Sun™ Management Center 3.5 Supplement for VSP High-End Entry Servers (Workgroup Servers)

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Contents

Sun Management Center 3.5 Supplement for VSP High-End Entry Servers (Workgroup Servers)

Sun™ Management Center 3.5 software enables you to monitor and manage supported Sun platforms with the appropriate add-on software. The workgroup server software add-on adds the capability to monitor and manage supported high-end entry server (workgroup server) systems.

This document describes installation and setup issues, as well as enhancements and bug fixes, that are particular to the workgroup server add-on software. For information about using or installing core Sun Management Center software, see the *Sun Management Center 3.5 Installation and Configuration Guide*, and the other documents accompanying the core product software.

What Is Included in This Add-On Software

This add-on software 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 Setup" on page 8.

Note – Your media might also include patches to the core Sun Management Center software. These patches must be installed manually, as described in the Release Notes (located on the product software CD).

About the Workgroup Server Packages

Sun Management Center 3.5 workgroup server packages correspond to the server and agent architectural layers of the Sun Management Center 3.5 product.

TABLE 1 Workgroup Server Packages in Sun Management Center 3.5 Supplement

Package Name	Layer	Description
SUNWeswgs	Server layer	Provides libraries and other files needed by the Sun Management Center 3.5 server to monitor and control supported workgroup server systems. This software must be installed on all systems configured to be Sun Management Center 3.5 servers. This package must be installed in addition to the core Sun Management Center 3.5 server software.
SUNWeswga	Agent layer for Sun Ultra™ and Sun Enterprise™ servers	Provides libraries and other files needed by the Sun Management Center 3.5 agent to monitor supported workgroup server (high-end entry server) systems. This software, in addition to the core Sun Management Center 3.5 agent software, must be installed on all Sun Ultra and Sun Enterprise workgroup server systems that Sun Management Center 3.5 will monitor.
SUNWeswha	Agent layer for Sun Fire™ 280R, V480, and V880 servers	Provides libraries and other files needed by the Sun Management Center 3.5 agent to monitor supported workgroup server systems. This software, in addition to the core Sun Management Center 3.5 agent software, must be installed on all Sun Fire workgroup server systems that Sun Management Center 3.5 will monitor.
SUNWeshd	Agent layer for Sun Fire V880 server	Provides files that the Sun Management Center 3.5 agent needs in order to dynamically reconfigure the Sun Fire V880 server.
SUNWeswgi	Agent and server layers	Provides scripts and Java™ class files to support setup, Agent Update, and add-on installation and removal.

Recommended Patches

There are recommended Solaris™ software patches available for the Sun Management Center 3.5 application. If you have a Sun service contract, you can download the patches from the following web site:

```
http://sunsolve.sun.com
```

You can also download the patches from the Sun Management Center product web site:

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

For more information about the patches for Sun Management Center 3.5 software, refer to the *Sun Management Center 3.5 Software Release Notes*.

Supported Systems and Environments

The following systems are supported in Sun Management Center 3.5 by the Workgroup Server add-on software.

TABLE 2   Supported System Platforms

Sun Enterprise 2	Sun Enterprise 420R
Sun Ultra 5	Sun Enterprise 450
Sun Ultra 10	Sun Fire 280R
Sun Enterprise 5s	Sun Fire V480
Sun Enterprise 10s	Sun Fire V880
Sun Enterprise 220R	Sun Filer N8200
Sun Enterprise 250	Sun Filer N8400

Sun Management Center 3.5 supports the following operating environments.

TABLE 3   Supported Operating Environments

Solaris 2.6, agent only	Solaris 7 (32-bit and 64-bit versions), agent only
Solaris 8	Solaris 9

Hardware Monitoring and Alarm Support for Workgroup Server Platforms

Sun Management Center software provides differing levels of monitoring and alarm support for various hardware features of workgroup server platforms. For instance, Sun Management Center software 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 software includes predefined alarms for selected hardware features.

TABLE 4 summarizes the monitoring and alarm support for legacy 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 4 Legacy Workgroup Server Platform Monitoring and Alarm Support

Component	U2	U5/10	220R	250	420R	450
CPU units	P	P	P	P	P	P
Memory controllers	n	n	n	M	n	M
CPU temperature	n	n	n	M	n	M
Memory Banks	n	n	n	M	n	M
DIMMs	M	x	x	M	x	M
SIMMs	x	M	M	x	M	x
Power Supplies	n	n	n	A	n	A
Fans	n	n	n	A	n	A
Power Supply Fans	n	n	n	x	n	M
Keyswitch	x	x	n	A	n	A
Activity LED	x	x	n	A	n	A
Disk error LED	x	x	x	x	x	x
General error LED	x	x	n	A	n	A
Power supply LEDs	x	x	n	A	n	A
Power Supply Error LED	x	x	n	A	n	A
Temperature Warning LED	x	x	x	A	x	A
Remote System Control (RSC)	x	x	x	M	x	x
Hardware Rules	M	M	M	M	M	M
I/O controllers	M	M	M	M	M	M
I/O devices	M	M	M	M	M	M
Disk devices	A	A	A	A	A	A
Tape devices	AP	AP	AP	AP	AP	AP
Network devices	A	A	A	A	A	A
Temperature sensors	x	x	x	n	x	n

TABLE 5 summarizes monitoring and alarm support for current 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 predefined alarm for this hardware.

