



# Sun™ Remote System Control (RSC) 2.2.3 Release Notes

---

Sun Microsystems, Inc.  
[www.sun.com](http://www.sun.com)

Part No. 819-2022-10  
February 2005, Revision A

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

Copyright 2005 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Sun Microsystems, Inc. has intellectual property rights relating to technology that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more of the U.S. patents listed at <http://www.sun.com/patents> and one or more additional patents or pending patent applications in the U.S. and in other countries.

This document and the product to which it pertains are distributed under licenses restricting their use, copying, distribution, and decompilation. No part of the product or of this document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any.

Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and in other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, AnswerBook, AnswerBook2, docs.sun.com, Sun Enterprise, OpenBoot, SunSwift, SunVTS, JumpStart, SunSolve Online, and Solaris are trademarks, registered trademarks, or service marks of Sun Microsystems, Inc. in the U.S. and other countries.

All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

U.S. Government Rights—Commercial use. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

---

Copyright 2005 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, Californie 95054, Etats-Unis. Tous droits réservés.

Sun Microsystems, Inc. a les droits de propriété intellectuels relatants à la technologie qui est décrit dans ce document. En particulier, et sans la limitation, ces droits de propriété intellectuels peuvent inclure un ou plus des brevets américains énumérés à <http://www.sun.com/patents> et un ou les brevets plus supplémentaires ou les applications de brevet en attente dans les Etats-Unis et dans les autres pays.

Ce produit ou document est protégé par un copyright et distribué avec des licences qui en restreignent l'utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l'autorisation préalable et écrite de Sun et de ses bailleurs de licence, s'il y en a.

Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun.

Des parties de ce produit pourront être dérivées des systèmes Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, AnswerBook, AnswerBook2, docs.sun.com, Sun Enterprise, OpenBoot, SunSwift, SunVTS, JumpStart, SunSolve Online, et Solaris sont des marques de fabrique ou des marques déposées, ou marques de service, de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays.

Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun™ a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

LA DOCUMENTATION EST FOURNIE "EN L'ETAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFAÇON.

# Contents

---

<b>1. Sun Remote System Control (RSC) 2.2.3 Release Notes</b>	<b>1</b>
What's New in RSC 2.2.3	1
Before Installing Sun Remote System Control Software	2
RSC 2.2.3 Support on Sun Fire V480, V880, V490 and V890 Servers	3
OpenBoot PROM Enhancements	4
RSC General Issues	4
Removing and Installing the RSC or SC Card	5
Alert Messages Might Be Delayed	5
Wrong Information Provided on <code>alerts.html</code>	5
<code>rsc-console</code> Switches to <code>tip</code> Connection During Boot When <code>diag-switch?</code> Is Set to <code>true</code>	6
<code>RSC bootmode -u</code> Command Fails to Toggle the Console	6
Running <code>obdiag</code> in <code>rsc-console</code> Mode Can Cause Unexpected Behaviors	6
<code>SetSockOpt: Invalid argument</code> Message Received When Maximum Number of Telnet Sessions Is Reached	6
Disk Errors are Reported in <code>loghistory</code> While Running SunVTS, But No Errors are Reported in SunVTS or Solaris Software	7
RSC Issues for Sun Fire V480, V880, V490, and V890 Servers	7
RSC Console Switches to the System Console Without Warning When OpenBoot PROM Enhanced Diagnostics Are On or the Keyswitch Is in the Diagnostics Position	8

LED Behavior During Startup	8
RSC Issues for Sun Fire 280R Servers	8
Additional RSC Alerts	8
False Drive Fault Reported at Power-On	9
RSC Issues for Sun Enterprise 250 Servers	9
Increased Number of RSC User Accounts Not Supported	9
Change to the <code>serial_hw_handshake</code> Variable Requires a System Reboot	10
Power Supply Alerts Display Incorrect Index in the GUI	10
Documentation Issue	10

# Sun Remote System Control (RSC)

## 2.2.3 Release Notes

---

This document describes some Sun™ Remote System Control (RSC) 2.2.3 hardware and software issues. For complete information about using RSC, see the *Sun Remote System Control (RSC) 2.2 User's Guide*.

