



Sun™ Management Center 3.0 Supplement for Workgroup Servers

Platform Update 4

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Sun Management Center 3.0 Supplement for Workgroup Servers

Sun™ Management Center 3.0 Platform Update 4 for Workgroup Servers software is an extension to the Sun Management Center 3.0 release. This extension enables you to monitor and manage supported workgroup server systems, including all Sun servers below midrange servers.

This document describes installation and set-up concerns, as well as enhancements and bug fixes, that are particular to the workgroup server supplement. For information about using or installing core Sun Management Center software, see the *Sun Management Center 3.0 Software User's Guide*, and the other documents accompanying the core product software.

What's Included In This Supplement

This supplement includes workgroup server specific packages. An installation program and a setup script are provided for installing, updating, and configuring the workgroup server specific packages. See "About the Installation Process" on page 8 and "About the Setup Script" on page 9.

Note – Your media may also include patches to the core Sun Management Center software. These must be installed manually, as described in the release notes. (See `rel_notes.pdf` located in the directory `Doc/rel_notes_pu` on the platform update CD.)

About the Workgroup Server Packages

Sun Management Center 3.0 workgroup server packages correspond to the server and agent architectural layers of the Sun Management Center 3.0 product.

TABLE 1 Workgroup Server Packages in Sun Management Center 3.0 Supplement

Package Name	Layer	Description
SUNWeswgs	Server layer	Provides libraries and other files needed by the Sun Management Center 3.0 server to monitor and control supported workgroup server systems. This software must be installed on all systems configured to be Sun Management Center 3.0 servers. This package must be installed in addition to the core Sun Management Center 3.0 server software.
SUNWeswga	Agent layer	Provides libraries and other files needed by the Sun Management Center 3.0 agent to monitor supported workgroup server systems. This software, in addition to the core Sun Management Center 3.0 agent software, must be installed on all workgroup server systems that Sun Management Center 3.0 will monitor.

Recommended Patches

There are recommended Solaris software patches available for the Sun Management Center 3.0 application. You can download the patches from <http://sunsolve.sun.com> (if you have a Sun service contract), or from the Sun Management Center product web site at <http://www.sun.com>. Refer to TABLE 17 on page 20 for a list of these patches, and for the corresponding hardware and Solaris software versions for each patch.

For more information on the patches for Sun Management Center, refer to the *Sun Management Center 3.0 Software Release Notes*.

Supported Systems and Environments

The following workgroup, desktop and storage systems are supported in this Platform Update 4 release:

Sun Ultra 2	Sun Enterprise 420R
Sun Enterprise™ 2	Sun Ultra 450
Sun Ultra 5	Sun Enterprise 450
Sun Enterprise 5s	Sun Fire™ 280R
Sun Ultra 10	Sun Fire V480
Sun Enterprise 10s	Sun Fire 880
Sun Enterprise 220R	Sun Filer™ N8200
Sun Enterprise 250	Sun Filer N8400

The following operating environments are supported:

Solaris™ 2.5.1 (agent only)	Solaris 7 (32-bit and 64-bit versions)
Solaris 2.6	Solaris 8

Hardware Monitoring and Alarm Support for Workgroup Server Platforms

Sun Management Center provides differing levels of monitoring and alarm support for various hardware features of workgroup server platforms. For instance, Sun Management Center can monitor some hardware features, but not others. Similarly, you can set an alarm for some hardware features, but not others. Finally, Sun Management Center includes pre-defined alarms for selected hardware features.

TABLE 2 summarizes monitoring and alarm support for workgroup server platforms. The key to this table is as follows:

- x — This hardware feature is not applicable to this platform
- n — This hardware feature cannot be monitored due to system design limitations
- M — Sun Management Center lets you monitor this hardware
- A — Sun Management Center lets you set an alarm for this hardware
- P — Sun Management Center includes a pre-defined alarm for this hardware

