

# Sun Enterprise SyMON™ 2.0.1 Software Release Notes

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# Sun Enterprise SyMON 2.0.1 Software Release Notes

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These release notes cover the following topics:

- Sun Enterprise SyMON 2.0.1 Web Site
- System Requirements
- Protecting Customized Scripts
- Upgrading from Sun Enterprise SyMON 2.0 to 2.0.1 Software
- Uninstalling Your Upgrade
- Major Changes from Version 2.0 of Sun Enterprise SyMON Software to Version 2.0.1
- Required Patches
- Known Limitations to this Version
- Known Bugs

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**Note** – Refer to the *Sun Enterprise SyMON 2.0.1 Software User's Guide* and the *Sun Enterprise SyMON 2.0.1 Supplement* for your hardware platform for install instructions. Before installing Sun Enterprise SyMON™ software on your system, read the `INSTALL.README` file on the Sun Enterprise SyMON 2.0.1 CD or the Sun Enterprise SyMON web site (<http://www.sun.com/symon>). This file provides information that will help you during the installation process.

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The following table describes which sections to read, depending on whether you are upgrading to Sun Enterprise SyMON 2.0.1 software, or installing Sun Enterprise SyMON software for the first time.

**TABLE 1** Sections of the Release Notes for Upgrading or Installing for the First Time

<b>If you are upgrading, read:</b>	<b>If you are installing for the first time, read:</b>
Sun Enterprise SyMON 2.0.1 Web Site	Sun Enterprise SyMON 2.0.1 Web Site
System Requirements	System Requirements
Protecting Customized Scripts	
Upgrading from Sun Enterprise SyMON 2.0 to 2.0.1 Software	
Major Changes from Version 2.0 of Sun Enterprise SyMON Software to Version 2.0.1	
Required Patches	Required Patches
Known Limitations to this Version	Known Limitations to this Version
Known Bugs	Known Bugs

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## Sun Enterprise SyMON 2.0.1 Web Site

For the latest information, go to the Sun Enterprise SyMON 2.0.1 web site:

<http://www.sun.com/symon>

The web site contains the *Sun Enterprise SyMON Configuration and Deployment Guide* which contains important information about supported hardware platforms.

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## System Requirements

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**Note** – You must have at least 128 MBytes of RAM available to run the Sun Enterprise SyMON console on your system.

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System requirements for installing Sun Enterprise SyMON software are documented in the *Sun Enterprise SyMON Configuration and Deployment Guide*, which is available on the Sun Enterprise SyMON web site. Refer to this document for more information.

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## Protecting Customized Scripts

If you customized the `email.sh` script that Sun Enterprise SyMON software uses to send email notification of alarm conditions, that script will be overwritten when you upgrade Sun Enterprise SyMON software to version 2.0.1.

To avoid overwriting the custom modified email script, rename the script. Here is an example with the name “Edith.”

```
# mv /var/opt/SUNWsymon/bin/email.sh /var/opt/SUNWsymon/bin \
/edithemail.sh
```

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## Upgrading from Sun Enterprise SyMON 2.0 to 2.0.1 Software

### ▼ To Upgrade from 2.0 to 2.0.1 Software

- 1. Read this section of the release notes before upgrading your Sun Enterprise SyMON software.**

In addition, refer to the `INSTALL.README` file on the Sun Enterprise SyMON 2.0.1 CD or in your downloaded packages, the *Sun Enterprise SyMON 2.0.1 Software User's Guide*, and the *Sun Enterprise SyMON 2.0.1 Supplement* for your hardware platform.

- 2. The Sun Enterprise SyMON 2.0.1 installation script will overwrite Sun Enterprise SyMON 2.0 configuration files.**

Therefore, back up your `/var/opt/SUNWsymon` directory before installing Sun Enterprise SyMON 2.0.1 software, as shown below.

```
# mv /var/opt/SUNWsymon /var/opt/SUNWsymon.bak
```

### 3. Install the new Sun Enterprise SyMON 2.0.1 server and console packages first.

You can install these at the same time, or if you want to install them separately, install the server first, and then the console.

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**Note** – The console and server *must* be upgraded to version 2.0.1 before you continue using Sun Enterprise SyMON software.

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**Note** – If you are unable to complete your software upgrade, see “Uninstalling Your Upgrade” below. In addition, contact your Sun service representative or authorized Sun service provider for more information.

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### 4. Upgrade the agent(s).

For more information, refer to the *Sun Enterprise SyMON 2.0.1 Software User's Guide*.