---

## What's New in RSC 2.2.3

Several new features are available in RSC 2.2.3 hardware and software:

- RSC 2.2.3 software supports the Sun Fire™ V480, V880, V490, and V890 servers with an updated system controller (SC) card installed. For more information about how RSC 2.2.3 works with the system controller card, refer to “RSC 2.2.3 Support on Sun Fire V480, V880, V490 and V890 Servers” on page 3.
- The RSC graphical user interface (GUI) requires an updated version of the Java™ Runtime Environment: Java 2 Standard Edition (J2SE) Runtime Environment Version 1.3.0\_02 or greater. You can download the appropriate version from one of these web sites:
  - Solaris — <http://www.sun.com/solaris/java>
  - Windows — <http://java.sun.com/getjava>

The following features are new in RSC 2.2 software. These features are not reflected in the *RSC 2.2 User's Guide*.

- Client support has been added for the Microsoft Windows 2000 and Windows XP Operating Systems.
- Sun Fire V480 and V490 servers include a new hardware feature, a Locator LED on the system's front and rear panels. RSC software allows you to toggle the state of these LEDs to help identify a particular system that might be located in a rack with other servers.

- Support for a maximum of 16 RSC user accounts has been added with RSC 2.2.3 software. A maximum of 10 users can be logged in at one time. However, the increased number of user accounts does not affect the limitation of five concurrent telnet or GUI login sessions per server.

---

## Before Installing Sun Remote System Control Software

RSC software is included as part of the default installation set for the Solaris Supplement CD that came with your operating system. You must install RSC server components only on a compatible server running the Solaris™ Operating System. You can install the client software on any computer that meets the Solaris or Windows operating system requirement. You must install and configure the RSC software before you can use RSC.

**IMPORTANT:** Before upgrading from a previous version of RSC server software or reinstalling the software, log in to the server as root and back up your configuration data using the following commands:

```
# rscadm show > remote_filename
# rscadm usershow >> remote_filename
```

Use a meaningful file name that includes the name of the server that RSC controls. After installation, you can refer to this file to restore your configuration settings, if necessary. Reverting to a previous version of RSC server software after installing Version 2.2.3 is not recommended. However, if you do so, you will need to restore your configuration information and also power cycle the server.

You can install the RSC 2.2.3 server software package, `SUNWrsc`, on the following Sun servers:

- A Sun Fire V890 server running the Solaris 8 2/04 Operating System or the Solaris 9 4/04 Operating System, or compatible releases
- A Sun Fire V490 server running the Solaris 8 2/04 Operating System or the Solaris 9 4/04 Operating System, or compatible releases
- A Sun Fire V480 server running the Solaris 8 10/01 Operating System, or compatible release
- A Sun Fire V880 server running the Solaris 8 7/01 Operating System, or compatible release
- A Sun Fire 280R server running the Solaris 8 1/01 Operating System, or compatible release

- A Sun Enterprise™ 250 server running one of the following operating systems:
  - Solaris 2.6
  - Solaris 7
  - Solaris 8

You can install the RSC 2.2.3 client software packages on:

- Any other computer running the Solaris 2.6, Solaris 7, Solaris 8, or Solaris 9 Operating Systems. The packages are SUNWrscj (GUI) and SUNWrscd (documentation).
- Any computer running one of the following Microsoft Windows operating systems:
  - Windows 98
  - Windows 2000
  - Windows NT 4.0
  - Windows XP

The file used to install the RSC GUI and documentation for Microsoft Windows operating systems is `SunRsc.exe`.

- Client computers require Java 2 Standard Edition (J2SE) Runtime Environment Version 1.3.0\_02 or a subsequent 1.3.x version to run RSC 2.2.3 software. RSC 2.2.3 software will not run using J2SE Runtime Environment Version 1.2.x. You can download the appropriate version from one of these web sites:
  - Solaris — <http://www.sun.com/solaris/java>
  - Windows — <http://java.sun.com/getjava>

Installation on the Solaris Operating System places the *Sun Remote System Control (RSC) 2.2 User's Guide* in the location `/opt/rsc/doc/locale/pdf/user_guide.pdf`. Installation on the Windows operating system places the User's Guide in the location `C:\Program Files\Sun Microsystems\Remote System Control\doc\locale\pdf\user_guide.pdf`.

---

## RSC 2.2.3 Support on Sun Fire V480, V880, V490 and V890 Servers

The Remote System Controller (RSC) card has been replaced with a new system controller (SC) card on the Sun Fire V490 and V890 servers as well as some V480 and V880 servers. Both cards run the same RSC 2.2.3 software; however, there are some important feature differences:

- The SC card does not have an on-board modem. The modem/pager commands in the RSC 2.2.3 software do not work with the SC card. Likewise, the modem/pager configuration variables do not work with the SC card.

