

System Management Services (SMS) 1.6 Software Release Notes

Sun Microsystems, Inc. www.sun.com

Copyright 2006 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, Java, docs.sun.com, Sun Fire, and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and in other countries.

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

The OPEN LOOK and Sun^TM 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 2006 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, Java, docs.sun.com, Sun Fire, et Solaris sont des marques de fabrique ou des marques déposées 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 SunTM 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 license non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciées 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'ÉTAT" 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

Preface v What's New in SMS 1.6 1 AVL 2.0 FS-2 Features and Requirements 1 SMS 1.6 Software Patches 2 Software Requirements 2 Requirements for the Domains 2 Requirements for the SCs 4 General Notes and Issues 5 smsconnectsc Command 5 Valid Paths for Version Switching 5 Using ssh With SMS 6 SMS Documentation Part Numbers 6 SMS 1.6 Software CRs 7 Issues in Related Products 7 Solaris OS Related Issues 7 Solaris Security Toolkit 4.2 Software Related Issues 9 Sun Fire Hardware-Related Issues 10

Preface

This guide contains release notes for the System Management Services (SMS) 1.6 software.

Before You Read This Book

This guide is intended for the Sun Fire™ system administrator, who has a working knowledge of UNIX® systems, particularly those based on the Solaris™ Operating System. If you do not have such knowledge, read the Solaris User and System Administrator documentation provided with your system, and consider UNIX system administration training.

All members of the next-generation Sun Fire server family can be configured as loosely-coupled clusters. However, it is currently outside of the scope of this document to address system management for Sun Fire cluster configurations.

Using UNIX Commands

This document might not contain information about basic UNIX commands and procedures such as shutting down the system, booting the system, and configuring devices. Refer to the following for this information:

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

http://docs.sun.com

Shell Prompts

Shell	Prompt
C shell	<pre>sc_name:sms-user:> or domain_id:sms-user:></pre>
C shell superuser	sc_name:# or domain_id:#
Bourne shell and Korn shell	>
Bourne shell and Korn shell superuser	#

Typographic Conventions

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

^{*} The settings on your browser might differ from these settings.

Related Documentation

The documents listed as online are available at:

http://www.sun.com/documentation

Application	Title	Part Number	Format	Location
Software Overview	Sun Fire High-End Systems Software Overview Guide	819-4658	PDF HTML	Online
Software Installation	System Management Services (SMS) 1.6 Software Installation Guide	819-4659	PDF HTML	Online
Administrator Guide	System Management Services (SMS) 1.6 Administrator Guide	819-4660	PDF HTML	Online
Reference (man pages)	System Management Services (SMS) 1.6 Reference Manual	819-4662	PDF	Online
Options	Sun Fire High-End and Midrange Systems Dynamic Reconfiguration User Guide	819-1501	PDF HTML	Online
	OpenBoot™ 4.x Command Reference Manual	816-1177	PDF HTML	Online
	Sun Fire 15K/12K System Site Planning Guide	806-3510	PDF HTML	Online
	Sun Fire E25K/E20K System Site Planning Guide	817-4137	PDF HTML	Online
	Securing the Sun Fire 12K and 15K Domains	817-1357	PDF HTML	Online
	Securing the Sun Fire 12K and 15K System Controllers	817-1358	PDF HTML	Online

Documentation, Support, and Training

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

Third-Party Web Sites

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

Sun Welcomes Your Comments

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

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

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

System Management Services (SMS) 1.6 Software Release Notes, part number 819-4663-10

System Management Services (SMS) 1.6 Release Notes

This chapter contains the release notes for System Management Services (SMS) 1.6 on Sun FireTM high-end systems and covers the following topics:

- "What's New in SMS 1.6" on page 1
- "Software Requirements" on page 2
- "General Notes and Issues" on page 5
- "SMS Documentation Part Numbers" on page 6

What's New in SMS 1.6

SMS 1.6 includes the following new features:.