## Uninstalling Your Upgrade

If you run into problems completing your upgrade to Sun Enterprise SyMON 2.0.1 software, follow these steps to re-establish your Sun Enterprise SyMON 2.0 software.

### ▼ To Uninstall Your Upgrade

#### 1. Type the following command.

```
# /opt/SUNWsymon/sbin/es-uninst
```

#### 2. Type `y` to uninstall Sun Enterprise SyMON software, or `n` to cancel your request.



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**Caution** – This utility does not enable you to remove Sun Enterprise SyMON packages selectively. Once you type `y`, all the packages are removed. There is no additional warning before package removal begins.

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The contents of the `/var/opt/SUNWsymon` directory remain and are unaltered by the uninstall script. The state of the domain configuration is retained for subsequent installations or upgrades.

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**Note** – To verify if there are packages that are left, type the following command:  
`pkginfo -c symon.`

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### 3. Restore your Sun Enterprise SyMON 2.0 software.

```
# mv /var/opt/SUNWsymon.bak /var/opt/SUNWsymon
```

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## Major Changes from Version 2.0 of Sun Enterprise SyMON Software to Version 2.0.1

The following table lists changes that have been made in version 2.0.1.

**TABLE 2** Major Changes to Sun Enterprise SyMON Software in Version 2.0.1

Feature	Description of Change in Version 2.0.1	Chapter of 2.0.1 User's Guide
Port Conflict with SNMP Legacy Agents	In previous versions of Sun Enterprise SyMON software setup, if you had a port conflict with a legacy subagent, you would not know it until you were unable to start the agent. In version 2.0.1, if you have a port conflict, during setup a message displays that includes an option to reconfigure the port used by the Sun Enterprise SyMON software.	Chapter 2, <i>Preparing to Install the Sun Enterprise SyMON 2.0.1 Software</i>
Composite Object	You can now create a composite object. This functionality was added to support specific machine architectures, such as the Sun Enterprise 10000 server (Starfire™).	Chapter 5, <i>Objects</i> , and the appropriate supplement
Discovery Requests	Request ID used to be displayed as one of four columns of information at the top of the Discovery Requests screen (the other columns are Name, Scheduled, and Status.) Request IDs now displayed in the (lower) Request Details portion of the Discovery Requests screen.	Chapter 6, <i>Discovery Manager</i>

**TABLE 2** Major Changes to Sun Enterprise SyMON Software in Version 2.0.1

<b>Feature</b>	<b>Description of Change in Version 2.0.1</b>	<b>Chapter of 2.0.1 User's Guide</b>
Copy/Add to Graph and Paste from Graph	Commands were changed to "Copy to Graph Clipboard," "Add to Graph Clipboard," and "Paste from Graph Clipboard" to reflect the actual functionality.	Chapter 9, <i>Monitoring and Graphing Data Properties</i>
User Notification When Host or Agent is Down	The user can now set alarm action on the server for a host or agent that is down.	Chapter 13, <i>Alarms</i>
Logical and Physical View	Some hardware platforms now support views of Sun StorEdge™ A5000, A5100, or A5200 devices. For details, refer to the <i>Sun Enterprise SyMON Configuration and Deployment Guide</i> on the Sun Enterprise SyMON web site.	Chapter 14, <i>Details</i>
Physical View	Now supports view of PCI I/O boards (previous versions showed a generic I/O board image)	Chapter 14, <i>Details</i>
Dynamic Reconfiguration	Dynamic reconfiguration of CPU/memory boards is now supported	See <i>Sun Enterprise SyMON 2.0.1 Supplement for Sun Enterprise Midrange Servers</i>
VERITAS File System (VxFS)	Are now supported	
Simple MIB-II Module	Replaces the MIB-II Instrumentation Module (The new module is loaded by default. If you want to continue to use the old MIB-II Instrumentation Module, first unload the Simple MIB-II Module, and then load the MIB-II Instrumentation Module.)	

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## Required Patches

- 1. If you are using Sun Enterprise 6x00/5x00/4x00/3x00 servers using the Solaris™ 2.6 operating environment HW3 release, you need the following patches to run Sun Enterprise SyMON 2.0.1 software:**
  - 105651-08 or a subsequent compatible version
  - 106183-04 or a subsequent compatible version



2. Add the following two lines to the `/etc/system` file:

```
set soc:soc_enable_detach_suspend=1
set pln:pln_enable_detach_suspend=1
```

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## Known Limitations to this Version

Here are the known limitations of the 2.0.1 version of Sun Enterprise SyMON software:

- Sun Enterprise SyMON Server Issues
  - Hanging Main Console Window
  - Console Client Machines with DHCP
- Disabled Browser Hierarchy View
- Sun Enterprise SyMON Agent Memory Threshold
- Refresh Interval for the Config-Reader Module

## Sun Enterprise SyMON Server Issues

### Hanging Main Console Window

The main console window hangs when users are attempting to start a new console window and connect to the Sun Enterprise SyMON server. However, existing console window connections encounter no problems.