TABLE 2 Workgroup Server Platform Monitoring and Alarm Support

Component	U2	U5/10	220R	250	420R	450	280R	V480	880
CPU units	P	P	P	P	P	P	P	P	P
CPU temperature	n	n	n	M	n	M	P	P	P
DIMMs/SIMMs	M	M	M	M	M	M	M	M	M
I/O controllers	M	M	M	M	M	M	M	M	M
I/O devices	M	M	M	M	M	M	M	M	M
Disk Devices	A	A	A	A	A	A	A	A	A
Network devices	A	A	A	A	A	A	A	A	A
Tape devices	AP	AP	AP	AP	AP	AP	AP	AP	AP
CPU/memory modules ¹	x	x	x	x	x	x	x	M	M
EEPROM devices ²	x	x	x	x	x	x	M	M	M
Power supplies	n	n	n	A	n	A	A	A	A
Fans	n	n	n	A	n	A	A	A	A
Memory controller	n	n	n	M	n	M	n	n	n
Memory banks	n	n	n	M	n	M	n	n	n
Power supply fans	n	n	n	x	n	M	n	n	n
Keyswitch	x	x	n	A	n	A	A	A	A
Temperature sensors	x	x	x	n	x	n	A	A	A
Remote System Control (RSC)	x	x	x	M	x	x	n	M	M
Activity LED	x	x	n	A	n	A	A	A	A
General error LED	x	x	n	A	n	A	A	A	A
Power supply LEDs	x	x	n	A	n	A	A	A	A
Power supply error LED	x	x	n	A	n	A	n	n	n
Temperature warning LED	x	x	x	A	x	A	n	n	x
Disk error LED	x	x	x	x	x	x	n	n	A

TABLE 2 Workgroup Server Platform Monitoring and Alarm Support (Continued)

Component	U2	U5/10	220R	250	420R	450	280R	V480	880
Disk LEDs	x	x	x	n	x	A	A	A	A
Service LEDs	x	x	x	n	x	n	x	A	A
Fan LEDs	x	x	n	x	n	x	A	A	A
CPU LEDs	x	x	n	x	n	x	A	x	A
PCI LEDs	x	x	n	x	n	x	A	x	A

1 — This feature applies only to platforms on which CPU and memory have been integrated into a single unit.

2 — These are miscellaneous EEPROM devices for hardware components that are not otherwise monitored. Components that have EEPROMs and are monitored show that EEPROM information in their device tables. EEPROM devices provide component manufacturing information.

A Note to Desktop System Customers

The Sun Management Center installation program previously allowed you to install either workgroup server or desktop (workstation) versions of Sun Management Center software on certain Sun platforms:

Sun Ultra 2	Sun Ultra 10
Sun Enterprise 2	Sun Enterprise 10s
Sun Ultra 5	Sun Ultra 450
Sun Enterprise 5s	Sun Enterprise 450

As of Platform Update 4, the installation program no longer displays this prompt:

Do you want to install the WorkgroupServer addon?

Rather than prompting you to choose between the workgroup server or desktop versions of the software, the Sun Management Center installation program automatically installs workgroup server versions of the software. This new software provides additional bug fixes and more features than the older desktop software.

Disk Space Requirements

The Sun Management Center 3.0 core packages have significant disk space requirements. The workgroup server specific supplement packages add to these requirements only very modestly, as TABLE 3 shows.

TABLE 3 Disk Space Requirements

Component	Core Product	Workgroup Server Supplement
Agent packages	40 Mbytes (<i>estimated</i>)	1 Mbyte
Server packages	780 Mbytes (<i>estimated</i>)	3–4 Mbytes
Console packages	70 Mbytes (<i>estimated</i>)	none

The core product disk space estimates are subject to change. For exact requirements, refer to the *Sun Management Center 3.0 Software Installation Guide*.

About the Installation Process

You run the same Sun Management Center 3.0 Platform Update 4 installation program to install or upgrade any Sun Management Center components on any system. Following installation, you must run a setup script to configure the software properly.

The installation program provides an interactive list of questions that guides you through the installation procedure. Before beginning the installation process, you should know which systems in your network will function as servers and consoles, and which systems will be configured only as agents to be monitored by the servers and consoles.

When you run the installation program, it checks the system hardware and software environment. If it does not find a previously installed version of Sun Management Center software, the installation program prompts you to choose whether to install the latest Sun Management Center core packages and add-on products. If the installation program finds any previously installed workgroup server packages, it prompts you to choose whether to remove those older packages and replace them with newer versions.

