configuring Sun Management Center software on Sun Fire high-end systems.

Refer to the *Sun Management Center 3.5 Version 6 Supplement for Sun Fire High-End Systems* for information about performing DR and other system management operations in the Sun Management Center environment.

For more information about Sun Management Center and the other platforms it supports, or to download the software or the documentation, refer to the Sun Management Center Web site at:

`http://www.sun.com/sunmanagementcenter/`

CHAPTER 3

Security

SMS 1.6 software provides support for Solaris Security Toolkit 4.2, which is downloaded automatically with installations of SMS 1.6. Security options for a system (secure by default or secure by choice) depends upon whether the SMS software is installed fresh or as an upgrade.

Secure By Default

If the SMS version is a fresh install, the `smsinstall` command is used and automatic hardening is accomplished as a function of the installation process (secure by default). Refer to the *System Management Services (SMS) 1.6 Administrator Guide* for more information.

Secure By Choice

If the installation is an upgrade, automatic system hardening does not occur. In this instance, the `smsupgrade` command is used. Solaris Security Toolkit software is downloaded as part of the SMS zip file and can then be used to harden, undo hardening, and audit the security posture of a system (secure by choice). Refer to the *System Management Services (SMS) 1.6 Administrator Guide* for more information.

CHAPTER 4

Solaris Operating Systems for Sun Fire High-End Systems

A Sun Fire high-end system can be divided into dynamic system domains. These domains are based on system board slots that are assigned to the domains. Each domain is electrically isolated into hardware partitions, which ensures that any failure in one domain does not affect the other domains in the system.

The Sun Fire high-end systems run the Solaris 8, 9, or 10 OS on their domains and Solaris 9 or 10 OS on the system controllers (SCs).The Solaris OS offers the best of UNIX-class reliability, availability, and serviceability at a fraction of the cost of mainframe operating systems.

The Solaris OS provides:

- Stability, high performance, capacity, and precision
- 32- and 64-bit operating environments
- Easy-to-use tools
- High quality and reliability
- Integrated graphics with industry-standard API support
- Over 12,000 leading technical and business applications

CHAPTER 5

System Management Services (SMS 1.6) Software

SMS 1.6 software supports Sun Fire high-end system domains that are running the Solaris OS. The commands provided with the SMS software can be used remotely.

SMS software enables the platform administrator to perform the following tasks:

- Administrate domains by logically grouping domain configurable units (DCU) together. DCUs are system boards, such as CPU and I/O boards. Domains are able to run their own operating systems and handle their own workloads.
- Dynamically reconfigure a domain so that currently installed system boards can be logically attached to or detached from the operating system while the domain continues running in multiuser mode. A system board can be physically swapped in and out when it is not attached to a domain, even while the system continues running in multiuser mode.
- Perform automatic dynamic reconfiguration of domains using a script.
- Monitor and display the temperatures, currents, and voltage levels of one or more system boards or domains.
- Monitor and control power to the components within a platform.
- Execute diagnostic programs such as power-on self-test (POST).

Features provided in the SMS software are:

- Dynamic system domain (DSD) configuration
- Configured domain services
- Domain control capabilities
- Domain status reporting
- Automatic diagnosis and domain recovery
- Hardware control capabilities
- Hardware status monitoring, reporting, and handling
- Hardware error monitoring, reporting, and handling
- System controller (SC) failover
- Configurable administrative privileges
- Ability to allocate, activate, and monitor additional processing resources through the Capacity on Demand (COD) option

New features added with the 1.6 release are:

- Support for Solaris 10 OS on domains and SCs
- Support for Solaris Security Toolkit 4.2
- UltraSPARC™ IV+ 1800 MHz processors
- System firmware version 5.20
- Support for the Availability (AVL) Feature Set 2 functionality (requires Solaris 10 5/06 software)
- Support for hsPCIX boards

System Architecture

SMS software uses a distributed client-server architecture. The `init`(1M) command starts, and restarts as necessary, one process: `ssd`(1M). The `ssd` command is responsible for monitoring all other SMS processes and restarting them as necessary.

The Sun Fire high-end platforms, the SCs, and other workstations communicate over Ethernet. You perform SMS operations by entering commands on the SC after remotely logging in to that SC from another workstation on the local area network. You must log in as a user with the appropriate platform or domain privileges if you want to perform SMS operations, such as monitoring and controlling the platform.

Dual system controller boards are supported within the Sun Fire high-end systems. One board is designated as the primary or main SC, and the other is designated as the spare SC. If the main system controller fails, the failover capability automatically switches to the spare system controller.

SMS Administration Environment

Administration tasks on the Sun Fire high-end systems are secured by group privilege requirements. Upon installation, SMS installs the following UNIX groups to the `/etc/group` file.

- `platadmn` identifies a platform administrator.
- `platoper` identifies a platform operator.
- `platsvc` identifies a platform service.
- `dmn[`*A...R*`]admn` - domain [*domain_id* | *domain_tag*] identifies the administrator of one of the eighteen available domains.
- `dmn[`*A...R*`]rcfg` - domain [*domain_id* | *domain_tag*] identifies the configurator of one of the eighteen available domains.