TABLE 5   Workgroup Server Platform Monitoring and Alarm Support

Component	280R	V480	V880
CPU units	P	P	P
CPU/memory modules[1]	x	M	M
DIMMs	M	M	M
Memory Banks	M	M	M
Power supplies	A	A	A
SEEPROM devices[2]	M	M	M
Fans	A	A	A
Keyswitch	A	A	A
Service LEDs	x	A	A
Running LEDs	A	A	A
Removal LEDs	A	A	A
User-Controlled LEDs	x	AM	x
Temperature sensors	A	A	A
Remote System Control (RSC)	n	M	M
I/O controllers	M	M	M
I/O devices	M	M	M
Disk devices	A	A	A
Tape devices	AP	AP	AP
Network devices	A	A	A
Power supply fans	n	n	n
Activity LED	A	A	A
Power supply error LED	n	n	n

TABLE 5   Workgroup Server Platform Monitoring and Alarm Support *(Continued)*

Component	280R	V480	V880
Temperature warning LED	n	n	x
CPU temperature	P	P	P
Disk error LED	n	n	A

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

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

A Note to Workstation Users

The Sun Management Center installation program previously allowed you to install either workgroup server or workstation versions of Sun Management Center software on certain Sun platforms listed in TABLE 6. In Sun Management Center 3.5, however, these platforms can only run the workgroup server version of the Sun Management Center software.

TABLE 6   Supported Platforms for Workgroup Server-Only Add-ons

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

Disk Space Requirements

The Sun Management Center 3.5 core packages have significant disk space requirements. The workgroup server specific add-on packages add a small additional amount to these requirements, as TABLE 7 shows.

TABLE 7   Disk Space Requirements

Component	Core Product	Workgroup Server Add-on
Agent packages	40 Mbytes (*estimated*)	1 Mbyte
Server packages	780 Mbytes (*estimated*)	4 Mbytes
Console packages	70 Mbytes (*estimated*)	none

The core product disk space estimates are subject to change. For exact requirements, refer to the *Sun Management Center 3.5 Software Installation Guide*.

About the Installation Process

You run the same Sun Management Center 3.5 installation program to install or upgrade any Sun Management Center component on any system. Following installation, you must run a setup script (referred to as Setup) 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 which systems will be configured only as agents to be monitored by the servers.

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 3.5 core software installation instructions, refer to the documentation provided with your Sun Management Center 3.5 media, or consult the Sun Management Center 3.5 web site:

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

About Setup

After the Sun Management Center 3.5 packages are installed, the installation program asks if you want to run Setup. You must run Setup to configure the newly installed software before you can use it.

You can run Setup immediately after a script-based 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 3.5 directory /opt/SUNWsymon/sbin and typing the command ./es-setup.

There are two ways to run the setup script. You may use either the traditional setup script, es-setup, or the new GUI Setup feature, gui-setup. The installation method you use determines which setup script automatically runs afterward(for example, if you used the GUI Install program for installation, gui-setup runs by default). If you choose not to automatically start Setup after installation, you may choose which method of Setup to use when you run the setup script later on. Refer to the *Sun Management Center 3.5 User's Guide* for more information on these two methods.

Note – If desired, you can set your path to point to the /opt/SUNWsymon/sbin directory. Refer to the *System Administrator's Guide* shipped with your version of the Solaris operating environment.

The GUI (Graphical User Interface) Setup application is new to Sun Management Center 3.5. This application enables you to set up the add-on software for VSP high-end entry servers (workgroup servers) through the GUI.

To run GUI Setup, go to the Sun Management Center 3.5 directory /opt/ SUNWsymon/sbin and typing the command ./es-guisetup.

For more information about the GUI Setup application, refer to the *Sun Management Center 3.5 User's Guide*.

Should I Run Setup Now or Later?

How long Setup takes to configure newly installed Sun Management Center components depends on what components you've installed. See TABLE 8 for details.

TABLE 8 Time Required by Setup

If You've Installed This Component...	Then Setup Takes...
Agent only	Under one minute
Console only	Under one 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 to Install the Localization Packages

If you are currently using a localized environment installed from an earlier release of Sun Management Center software, you need to remove the older localization packages manually before installing the newer versions included with this release. The following table describes the localization packages.

TABLE 9   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

Note – You only need to remove these packages if you have an older version of Sun Management Center software installed. The Sun Management Center 3.5 software contains only the following localization packages: French, Japanese, Korean, and Simplified and Traditional Chinese.