Note – Core Sun Management Center packages are treated differently from workgroup server packages. The installation program does not automatically update the former. To update core packages, you must apply the appropriate patches as discussed in the release notes.

For complete Sun Management Center 3.0 core software installation instructions, please refer to the documentation provided with your Sun Management Center 3.0 Platform Update 4 media, or consult the Sun Management Center 3.0 web site, www.sun.com/sunmanagementcenter.

About the Setup Script

After the Sun Management Center 3.0 packages are installed, the installation program asks you if you want to run the setup script. You must run this script to configure the newly installed software before you can use it.

You can run the setup script immediately after installation by answering Yes [y] to the installation program prompt, or you can run it at a later time by going to the Sun Management Center 3.0 directory `/opt/SUNWsymon/sbin` and typing the command `./es-setup`.

Should I Run the Setup Script Now or Later?

How long the setup script takes to configure newly installed Sun Management Center components depends on what components you've installed. See TABLE 4 for details.

TABLE 4 Time Required by the Setup Script

If You've Installed This Component...	Then the Setup Script Takes...
Agent only	Under a minute
Console only	Under a minute
Server only	Twenty minutes, approximately. If this is a first-time install of server components, the setup script prompts you to reboot the system before configuring the software.
Combination of components	Add up the times required for the individual components

Preparing for Installation of the Localization Packages

If you are currently using a localized environment installed from a release earlier than Platform Update 4, you need to remove the older localization packages manually (see TABLE 5) before installing the newer versions included with this release. Follow the steps described below.

TABLE 5 Localization Packages To Be Removed

Package Name	Description
SUNWfeswg	French Sun Management Center Server Layer for Workgroup Servers
SUNWdeswg	German Sun Management Center Server Layer for Workgroup Servers
SUNWieswg	Italian Sun Management Center Server Layer for Workgroup Servers
SUNWeeswg	Spanish Sun Management Center Server Layer for Workgroup Servers
SUNWjeswg	Japanese Sun Management Center Server Layer for Workgroup Servers
SUNWkeswg	Korean Sun Management Center Server Layer for Workgroup Servers
SUNWceswg	Simplified Chinese Sun Management Center Server Layer for Workgroup Servers
SUNWheswg	Traditional Chinese Sun Management Center Server Layer for Workgroup Servers

▼ To Remove Localization Packages

1. Check whether you have any localization packages listed in TABLE 5 already installed:

```
% pkginfo package_name package_name ...
```

2. If the `pkginfo` command displays information for any of the localization packages *without* an error message, become superuser with the `su -` command, and remove the package(s):

```
# pkgrm package_name package_name ...
```

Installing Localized Versions of the Supplement Software

To install the localization packages, perform the following steps *after* the installation of the English Sun Management Center 3.0 software is complete.

▼ To Install Localization Packages

1. Insert the Platform Update 4 CD (2 of 3) in the CD-ROM drive.
2. Open a command window and (if you are not already superuser) become superuser by using the `su -` command.
3. Change to the CD-ROM directory and type the following command:

```
# cd /cdrom/sun_management_center_3_0
```

4. From the `localization` directory, type the following command to run the installation script:

```
# ./es-inst-110n
```

Unsupported Modules

The Dynamic Reconfiguration module included in the Sun Management Center 3.0 product is not functional on workgroup server systems. Therefore, do not load the Dynamic Reconfiguration module on workgroup server agents.

Platform-Specific Notes

This section provides information that applies only to specific workgroup server machines.

Sun Enterprise 450 Expansion Drives

If you order or install either one or two 8-bay storage expansion kits for the Sun Enterprise 450 server, you must set the `disk-led-assoc` parameter from the `ok` prompt to obtain a physical view of the added disks. You must set this parameter even if the expansion backplane(s) and drives were installed in the factory. The *Ultra Enterprise 450 Server Owner's Guide* (part number 805-0429-10) explains how to install the 8-bay storage expansion kit, and how to set the parameter. See the end of the section "How to Install the 8-Bay Storage Expansion Option."