- The SC card does not have a backup battery. It receives its power directly from the server power, and it runs even when the server is powered down or on standby, as long as the server is plugged in to an AC outlet.

To update your RSC software to a version that supports these hardware changes, go to the following Web site:

<http://www.sun.com/servers/rsc.html>

For more information about using RSC 2.2.3 software with SC hardware, refer to your server's administration guide or owner's guide. This manual is included on the documentation CD that came with your server.

## OpenBoot PROM Enhancements

The Sun Fire V490 and V890 servers ship with OpenBoot™ PROM Version 4.15. This version of OpenBoot PROM has a new standard (default) configuration that includes enhanced diagnostics. These enhanced diagnostics change some behaviors in RSC. For more information about these diagnostics, refer to *OpenBoot PROM Enhancements for Diagnostic Operation*, which is on the Sun Fire V490 or V890 Documentation CD that came with your server.

---

## RSC General Issues

This section describes issues that affect RSC 2.2.3 software running on Sun Enterprise 250, Sun Fire 280R, Sun Fire V480, Sun Fire V880, Sun Fire V490, and Sun Fire V890 servers.

---

**Note** – The battery, pager, and modem related issues do not apply to the Sun Fire V490 and V890 servers, or to some Sun Fire V480 and V880 servers. These servers use the system controller (SC) card instead of the RSC card. The SC card has connectors for a serial and network connections. The RSC card has connectors for serial, modem, and network connections. See the hardcopy Platform Release Notes that are included with V480 and V880 server hardware to determine if your server contains an SC card or an RSC card.

---



# Removing and Installing the RSC or SC Card



---

**Caution** – Removing or installing the SC card while the system has the AC power cord connected could damage your system *or* your SC card. Only qualified service personnel should remove or replace the SC card. Contact your qualified service representative to perform this service operation.

---

*Before* you follow the procedures in the Service Manual for your server to remove or install the SC card, perform this procedure to ensure that there is *no AC power present* in the system.

1. **Shut down and halt the system.**
2. **With the system at the `ok` prompt, turn the keyswitch to the Off position.**  
Standby power is still present in the system at this point.
3. **Disconnect all AC power cords from their back panel receptacles.**  
This ensures that there is no standby power voltage present in the system.
4. **Follow the procedure you require in your Service Manual.**

## Alert Messages Might Be Delayed

If the RSC variables `page_enabled` and `mail_enabled` are set to `true` and multiple alert messages are generated within a short interval, the first message is delivered in a timely fashion but each subsequent message issued during the interval is delayed by three to four minutes.

## Wrong Information Provided on `alerts.html`

When configuring the `page_info1` or `page_info2` fields, you can use any digit or the alphanumeric characters `#`, `@`, and `,` (comma) when specifying a pager phone number, but the PIN area can contain only digits (0 to 9). In the RSC GUI, the online help for this function is incorrect. For more information about how to configure RSC to work with a pager, refer to the *Sun Remote System Control (RSC) 2.2 User's Guide*.

## rsc-console Switches to tip Connection During Boot When diag-switch? Is Set to true

When `diag-switch?` is set to `true` and you use the `bootmode -u` command to reboot your server, `rsc-console` reverts to the serial (`tip`) connection after the Solaris software restarts, even if you have previously redirected the console to RSC.

If this occurs, manually redirect the console output to RSC again after the reboot operation has completed. Refer to the *Sun Remote System Control (RSC) 2.2 User's Guide* for more information.

## RSC bootmode -u Command Fails to Toggle the Console

This intermittent problem has been observed on Sun Fire V880 servers running OpenBoot PROM Version 4.4.6. Occasionally, the `bootmode -u` command fails to redirect the console to RSC. If this happens, use the `resetrsc` command.

## Running obdiag in rsc-console Mode Can Cause Unexpected Behaviors

If you run `obdiag` on the console while it is set to `rsc-console` mode, the following behaviors might occur:

- Running the `rsc-control` test in `obdiag` logs you out of RSC.
- Running the serial test in `obdiag` sends unexpected characters to the server's serial connection.

To avoid these behaviors, run `obdiag` when the system console is not set to RSC.