This problem occurs because threads that are reading from a socket can hang when there is a large discrepancy between the read and write rates at either end of a socket. The memory problem occurs when the Sun Enterprise SyMON server has a large amount of buffered data waiting to be sent to its clients. This buffered data is so large that the server runs out of memory while trying to write to the socket. Once this happens, the server does not recover.

### ▼ To Resolve a Hanging Main Console Window

1. Edit the `/opt/SUNWsymon/classes/base/server/bin/es-server.sh` file.

2. Depending on the memory configuration on your Sun Enterprise SyMON server, increase the available memory to the server process.

For example, double the default memory from 24 Mbytes to 48 Mbytes.

Before:

```
# -mx24m
```

After:

```
# -mx48m
```

## Console Client Machines with DHCP

The Sun Enterprise SyMON server does not connect properly to console client machines that use DHCP.

### ▼ To Connect to Console Client Machines with DHCP

1. Edit the `/opt/SUNWsymon/classes/base/console/bin/es-console.sh` file.
2. Add the following after `jre` on the last line of the file where `IP_Address` is the IP address of the console host:

```
-Djava.rmi.server.hostname=IP_Address
```

Here is an example of the last line of the file:

```
exec jre -DINTERFACE_PATH=$INTERFACE_PATH -DESDIR=$ESDIR "-mx24m"  
-ss2m -oss4m -DNUM_FDS='ulimit -n'  
com.sun.symon.base.server.main.ServerMain $*
```

Here is an example of how the last line of the file appears after the insertion:

```
exec jre -Djava.rmi.server.hostname=IP_Address  
-DINTERFACE_PATH=$INTERFACE_PATH -DESDIR=$ESDIR "-mx24m"  
-ss2m -oss4m -DNUM_FDS='ulimit -n'  
com.sun.symon.base.server.main.ServerMain $*
```

## Disabled Browser Hierarchy View

The browser hierarchy view in the Details window is disabled (grayed out) if the Sun Enterprise SyMON agent is down or goes down after the Details window is displayed.

## Sun Enterprise SyMON Agent Memory Threshold

The Sun Enterprise SyMON software has a feature that enables the user to add a threshold value for Sun Enterprise SyMON agent memory usage. However, if the added threshold value is set too low, the default alarm action is to shut down the agent. We cannot suggest an agent memory usage limit—this should be determined on a system-by-system basis (if this feature is used).

The workaround is for you to delete the `agent-stats.dat` file from `$ESDIR/cfg` (typically `ESDIR=/var/opt/SUNWsymon`). This workaround deletes any user-specified attributes for the module. Alternatively, if you have set other alarm limits or other attributes in the module which you are not willing to delete, then you can edit the `agent-stats.dat` file.

For example, there should be a block like the following:

```
procstats = {
    size = {
        alarmlimit:error-gt = "0"
    }
}
```

- Delete the block, or if there are other entries in the block which you do not want to delete, then delete only the `alarmlimit:error-gt` line for `procstats.size`.

## Refresh Interval for the Config-Reader Module

The Attribute Editor for the data properties of the system object (in the System folder of the Config-Reader module in the Details window) has a default refresh interval of 10 seconds. We suggest you change that default value to 300 seconds unless you are using the Dynamic Reconfiguration feature on the machine monitored by the Sun Enterprise SyMON agent.



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**Caution** – *Do not change* the default value if you are using dynamic reconfiguration on the machine monitored by the Sun Enterprise SyMON agent.

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## ▼ To Change the Refresh Interval

**1. Open the Details window.**

For more information, see the “Details” chapter in the *Sun Enterprise SyMON 2.0.1 Software User’s Guide*.

**2. Click the light-colored circle next to the Hardware icon in the hierarchy tree view.**

The Config-Reader module is displayed.

**3. Double-click on the System folder icon.**

The System properties table is displayed.

**4. Click with your left mouse button and select any table cell.**

**5. Click the Attributes button.**

The Attribute Editor window is displayed.

**6. Click the Refresh tab button.**

The refresh panel is displayed.

**7. Select the default refresh interval and type 300 in the Refresh Interval field.**

The refresh interval is updated to five minutes.