- Support for SolarisTM 10 OS on the SCs
- Solaris Security Toolkit (SST) 4.2 software support
- Support for UltraSPARCTM IV+ 1.8-GHz processor
- Support for 4.5 Gbyte swap space
- Support for the Availability 2.0 Feature Set 2 (AVL 2.0 FS-2) functionality

AVL 2.0 FS-2 Features and Requirements

The AVL 2.0 FS-2 functionality in the SMS software encompasses the features described in the following Requests for Enhancement (RFEs):

- 6277467
- 6281071
- **6281100**

AVL 2.0 FS-2 provides the following enhancements to the SMS software:

- The dsmd daemon can process requests from a domain to provide information to the Solaris Fault Management Architecture (FMA). This information includes part numbers and serial numbers for the DIMMs on a system board and the chassis serial number (CSN) of the platform.
- The efhd daemon can diagnose faults on the UltraSPARC IV+ processors. Also, efhd can provide information on parity events in the datapath to domains running FMA, and whether or not efhd has diagnosed an event on a datapath.

Note – The AVL 2.0 FS-2 functionality is not supported in the Solaris 10 1/06 OS release. You need to download and install a subsequent release of the Solaris 10 OS in order to make use of AVL 2.0 FS-2 features.

SMS 1.6 Software Patches

The following patches are available for SMS 1.6:

- 123161-02 (fixes CRs 6413613, 6418588)
- 123172-02 (fixes CR 6401382)
- 123300-01 (fixes CR 6406078)

These patches are available at http://sunsolve.sun.com.

Software Requirements

This section contains the following topics:

- "Requirements for the Domains" on page 2
- "Requirements for the SCs" on page 4

For more information about the correct package to use for your version of the Solaris OS, refer to the *System Management Services (SMS)* 1.6 *Installation Guide*.

Requirements for the Domains

The software requirements shown in this section are the *minimum* software requirements for SMS 1.6. They vary by operating system.

Note – All software versions and patch levels shown in this section reflect the first versions that SMS 1.6 supports.

Solaris 8 OS Requirements

Note – SMS 1.6 does not support the Solaris 8 OS on the SCs. The Solaris 8 OS is supported on the domains only.

As a minimum, the Solaris 8 OS on the domains requires the Solaris 8 2/02 OS release.

Note – The Solaris 8 OS is not supported on domains running on UltraSPARC IV+ processors.

Solaris 9 OS Requirements

As a minimum, the Solaris 9 OS version on the domains requires:

- Solaris 9 4/04 OS release
- Patches (first supported versions):
 - **113027-05**
 - 112233-09

Note – On systems with UltraSPARC IV+ 1.8 GHz processors, the first supported version of the Solaris 9 OS is Solaris 9 9/05.

Solaris 10 OS Requirements

As a minimum, the Solaris 10 OS version on the domains requires:

- Solaris 10 3/05 (minimum for UltraSPARC III+, UltraSPARC III++, and UltraSPARC IV) or Solaris 10 3/05 HW1 (minimum for UltraSPARC IV+). Solaris 10 1/06 is supported
- Patches (first supported versions):
 - **121946-01**
 - **121286-02**

Requirements for the SCs

SMS 1.6 has different binary packages for the Solaris 9 OS and the Solaris 10 OS on the SCs. You must install the correct SMS package for your OS version. For more information about the correct package to use for your version of the Solaris OS, refer to the *System Management Services (SMS)* 1.6 *Installation Guide*.

The software requirements shown in this section are the *minimum* software requirements for SMS 1.6. They vary by operating system.

Note – All software versions and patch levels shown in this section reflect the first versions that SMS 1.6 supports.