The *Platform Notes: Ultra 450 Workstation and Ultra Enterprise Server* (PN 805-4452-10) also provide instructions on setting the parameter. The *Platform Notes* are available on the Solaris on Sun Hardware AnswerBook™, and they are also available on the `docs.sun.com` web site.

New Rules for Product Update 4

This section describes three different sets of rules:

- Config Reader Alarm Rules
- User Configurable Rules
- Rules Removed from Product Update 4

Config Reader Alarm Rules

This section describes the alarm rules for the Config Reader module. You cannot change the limits for these rules. The system provides a message with the alarms telling what the current property is and what the limit is.

Note – The Config Reader rules file is located at `/opt/SUNWsymon/modules/cfg/Config-Reader4uwg-d.rul` by default. If you installed the Sun Management Center software to a location other than `/opt/SUNWsymon`, you can find the rules file in the path `/modules/cfg/Config-Reader4uwg-d.rul` in the directory where you installed the software.

DIMM Status is not OK (rcr4u200)

This alarm reads DIMM status from the i2c bus and generates an alarm if any DIMM has a faulty status.

Recommended Action: Replace the DIMM (or entire bank of DIMMs, on the Sun Fire V480 and Sun Fire 880).

TABLE 6 Workgroup Server Config Reader DIMM Error Status Rule

Current Threshold	Alarm Level	Meaning
Not OK or ok	Alert	DIMM has failed

Power Supply State is Not OK (rcr4u203)

This alarm reads the status of the power supply from the i2c bus, and generates an alarm if any power supply has a faulty status.

Recommended Action: If the power supply is unplugged, plug it in. If the power supply or the fan has failed, replace the failed component.

TABLE 7 Workgroup Server Config Reader Power Supply Error Status Rules

Current Threshold	Alarm Level	Meaning
Not OK or ok	Alert	Power supply or fan has failed, or power supply is unplugged

Fan Status is Not OK (rcr4u204)

This alarm reads the status of the fan from the i2c bus, and generates an alarm if any fan in the system has a faulty status.

Recommended Action: Replace the fan.

TABLE 8 Workgroup Server Config Reader Fan Status Rules

Current Threshold	Alarm Level	Meaning
Not OK or ok	Alert	Fan has failed

CPU Status Rules (rcr4u207)

This alarm reads the status of the CPU from the processor_info(2) command and reports an error if the CPU is not online or if its status is not OK.

Recommended Action: If the CPU is offline, use the `psradm` command to place it back online. If the CPU has failed, replace it. (On the Sun Fire V480 or Sun Fire 880, replace `cpu-memory-module`.)

TABLE 9 Workgroup Server Config Reader CPU Status Rules

Current Threshold	Alarm Level	Meaning
Not online, OK, or noncritical	Alert	CPU is offline or it has failed.

UltraSPARC I/II/III ECC Correctable Errors (rcr4u209, rcr4u212)

This alarm monitors `/var/adm/messages` and waits for incoming log messages. If a logged error matches the alarm, the error count of the faulty DIMM is incremented and the alarm is closed immediately. To set an alarm on this count, use the user configurable rule `rcr4u234`. The logged errors indicate a faulty DIMM or bank of DIMMs.

Recommended Action: Replace the faulty DIMM. On the Sun Fire V480 or Sun Fire 880, replace the entire bank of DIMMs.

TABLE 10 Workgroup Server Config Reader ECC Correctable Error Rules

Current Threshold	Alarm Level	Meaning
<code>rcr4u209</code> : A string is logged to <code>/var/adm/messages</code> .	Warning	A DIMM or bank of DIMMs has produced an error condition. The Solaris software has corrected the error.
<code>rcr4u212</code> : A string is logged to <code>/var/adm/messages</code> .		

NOTE: To view the syntax of the strings, view the Config Reader rules file as described in the following note.

Note – The Config Reader rules file is located at `/opt/SUNWsymon/modules/cfg/Config-Reader4uwg-d.rul` by default. If you installed the Sun Management Center software to a location other than `/opt/SUNWsymon`, you can find the rules file in the path `/modules/cfg/Config-Reader4uwg-d.rul` in the directory where you installed the software.

For more information on Rule `rcr4u234`, refer to “User Configurable Rules” on page 16.