Removing the Old Localization Packages

1. **Check whether you have any of the localization packages installed. The packages are listed in** TABLE 9**. Type the following, substituting the names of the localization packages for** *package_name***:. If you have multiple localization packages, type the package names on the same line and separate them with spaces.**

```
% pkginfo package_name package_name
```

If the old localization packages are not installed, your system returns an error message. This means you are ready to install the new packages. If your system does not return an error message, you need to remove the old packages as described in the next step.

2. **Log in as superuser and type the following command, substituting the name of the package you want to remove for** *package_name***:**

```
# pkgrm package_name
```

Installing the New Localization Packages

Refer to the *Sun Management Center 3.5 Installation and Configuration Guide* for information about how to install the new localization packages.

Unsupported Modules

The Dynamic Reconfiguration module included in the Sun Management Center 3.5 product is not functional on workgroup server systems. Refer to "Sun Fire V880 Dynamic Reconfiguration Module" on page 12 for more information about performing dynamic reconfiguration commands on the Sun Fire V880.

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* (Part Number 805-4452-10) also provide instructions on setting the parameter. The Platform Notes are available on the Solaris on Sun Hardware Supplement CD, and they are also available on the http://docs.sun.com web site.

Sun Fire V880 Dynamic Reconfiguration Module

Note – Dynamic Reconfiguration is supported on Solaris operating environment version 8 and higher.

Once the Sun Fire V880 Dynamic Reconfiguration module is loaded, it appears in the Hardware tab of the Sun Management Center 3.5 main window.

To perform a dynamic reconfiguration (DR) operation, right-click on the value you want to change, and then select a new value. The menu that appears when you right-click the value shows all the available DR operations at the bottom. If there are no available DR operations for the value you selected, none appear in the menu. When you select a DR operation from the menu, a confirmation window appears and remains open until the operation has completed.

The columns that permit DR operations are Receptacle and Occupant.

Note – Before you attempt to reconfigure your PCI card, make sure that it supports DR operations. Do not perform a DR operation on a PCI card that does not support DR. Dynamic Reconfiguration of CPU modules is not implemented in this release.

Using Agent Update with Sun Ultra 5 Workstations

If you use the Agent Update utility to update the Sun Management Center 3.5 agent on a Sun Ultra 5 workstation, the workstation may identify itself as a Sun Ultra 10 after the upgrade. This means that the icon and physical view for the Sun Ultra 5 appear in Sun Management Center windows as though it were a Sun Ultra 10.

To correct this so that the workstation displays the appropriate icon and physical view, perform the following procedure:

1. **At the system prompt, type the** `es-stop -a` **command.**

2. **Use the** `cd` **command to change to the directory** `/var/opt/SUNWsymon/platform` **by typing the following:**

```
% cd /var/opt/SUNWsymon/platform
```

3. **Use your favorite text editor to edit the file** `platform.prop` **in this directory.**

4. **Change the line** `UltraModel=10` **to** `UltraModel=5`**.**

5. **Save the file.**

6. **At the system prompt, type** `es-start -a` **to restart the Sun Management Center agent.**

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New Rules for Version 3.5

Sun Management Center 3.5 software contains two Config Reader modules. One Config Reader supports the Sun Ultra, Sun Enterprise, and Sun Fire 280R servers. The other Config Reader supports the Sun Fire 280R, V480, and V880 servers.

Using Sun Management Center to Launch the RSC Software

Sun Management Center allows you to launch the RSC (Sun Remote System Controller) software from the Sun Management Center browser. RSC lets you remotely monitor and control the server, and lets you set alarms that notify you by email or pager in the event of system problems.

RSC consists of two components: the RSC card and the accompanying RSC software. Some VSP High-End Entry Servers (Workgroup Servers) have the RSC card installed. You can use either the RSC CLI (Command-Line Interface) with a telnet connection to the server, or the RSC GUI (Graphical User Interface) to interact with the software.

Note – To launch the RSC GUI from Sun Management Center, you must have the SUNWrscj software package installed on the machine running the Sun Management Center console. If the package is not already installed, you can download and install it from the RSC product web page at `http://www.sun.com/servers/rsc.html`.

To launch RSC from the Sun Management Center browser, follow these steps:

1. **Click on the icon representing the server you want to monitor.**

2. **From the Tools menu, choose the Launch Remote System Control (RSC) command.**

   The Launch Remote System Control (RSC) dialog box is displayed. Sun Management Center attempts to locate the host name or IP address of the server's RSC card. If it succeeds, that information appears in the RSC Hostname or IP field. If it does not appear, or if you want to use a different IP address, you can fill in this field manually.

3. **Select either RSC GUI (if installed) or Telnet.**

   If the GUI is not installed, the dialog box displays a message telling you that the GUI is not available. You can either install the GUI software package before proceeding, or use telnet to connect to RSC.

4. **To connect to RSC, click Launch RSC.**

   For more information about RSC, refer to the Sun Remote System Controller documentation.