Solaris 9 OS Requirements

As a minimum, the Solaris 9 OS version of SMS 1.6 requires:

- Solaris 9 4/04 OS release
- Same version of SMS software on both system controllers (SCs)
- Installation of the Entire Distribution software group of the Solaris OS, including update version and installed patches, on both SCs. All patches are available at:

http://sunsolve.sun.com

- Patches (first supported versions):
 - **113027-03**
 - **111712-12**

Solaris 10 OS Requirements

As a minimum, the Solaris 10 OS version of SMS 1.6 requires:

- Solaris 10 1/06 OS release
- Same version of SMS software on both system controllers (SCs)
- Installation of the Entire Distribution software group of the Solaris OS, including update version and installed patches, on both SCs. All patches are available at: http://sunsolve.sun.com
- Patches (first supported versions):
 - **121946-01**
 - **121286-02**

General Notes and Issues

This section contains general notes and issues that involve SMS on Sun Fire highend systems.

smsconnectsc Command

smsconnectsc is intended to be used in the event a remote SC hangs and cannot be accessed normally through login. Using smsconnectsc to create a remote console session from the local SC can result in the local SC losing monitoring capability and functionality. Do *not* use smsconnectsc except for the express purpose of system recovery.

Valid Paths for Version Switching

You can use the smsversion script to switch to any version of SMS that is still installed on your system, with these exceptions:

- Upgrade from SMS 1.4 to SMS 1.4.1 is permanent. Once you upgrade to SMS 1.4.1, you cannot return to SMS 1.4.
- If you upgrade from SMS 1.4 to SMS 1.4.1, SMS 1.5, and then to SMS 1.6, you cannot switch back to SMS 1.4 or 1.4.1, only to SMS 1.5.
- If you upgrade from SMS 1.5 to SMS 1.6, you can switch back to SMS 1.5.
- If you upgrade both SMS and the operating system, you cannot switch to the previous version of SMS unless you first reinstall the previous version of the operating system.
- If you switch from SMS 1.6 to SMS 1.5, you must manually undo the hardening on the SCs using the Solaris Security Toolkit, and then reharden and reboot.

This switching of SMS versions only applies if you have the same Solaris OS version running. The version switching does not apply if you have upgraded the Solaris OS version. Refer to previous versions of SMS Installation Guides for installation instructions prior to SMS 1.6.

For more information about version switching and its relationship to the Solaris OS, refer to the *System Management Services (SMS)* 1.6 *Installation Guide*.

Using ssh With SMS

Before installing the SMS 1.6 packages, make sure that you have serial or console access to the SC or have ssh available on the SC. After you install SMS 1.6 and reboot the SC, the hardening performed by the smsinstall script disables remote access. This hardening takes place due to the secure by default feature in SMS 1.6. If you do not have ssh available on your system, you will not have access to the SC except by using the console cable.

Note – If you are using ssh on the SC, you must change the ssh escape character to avoid conflict with the SMS console. Refer to the *System Management Services (SMS)* 1.6 *Installation Guide* for more information.

SMS Documentation Part Numbers

Software documentation for this release is provided at:

http://www.sun.com/products-n-solutions/hardware/docs/Servers/High-End_Servers/Sun_Fire_15K/SW_FW_Documentation/SMS/index.html

Files are named by part numbers. The part numbers correspond to these document titles:

- 819-4663-10.pdf System Management Services (SMS) 1.6 Release Notes
- 819-4659-10.pdf System Management Services (SMS) 1.6 Installation Guide
- 819-4660-10.pdf System Management Services (SMS) 1.6 Administrator Guide
- 819-4662-10.pdf System Management Services (SMS) 1.6 Reference Manual
- 819-4658-10.pdf Sun Fire High-End Systems Software Overview Guide
- 819-1504-10.pdf Solaris Security Toolkit 4.2 Release Notes
- 819-1501-10.pdf Sun Fire High-End and Midrange Systems Dynamic Reconfiguration User Guide

Note – There is no longer a separate Dynamic Configuration User Guide for SMS software. The DR information for SMS now resides in the *Sun Fire High-End and Midrange Systems Dynamic Reconfiguration User Guide*.

Known Issues in SMS 1.6 Software

This chapter provides information about known SMS 1.6 CRs, as well as CRs for related products that affect SMS. The chapter includes the following sections:

- "SMS 1.6 Software CRs" on page 7
- "Issues in Related Products" on page 7

SMS 1.6 Software CRs

There are no outstanding CRs associated with the SMS 1.6 software. For more information on the patches available for SMS 1.6, see "SMS 1.6 Software Patches" on page 2.