Note – You should download and install the recommended patches discussed in TABLE 17. These patches improve memory error messages to be compatible with these rules. The patch you need depends on the version of Solaris software you are running as well as your hardware platform.

Tape Status Rules (rcr4u225)

This alarm monitors the tape device and reports when the open value of the tape drive shows that the tape drive is offline, or that no tape is loaded in the drive. The alarm is based on the fan status property.

Recommended Action: Check the tape drive, especially physical connections, and make sure a tape is loaded into the drive.

TABLE 11 Workgroup Server Config Reader Tape Status Rules

Current Threshold	Alarm Level	Meaning
The return value of open is EIO	Alert	The tape drive is offline or has no tape loaded.

Temperature Error Rules (rcr4u230)

The temperature sensor reads both the current temperature and the temperature threshold from the i2c bus. It generates an alarm when the current temperature value is either above or below the threshold.

Recommended Action: There are many causes of temperature failure.

TABLE 12 Workgroup Server Config Reader Temperature Error Rules

Current Threshold	Alarm Level	Meaning
Current temperature is above or below the thresholds for warning and shutdown	Alert	The system has a heat problem. Some possible causes include a failed fan or a too-high ambient temperature.

Device Added or Removed Rules (rcr4u233)

The Config Reader takes “snapshots” of the device tree every five minutes. If a device is added or removed between snapshots, the config reader reports an alarm.

Recommended Action: If a device was added or removed unintentionally, add or remove it again both physically and logically.

TABLE 13 Workgroup Server Config Reader Device Rules

Current Threshold	Alarm Level	Meaning
The alarm condition happens when a device is added to or removed from the device tree.	Caution	A device was added or removed.

User Configurable Rules

This section discusses the user configurable rules. You use these rules to specify threshold values for errors that the Config Reader logs, and then generate an alarm when the number or rate of errors has been exceeded.

Error Rate and Count Alarm (rcr4u234)

In places where the Config Reader counts errors (refer to TABLE 15), you may configure alarms based on either the count of errors or the rate of errors. The rate of errors is calculated in errors per minute.

TABLE 14 Workgroup Server Config Reader Error Rate and Count Alarm Rules

Current Threshold	Alarm Level	Meaning
The default threshold is -1, which will never generate an alarm.	Alert	Either of the user-specified thresholds has been exceeded.

The following table lists the user configurable rules Refer to the *Sun Management Center 3.0 User's Guide* for more information about these rules and the Type fields.

TABLE 15 User Configurable Rules

Table	Element	Type	Alarm Condition
cpu-fans	speed	INTHILO	Fan speed is above or below user-specified threshold
keyswitch	position	STRINGNE	Keyswitch value does not equal user-specified value
active-led	state	STRINGNE	led value does not equal user-specified value
disk-error-led	state	STRINGNE	led value does not equal user-specified value
gen-error-led	state	STRINGNE	led value does not equal user-specified value
power-led	state	STRINGNE	led value does not equal user-specified value
ps-error-led	state	STRINGNE	led value does not equal user-specified value
temp-error-led	state	STRINGNE	led value does not equal user-specified value
disk-led	state	STRINGNE	led value does not equal user-specified value
fan-led	state	STRINGNE	led value does not equal user-specified value
cpu-led	state	STRINGNE	led value does not equal user-specified value
power-supply-led	state	STRINGNE	led value does not equal user-specified value

TABLE 15 User Configurable Rules

Table	Element	Type	Alarm Condition
disk devices	transport errors	rcr4u234	Rate of transport errors is above a user-specified number of errors per minute.
disk devices	hard errors	rcr4u234	Rate of hard errors is above a user-specified number of errors per minute.
disk devices	soft errors	rcr4u234	Rate of soft errors is above a user-specified number of errors per minute.
tape devices	transport errors	rcr4u234	Rate of transport errors is above a user-specified number of errors per minute.
tape devices	hard errors	rcr4u234	Rate of hard errors is above a user-specified number of errors per minute.
tape devices	soft errors	rcr4u234	Rate of soft errors is above a user-specified number of errors per minute.
network devices	input errors	rcr4u234	Rate of input errors is above a user-specified number of errors per minute.
network devices	output errors	rcr4u234	Rate of output errors is above a user-specified number of errors per minute.