## SetSockOpt: Invalid argument Message Received When Maximum Number of Telnet Sessions Is Reached

When you are running the maximum allowed number of telnet sessions on RSC, you might see messages similar to the following:

```
telnet myserver
```

```
Trying 123.234.245.256...
Connected to myserver.
Escape character is '^]'.
SetSockOpt: Invalid argument
Connection to myserver closed by foreign host.
If this message appears, try running fewer telnet sessions on RSC.
```

## Disk Errors are Reported in loghistory While Running SunVTS, But No Errors are Reported in SunVTS or Solaris Software

If you run SunVTS software and RSC software simultaneously, you may see disk errors reported using the `loghistory` command that do not appear in SunVTS tests. This occurs because SunVTS cannot suspend RSC monitoring while tests are running. RSC reports each state change as a disk error. These messages do not appear when SunVTS is not running tests.

---

## RSC Issues for Sun Fire V480, V880, V490, and V890 Servers

This section describes issues that affect RSC 2.2.3 software running on Sun Fire V480, V880, V490, and V890 servers.

# RSC Console Switches to the System Console Without Warning When OpenBoot PROM Enhanced Diagnostics Are On or the Keyswitch Is in the Diagnostics Position

When the OpenBoot PROM enhanced diagnostics are enabled (as they are by default), `rsc-console` gets sent to the system console without warning. The RSC console might appear to be unresponsive to RSC commands. This behavior can also happen when you are using RSC software and the keyswitch of the system is set to the Diagnostics position.

## LED Behavior During Startup

(Sun Fire V490 and Sun Fire V890 servers only)

In the Sun Fire V490 and V890 servers, during startup, the Power LED does not blink. This LED blinks in other Sun server products. The LED in the Sun Fire V490 and V890 servers remains on during the startup process.

---

## RSC Issues for Sun Fire 280R Servers

This section describes issues that affect RSC 2.2.3 software running only on Sun Fire 280R servers. See the *Sun Fire 280R Server Product Notes* for other Sun Fire 280R server issues.

### Additional RSC Alerts

RSC software generates the following alert on a Sun Fire 280R server when the RSC card begins battery use after a power interruption:

```
00060012: "RSC operating on battery power."
```

RSC software generates the following alerts when the host system has shut down from RSC. The messages appear in the log history.

```
00040000: "RSC Request to power off host."
```

```
00040029: "Host system has shut down."
```

If you shut down the system using the keyswitch, or by using the OpenBoot PROM `poweroff` command, the alert 00040029 is the only alert displayed.

These alerts are not documented in the *Sun Remote System Control (RSC) 2.2 User's Guide*.

## False Drive Fault Reported at Power-On

When you power on the system, it might report a false internal drive fault that is recorded in the RSC log history.

If the error is reported by RSC, you should disregard it if the system boots successfully to the Solaris Operating System. In most cases the erroneous fault will not reappear. You can verify the disk after the boot process by using the `fsck` utility.

---

**Note** – Any disk drive error message reported by the Solaris Operating System is a real disk drive error.

---

If a disk fault is reported at the `ok` prompt and the system fails to boot to the Solaris Operating System, there may be a problem with the disk drive. Test the disk drive with the OpenBoot Diagnostics tests documented in the “Diagnostics, Monitoring, and Troubleshooting” chapter in the *Sun Fire 280R Server Service Manual*.

---

## RSC Issues for Sun Enterprise 250 Servers

This section describes issues that affect RSC 2.2.3 software running on Sun Enterprise 250 servers. See the *Sun Enterprise 250 Server Product Notes* for other Sun Enterprise 250 server issues.

### Increased Number of RSC User Accounts Not Supported

Support for a maximum of 16 RSC user accounts is available in RSC 2.2.3 software. However, Sun Enterprise 250 servers continue to be limited to four RSC user accounts because of hardware limitations.

Reset the system's input-device and output-device settings to `ttya`. Then reboot the system and access the system through its local console or terminal and execute the `boot -s` command directly.

## Change to the `serial_hw_handshake` Variable Requires a System Reboot

In order for changes to the RSC configuration variable `serial_hw_handshake` to take effect, the server must be rebooted. This also affects the Enable Hardware Handshaking check box in the RSC graphical user interface. This limitation is not stated in the documentation.

## Power Supply Alerts Display Incorrect Index in the GUI

In the Sun Enterprise 250, the power supplies are numbered 0 and 1, but the RSC graphical user interface (GUI) refers to them as Power Supply 1 and Power Supply 2 in the event log and in alerts.

---

## Documentation Issue

The *Sun Remote System Control 2.2 User's Guide* currently states that supports Sun Fire 480R and Sun Fire 880 servers. These model numbers are described incorrectly. The terminology should instead say that Sun Fire V480 and Sun Fire V880 servers are supported.