Management Network

One of the system controller's main functions is to provide administration services for the Sun Fire high-end systems platform and its domains. The Sun Fire high-end systems Management Network (MAN) is a combination of hardware and software providing the network architecture by which such administration services are delivered.

The primary services provided by the Management Network include:

- Domain consoles
- Message logging
- Time synchronization
- Dynamic reconfiguration
- Network boot and Solaris installation
- System controller heartbeats

Access to the Management Network is restricted to the SC and the domains in the platform. No external IP traffic should be routed across the Management Network.

Capacity on Demand

Sun Fire high-end systems are configured with a specific number of processors (CPUs) that reside on CPU/Memory boards. These boards are purchased as part of initial system configurations or as add-on components. The purchase of the boards includes the right to use the CPUs on those boards.

The Capacity on Demand (COD) option provides additional processing resources that you pay for as you use them. Through the COD option, you receive and install unlicensed CPU/Memory boards. These boards, which are identified as COD CPU/Memory boards, contain four CPUs. However, you do not have the right to use the CPUs on COD CPU/Memory boards until you also purchase the COD right-to-use (RTU) licenses for them. The purchase of a COD RTU license entitles you to receive a license key, which enables the appropriate number of COD processors.

Sun Fire high-end systems can have any combination of active CPU/Memory boards and COD CPU/Memory boards, up to the maximum capacity allowed for the system. There must be at least one active CPU for each domain in a system.

Contact your Sun sales representative or authorized Sun reseller to purchase COD CPU/Memory boards and the appropriate number of COD RTU licenses. After the COD CPU/Memory boards are installed, use the SMS software to allocate COD RTU licenses, activate COD CPUs, and monitor the COD CPUs used.

For More Information

See "Audience for This Document Set" on page 3 to determine which documents to read for more information about SMS software.

CHAPTER 6

Dynamic Reconfiguration Software for Sun Fire High-End Systems

Dynamic reconfiguration (DR) software running on the Sun Fire high-end systems enables you to perform hardware configuration changes to a live domain that is running the Solaris OS.

You can perform DR operations from the SC or from an individual domain.

You can perform DR operations from the SC using the `addboard`(1M), `moveboard`(1M), `deleteboard`(1M), and `rcfgadm`(1M) SMS commands.

Dynamic reconfiguration software also enables you to hot-plug system boards without bringing the system down. It is used to deconfigure the resources on a faulty system board from a domain so that the system board can be removed from the system. The repaired or replacement board can then be inserted into the domain while the Solaris OS is running.

DR software then configures the resources on the board into the domain. If you use the DR feature to add or remove a system board, DR always leaves the board in a known configuration state.

System boards include:

- CPU/Memory boards
- HPCI I/O boards
- HPCI+ I/O boards
- WCI boards
- MCPU boards

System Board Slots and Logical Domains

Domain configuration for Sun Fire high-end systems is determined by the domain configuration in the platform configuration database (PCD), which resides on the SC. The PCD controls how the system board slots are logically partitioned into domains. Thus, the configuration can include empty slots and populated slots.

The physical domain is determined by the logical domain. The logical domain is the set of slots that belong to the domain. The physical domain is the set of boards that are physically interconnected. A slot can be a member of a logical domain without having to be part of a physical domain.

The number of slots available to a given domain is controlled by an available component list maintained on the system controller. A slot must be assigned or available to a domain before you can use a `cfgadm`(1M) command to change its state.

After a slot has been assigned to a domain, it becomes visible to that domain and unavailable and invisible to any other domain. Conversely, you must unassign and disconnect a slot from its domain before you can assign and connect it to another domain.

After the domain is booted, the system boards and the empty slot can be assigned to or unassigned from a logical domain. However, they are not allowed to become a part of the physical domain until the operating system requests it.

System board slots that are not assigned to any domain are available to all domains. These boards can be assigned to a domain by the platform administrator; however, an available component list can be set up on the SC to allow users with appropriate privileges to assign available boards to a domain.

DR Administration Models

The available component list controls what administrative tasks can be performed, based on the name and group identification of the user. For instance, the platform administrator can add, delete, or move boards to or from a domain, as well as assign and unassign boards to or from a domain. However, the domain administrator or a domain configurator cannot assign or unassign boards to or from a domain.

SC State Models

On the SC for a Sun Fire high-end system, a board can be in one of four states: `unavailable`, `available`, `assigned`, or `active`. You can use the `showboards`(1M) command to view the state of a specific board. You must have appropriate privileges for the specified domain. Unavailable boards cannot be viewed by the domain administrator. Only the platform administrator can see every board in the system.

The names and descriptions of the states for boards on the SC are described in the sections that follow. The state of a board on the SC is not the same as the state of a board on the domain.