Rules Removed from Product Update 4

The following table lists Workgroup Server Config-Reader rules that were removed from Product Update 4.

TABLE 16 Rules Removed from Product Update 4

Rule	Function	Reason Removed
rcr4u210	Hardware error on a disk	Outdated message; replaced by rcr4u234.
rcr4u211	Fatal error on disk	Outdated message; replaced by rcr4u234.
rcr4u214	Power failing	Not relevant to Workgroup Server platforms.
rcr4u216	CPU panic	Not relevant to Workgroup Server platforms.
rcr4u217	Tape error rate too high	Outdated message; replaced by rcr4u234.
rcr4u219	Disk taken offline	Outdated message; replaced by rcr4u233.
rcr4u220	Disk back online	Outdated message; replaced by rcr4u233.
rcr4u213	HotPlug removed	Nonexistent message; replaced by rcr4u233.
rcr4u215	HotPlug added	Nonexistent message; replaced by rcr4u233.
rcr4u224	HotPlug installed	Nonexistent message; replaced by rcr4u233.
rcr4u221	Redundant power event	Nonexistent message.
rpfa300	The count ECC of errors on a single SIMM exceeds a preset threshold.	Outdated message; partially replaced by rcr4u209/rcr4u212.
rpfa301	The count of disk recovered errors exceeds a preset threshold.	Outdated message; replaced by rcr4u234.
rpfa302	Disk soft errors from a SMART drive are recorded in <code>syslog</code> .	Not relevant to Workgroup Server platforms.

History of Platform Update Enhancements

The workgroup server packages provided with the Sun Management Center 3.0 Workgroup Server Supplement incorporate the enhancements shown below.

Platform Update 4

These enhancements were incorporated in the Platform Update 4 release.

■ Sun Fire V480 Support

The workgroup server packages provided with this release incorporate support for the new Sun Fire V480 workgroup server.

■ Improved Sun Fire 880 Physical View Images

The physical view images have been made sharper to better indicate LED status.

■ Launch Mechanism for Remote System Control (RSC)

You can now launch RSC directly from the Sun Management Center console's Tools menu. You can choose to run the RSC GUI (graphical user interface), or activate a telnet connection to connect to RSC.

■ Sun Filer N8200/N8400 Support

The workgroup server packages provided with this release incorporate support for platform hardware in the new N8200 and N8400 Sun Filer systems.

The following table lists the recommended patches for this update and the corresponding hardware and Solaris software versions.

TABLE 17 Recommended Patches

Patch	Revision Number	Solaris Software Version/Hardware Platform Supported	Description
103640	34	2.5.1	Improves memory error messages to be compatible with rule rcr4u209
105181	23	2.6	Improves memory error messages to be compatible with rule rcr4u209
106541	14	Solaris 7	Improves memory error messages to be compatible with rule rcr4u209
108528	04	Solaris 8/ UltraSPARC II	Improves memory error messages to be compatible with rule rcr4u209

TABLE 17 Recommended Patches

Patch	Revision Number	Solaris Software Version/Hardware Platform Supported	Description
108528	11	Solaris 8/ UltraSPARC III	Improves memory error messages to be compatible with rule rcr4u212
110460	08	Solaris 8/ UltraSPARC III	Picl/FRU updates NOTE: This patch is required on Sun Fire 280R platforms running Solaris 8, Update 3.
110849	07	Solaris 8/Sun Fire 880	Picl updates

Platform Update 2

This enhancement was incorporated in the Platform Update 2 release.

- **FRU SEEPROM Data Supported on the Sun Fire 280R**

Sun Management Center 3.0 Platform Update 2 displays field replaceable unit (FRU) SEEPROM data.

- **Localization Support**

All graphical interfaces provided by the workgroup server packages are now fully localized.

Platform Update 1

These enhancements were incorporated in the Platform Update 1 release.

- **Sun Fire 880 Server Support**

The workgroup server packages provided with this release incorporate support for the new Sun Fire 880 workgroup server.