Issues in Related Products

This section discusses CRs and RFEs for other products that affect SMS 1.6.

Solaris OS Related Issues

Error Processing FRU Tree: IO Error (CR ID 6325788)

This CR affects systems running SMS 1.6 with the Solaris 10 1/06 OS on the SCs. It does not appear on systems running the Solaris 9 OS.

When you use the prtfru command to access the field replaceable units (FRUs) on your system, prtfru might return the error message Error processing FRU tree: IO error. When this condition occurs, dynamic FRUID, COD and Availability might not work properly.

Workaround: Install Solaris 10 1/06 OS patches 121286-02 and 121946-01. All patches can be found at http://sunsolve.sun.com.

panic:recursive mutex_enter, Then panic:panic sync timeout After cfgadm unconfigure NO.SBO::mem (CR ID 6379866)

In some systems with UltraSPARC IV+ cpu/memory boards, using the following command can lead to system panics.

```
# cfgadm -c unconfigure N0.SB0::memory
```

Workaround: A patch will be released for this CR. All patches are available at http://sunsolve.sun.com.

prtdiag Still Shows the System Board After the Board Was DR'ed Out of the Domain (CR ID 6298989)

After a board with an UltraSPARC IV+ processor has been unconfigured out of the domain using DR, prtdiag still shows the board as being present in the domain. Issuing the psrinfo command correctly shows that the board is no longer present in that domain.

Workaround: This has been fixed in the Solaris 10 1/06 release. If you are running the Solaris 10 3/05 release, Solaris 9, or Solaris 8 on the domain, you must install a patch for your version of the Solaris OS.

- Solaris 10 3/05: Install patch 118822-23 (minimum release)
- Solaris 9: Install patch 117124-11
- Solaris 8: Install patch 111335-32

These patches are available at http://sunsolve.sun.com.

Solaris Security Toolkit 4.2 Software Related Issues

Sample ipf.conf* Files Block All UDP Traffic (CR 6307744)

SST 4.2 contains three ipf.conf files:

- /opt/SUNWjass/Files/etc/opt/ipf/ipf.conf
- /opt/SUNWjass/Files/etc/opt/ipf.conf-15k_sc
- /opt/SUNWjass/Files/etc/opt/ipf/ipf.conf-server

These sample files contain errors that block all UDP traffic when used with the rules in other (preceding) filter files.

Workaround: A patch is available for this CR at http://sunsolve.sun.com. Search for the patch using the CR number, 6307744.

enable-ipfilter Installs Config File in the Wrong Path (CR 6364993)

The enable-ipfilter.fin script installs the ipf.conf file in the wrong location. This can result in the rules in ipf.conf not being used with SST.

Workaround: A patch is available for this CR at http://sunsolve.sun.com. Search for the patch using the CR number, 6364993.

ipfilter Fails to Start Due to ipf.conf syntax error at "" (CR 6394832)

When server.secure-driver is executed, ipfilter fails to load the ipf.conf file. This causes the following error to be displayed:

```
[May 7 01:20:06 Executing start method ("/lib/svc/method/ipfilter start")]
syntax error error at "", line 21
/lib/svc/method/ipfilter: load of /etc/ipf/conf into alternate set failed
Not switching config due to load error.
```

Workaround: A patch is available for this CR at http://sunsolve.sun.com. Search for the patch using the CR number, 6394832.

For more information about SST 4.2, refer to the Solaris Security Toolkit 4.2 documentation set, available at http://www.sun.com/documentation.

Sun Fire Hardware-Related Issues

Starcat Othello+ cp2140 SMC Corruption During Combined SPARC/SMC Update With 1.1.16 (CR 6422438)

When updating the firmware on the SPARCengine CP2000 Model 140 (cp2140) board in a Sun Fire system to version 1.1.16, the flashupdate utility might exit prematurely and cause the system to hang during the update process.

Workaround: This issue is fixed in firmware version 1.1.19.