`unavailable`

The board is unavailable to the domain. This means that the board has not been added to the available component list for the specified domain or that the board is currently assigned to another domain. Note that boards that are not in the available component list are invisible to the domain. In the unavailable state, the board is not considered part of the specified domain.

`available`

The board is available to be added to the domain. This means that the board is in the available component list for the domain. Note that the board can be available to any number of domains. In the available state, the board is considered to be part of the logical domain.

`assigned`

The board has been assigned to the domain, which means that the board is in the available component list for that domain and that it is unavailable to any other domain. In the assigned state, the board is considered to be part of the physical domain.

active

The board has been connected or the board has been connected and configured into the Solaris OS and is available for use by the operating system. In the active state, the board is considered part of the physical domain.

DR on I/O Boards

You must use caution when you add or remove system boards with I/O devices. Before you can remove a board with I/O devices, all its devices must be closed and all its file systems must be unmounted.

If you need to remove a board with I/O devices from a domain temporarily and then add it back before any other boards with I/O devices are added, reconfiguration is not necessary and need not be performed. In this case, device paths to the board devices remain unchanged. But if you add another board with I/O devices before the first board has been put back, reconfiguration is required because the paths to devices on the first board have changed.

Automatic DR

Automatic DR enables an application to execute DR operations without requiring user interaction. This ability is provided by an enhanced DR framework that includes the reconfiguration coordination manager (RCM) and the `sysevent` system event facility. The RCM enables application-specific loadable modules to register callbacks. The callbacks perform preparatory tasks before a DR operation, error recovery during a DR operation, and cleanup after a DR operation.

The system event framework enables applications to register for system events and receive notifications of those events. The automatic DR framework interfaces with the RCM and with the system event facility to enable applications to automatically give up resources prior to unconfiguring them, and to capture new resources as they are configured into the domain.

The automatic DR framework can be used locally from the domain by using the `cfgadm`(1M) command, or from the SC. The automatic DR operations that are initiated locally on the domain are referred to as local automatic DR, and the automatic DR operations initiated from the SC are referred to as global automatic

DR. The global automatic DR operations include moving system boards from one domain to another, configuring hot-plugged boards into a domain, and removing system boards from a domain.

For More Information

See "Dynamic Reconfiguration Software Information" on page 6 to determine which documents to read for more information about Dynamic Reconfiguration software.

CHAPTER 7

Sun Management Center Software for Sun Fire High-End Systems

Sun Management Center software easily integrates into heterogeneous IT environments and scales from a single system to thousands of systems and desktop systems. Sun Management Center software is an open, extensible system monitoring and management application that uses Java™ software and the Simple Network Management Protocol (SNMP) to provide an integrated and comprehensive enterprise-wide management of Sun products and their subsystems, components, and peripheral devices.

Sun Management Center offers a single point of management for Sun systems and storage components, for the Solaris OS, and for applications running on the Solaris OS. With Sun Management Center software, organizations can deliver monitoring and management capabilities that optimize performance, enhance application availability, and simplify management of the IT environment.

Sun Management Center Add-On Sun Fire High-End Software Packages

The add-on software packages for Sun Fire high-end systems provide support for the Sun Fire E25K/E20K and Sun Fire 15K/12K platforms and domains. For the Sun Fire E25K/E20K and Sun Fire 15K/12K platforms, hardware configuration information resides on both system controllers and on each of the individual Sun Fire high-end platform domains. Hardware configuration information, process monitoring, and management operations for the Sun Fire high-end system are provided by Sun Fire high-end agent modules.

Sun Management Center software provides the only graphical user interface (GUI) available for monitoring and managing Sun Fire high-end systems. Sun Management Center software also provides flexible integration with most major enterprise management software packages.

Features of Sun Management Center Software

- It manages thousands of Sun systems.
- Its three-tier architecture provides a single point of management.
- The Java GUI offers a common look and feel.
- It can be integrated with leading third-party vendors to address enterprise-wide, heterogeneous environments.
- The Sun Management Center Developer Environment enables you to create and modify customized modules.
- Grouping of objects provides an easy way to define and invoke complex tasks on a set of managed objects.
- Enhanced alarm management and predictive failure analysis increase system availability.
- Comprehensive online hardware diagnostic testing identifies faults before the system is affected.
- A web-based interface simplifies administration.
- A GUI module builder provides a powerful, easy-to-use interface for developing custom modules.
- New filtering capabilities help pinpoint problems quickly, even in systems with thousands of objects or nodes.
- Secure management controls enable dynamic reconfiguration and domain management through an easy-to-use GUI.

Sun Management Center Software Pricing

Sun offers its Sun Management Center base package free of charge and downloadable from the Web. This package enables you to manage an unlimited number of nodes, and is sufficient to perform monitoring and management of Sun Fire high-end systems.

The Advanced Systems Monitoring and Premier Management Applications packages are licensed per node or per Solaris OS image.

For More Information

See "Audience for This Document Set" on page 3 to determine which documents to read for more information about Sun Management Center software.