- **Improved Functionality in Config-Reader Tables**

Config-Reader tables have been re-organized for improved usability in the browser. The improved data model properly supports group operations, dataviews, and the web-based interface. Note that group operations and dataviews may not function properly unless all clients and servers involved have been upgraded to Platform Update 1, 2, or 3.

History of Platform Update Bug Fixes

The workgroup server packages provided with the Sun Management Center 3.0 Workgroup Server Supplement incorporate the bug fixes shown below.

Platform Update 4

These bug fixes were incorporated in the Platform Update 4 release.

- **Config reader assert fails when ATAPI CD drive is present in the monitored system** [4395048]

Sun Management Center agent software previously failed on systems with ATAPI-based CD drives. Administrators would see an error message about being “unable to monitor” the system. This problem was tracked to a logical device naming conflict and has been fixed.

- **Disk is removed from system; picld sees event, but SunMC still lists the device** [4513512]

When a hot-plugged disk was removed from the system, the Config Reader and Browser still listed the disk as being present. This problem has been fixed.

Note – Occasionally, when disks are hot-plugged, the Total Disks field in the hardware summary may be incorrect. To correct this, you must become root and restart picld, by first typing the command `/etc/init.d/picld stop`, and then typing `/etc/init.d/picld start`.

Platform Update 2

These bug fixes were incorporated in the Platform Update 2 release.

- **Sun Fire 880 Displays Slot and FRU Information for Only Four DIMMs** [4458452]

On a Sun Fire 880 containing 8 DIMMs, Sun Management Center displayed slot and FRU information for only four of the DIMMs. With Platform Update 2, slot and FRU information is displayed for all eight DIMMs

- **DVD-ROM Drive Referred to as CD-ROM Drive on the Sun Fire 280R Server [4380383]**

Previously, the DVD-ROM drive was referred to as the CD-ROM drive on the Sun Fire 280R server. This problem is fixed. With Platform Update 2, Sun Management Center 3.0 refers to this drive as the CD/DVD-ROM drive.

- **Disk Properties Are Not Displayed on the Sun Fire 880 Server [4404426]**

On Solaris 8 SU4 (4/01), certain disk properties (including `port`, `disk target`, `node wwn`, and `port wwn`) were not displayed on the Sun Fire 880 server. Patch ID# 110460-06 fixes this bug. To obtain the patch, go to Sun's web site:

<http://www.sun.com/service/support/sunsolve/index.html>

The patch will not be necessary when running on Solaris 8 SU5 (7/01).

Platform Update 1

These bug fixes were incorporated in the Platform Update 1 release.

- **Config-Reader Aborts on an Ultra 10 or Ultra 10s With High-Density DIMMs [4407106]**

In prior releases, workgroup server and desktop agents would abort abruptly when running on a Sun Ultra 10 workstation or Sun Enterprise 10s server that contains high-density DIMMs. This bug is fixed.

- **Workgroup Server Static Config-Reader Fails on Older Platforms Running Solaris 8 6/00, 10/00 or 1/01 [4409159]**

Previously, a bug in the statically linked Config-Reader prevented Hardware Diagnostics Suite software from working on older workgroup server platforms running the Solaris 8 6/00, 10/00, or 1/01 operating environment. This problem, which is now fixed, affected the following systems:

Sun Enterprise 2	Sun Enterprise 250
Sun Enterprise 5s	Sun Enterprise 420R
Sun Enterprise 10s	Sun Enterprise 450
Sun Enterprise 220R	

- **Physical View of Sun Enterprise 450 Shows Incorrect Memory Slot Location [4273053]**

Prior to Platform Update 1, the physical view of a Sun Enterprise 450 server displayed incorrect memory slot locations. This problem is fixed.

- **Rule Descriptions for Config-Reader Are Displayed Incorrectly [4402478]**

Platform Update 1 fixes a bug involving the display of Config-Reader rule descriptions for workgroup servers. The bug occurs under the following circumstances: In the Modules tab of the Details window, if you select the Config-

Reader (Workgroup Server) module and click the Rules button, a window appears displaying a summary of thresholds for Config-Reader rules. If you select any rule, its description should be displayed in the Rules Description field. In prior releases, this field showed a variable name instead of the appropriate description. This problem is fixed.