**8. 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 Reset to reset the Attribute Editor to the default parameters.
- Click Cancel to cancel your request.

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## Known Bugs

This is a list of known problems in the Sun Enterprise SyMON 2.0.1 release. The list includes a workaround if any is available.

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Bug Id: 4213732

Bug/Rfe: BUG

Public Summary: When the agent starts on a SPARCserver 1000 that at one time had many devices attached, but have since been removed, the agent fails to respond as it is busy attempting to find all the devices in the device tree.

This problem is due to the fact that `configd` takes a long time to go through all the devices and hence the console times out. It happens only if there are a lot of disks which have been configured but do not actually exist physically. In other words, at some point of time these disks were physically present and the system was configured but later these disks were removed or turned off.

`configd` tries to open all the devices present in `/dev/dsk/*` in read-only mode to check the status. If an entry exists in `/dev/dsk` but the corresponding disk is not present, open fails but it takes a very long time to return. When the number of such entries/disks are big, the cumulative time `configd` takes is too long for the console to wait and hence the console times out. The agent does not hang but takes a long time to complete.

Workaround: Remove the stale entries in `/dev/dsk` and `/dev/rdisk`.

=====

Bug Id: 4228298

Bug/Rfe: BUG

Public Summary: Sun Enterprise SyMON software does not correctly look for ECC (error correction code) errors and generate reasonable alarms. Rule rcr4u209 should deal with ECC errors. Sun Enterprise SyMON software will not generate any alarms for ECC errors.

=====

Bug Id: 4230998

Bug/Rfe: BUG

Public Summary: The Physical View/Logical View GUI does not highlight components which have Caution (blue) level alarms. If this level of alarm is generated for a hardware component, the alarm will be displayed in the Browser and the Alarms tab, but not in the Physical or Logical View.

=====

Bug Id: 4231707

Bug/Rfe: BUG

Public Summary: During installation, `groupadd` fails for `esadm` and `esdomadm` if an entry for them already exists in NIS map. Sun Enterprise SyMON software should check if such a group already exists in NIS.

Workaround: Edit the `/etc/group` file and add the Sun Enterprise SyMON groups manually.

=====

Bug Id: 4235230

Bug/Rfe: BUG

Public Summary: If you look at the physical view of a Sun Enterprise 6x00/5x00/4x00/3x00 server, the PCI card is not shown. For example, the PCI ATM card in PCI Slot 0 on PCI I/O Board 6 is not shown in the detailed view of the PCI I/O Board.

=====  
Bug Id: 4236644

Bug/Rfe: BUG

Public Summary: The alarm rule for the Process Status field (in the PA Process Statistics Property table) is complex. This is an ease-of-use problem.

Workaround: Ignore the threshold value in the alarm attribute editor.

=====  
Bug Id: 4236653

Bug/Rfe: BUG

Public Summary: The File Scanning module reports an incorrect number of total matches when a row is disabled and then enabled in the "FULL" scanning mode.

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**Note** – The problem does not happen in incremental mode.

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1. If the row in the File Scanning Table is enabled, any matching string in the `/var/adm/messages` file will increment the contents of both "Matches" and "Total Matches."
2. If the row is disabled, the contents of "Total Matches" becomes 0.
3. Once the row is enabled again, the "Total Matches" still remain 0. Subsequently, if there is any matching condition, only the "Matches" column increments while the "Total Matches" remains 0.

On closing and reopening the Host details window, the "Matches" and "Total Matches" columns become equal.

=====  
Bug Id: 4236859

Bug/Rfe: BUG

Public Summary: When you convert from one Sun Enterprise SyMON server context to another server context, the object monitored by the Sun Enterprise SyMON agent is displayed in the console window in both the original and the new server contexts.

Workaround: Stop, then restart the original server components.

=====  
Bug Id: 4237225

Bug/Rfe: BUG

When the MIB-II Instrumentation Module is loaded without unloading the Simple MIB-II Module, the Sun Enterprise SyMON agent unloads all the modules under the operating system.

Workaround: The Simple MIB-II Module must be unloaded before loading the MIB-II Instrumentation Module.

=====  
Bug Id: 4237744

Bug/Rfe: BUG

Public Summary: `inst-es` may fail under a certain old installation. This may happen when there is a Sun Enterprise SyMON component installed and `inst-es` tries to install a new one.

In this case, `inst-es` will try to uninstall the previous one first, then check partition and calculate the available space using `/usr/bin/df` command before installing the new packages. Under a certain installation, the uninstallation will remove the `/opt/SUNWsymon` dir and cause `/usr/bin/df /opt/SUNWsymon` to fail.

