

WDR Installation Guide

Sun Microsystems, Inc. 4150 Network Circle Santa Clara, CA 95054 U.S.A.

Part No. 816-4820-10 September 2002, Revision A

Send comments about this document to: docfeedback@sun.com

Copyright 2002 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, CA 95054 USAAll rights reserved.

This product or document is distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or 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 other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, AnswerBook2, docs.sun.com, 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 Energy Star logo is a registered trademark of EPA.

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.

[IF ENERGY STAR INFORMATION IS REQUIRED FOR YOUR PRODUCT, DO THE FOLLOWING: DELETE THIS TEXT. DOWNLOAD THE ENERGY STAR GRAPHIC (ENERGYSTAR.EPS) FROM DOCS MANAGER TO YOUR / ART DIRECTORY. IMPORT THE GRAPHIC BY REFERENCE INTO THIS PARAGRAPH USING THE <GRAPHIC> ELEMENT.]

Federal Acquisitions: Commercial Software—Government Users Subject to Standard License Terms and Conditions.

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 2002 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, CA 95054 Etats-Unis. Tous droits réservés.

Ce produit ou document est 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, AnswerBook2, docs.sun.com, 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.

Achats fédéraux : logiciel commercial - Les utilisateurs gouvernementaux doivent respecter les conditions du contrat de licence standard.

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

Requirements for Running WDR on Sun Fire 15K, 12K, 6800, 4810, 4800, and 3800 Systems 1 Install the Correct Version of the Solaris Operating System 1 Where To Install Solaris Software 2 Information About Installing Solaris Software 2 Installing WDR on a Sun Fire 15K/12K System 2 Patches Required to Run DR on a Sun Fire 15K/12K 2 Make Sure CIMOM Is Running and Accepting Connections 3 On Both SCs Running the Solaris 8 2/02 Operating Environment 3 On Both SCs Running the Solaris 9 Operating Environment 3 To Start Solaris WBEM Services 3 Complete Sun Fire 15K/12K Installation Instructions 4 Before installing WDR, uninstall any existing version of WDR 4 ▼ To Install WDR Using the Web Installer 8 ▼ ▼ To Install WDR from the Solaris Supplement CD 8 To Install WDR Using the pkgadd(1M) command: 8 ▼ The final step is to compile the .mof files: 11 ▼ Establishing User Groups on the Sun Fire 15K/12K System 11 Installing WDR on a Sun Fire 6800, 4810, 4800, or 3800 System 12 Prerequisites 12

Midframe Service Processor (MSP) Prerequisites 13

Sun Fire 6800/4810/4800/3800 System Prerequisites 13

Domain Configuration Server (DCS) 13

Make Sure CIMOM Is Running and Accepting Connections 14

On an MSP Running the Solaris 8 2/02 Operating Environment 14

On an MSP Running the Solaris 9 Operating Environment 14 To Start Solaris WBEM Services 14

Complete Sun Fire 6800, 4810, 4800, and 3800 Installation Instructions 15

- ▼ Before installing WDR, uninstall any existing version of WDR 15
- ▼ To Install WDR Using the Web Installer 20
- ▼ To Install WDR from the Solaris Supplement CD 20
- ▼ To Install WDR Using the pkgadd(1M) command: 20
- ▼ Configure WDR 23
- ▼ The final step is to compile the .mof files: 24

Configuring for Process Indications 25

Establishing User Groups on the Sun Fire 6800, 4810, 4800, or 3800 System 25

Installing WDR

This WDR Installation Guide is organized into the following sections:

- The first section describes installation issues that pertain to all the Sun Fire systems on which WDR runs: Sun Fire 15K/12K, 6800, 4810, 4800, and 3800.
- The second section displays the commands that you enter, and the messages that the system displays, during the installation process on a Sun Fire 15K/12K system.
- The third section displays the commands and output during installation of WDR on a Sun Fire 6800, 4810, 4800, or 3800 system.

Requirements for Running WDR on Sun Fire 15K, 12K, 6800, 4810, 4800, and 3800 Systems

Install the Correct Version of the Solaris Operating System

WDR runs only on Sun Fire 15K, 12K, 6800, 4810, 4800, and 3800 systems that are running either the Solaris 8 2/02 operating environment or the Solaris 9 operating environment.

Where To Install Solaris Software

- On a Sun Fire 15K/12K system make sure either the Solaris 8 2/02 operating environment or the Solaris 9 operating environment is correctly installed on each System Controller (SC) and on each domain.
- On a Sun Fire 6800, 4810, 4800, or 3800 system, make sure either the Solaris 8 2/02 operating environment or the Solaris 9 operating environment is correctly installed on an external host called the *Midframe Service Processor* (MSP) and on each domain.

Note – The hardware and software requirements for the MSP are described in "Midframe Service Processor (MSP) Prerequisites" on page 13.

Information About Installing Solaris Software

For complete information about installing Solaris software see the following documentation:

- The Solaris 8 2/02 Installation Roadmap (part number 816-2582-10)
- The Solaris 9 Installation Roadmap (part number 816 1662-10)

Installing WDR on a Sun Fire 15K/12K System

Patches Required to Run DR on a Sun Fire 15K/12K

If you are running the Solaris 8 2/02 operating emvironment on a Sun Fire 15K/12K system, you need to install additional patches to enable dynamic reconfiguration. These patches are available at sunsolve.sun.com. Complete instructions for installing the patches are available in the Sun Fire 15K/12K Dynamic Reconfiguration Installation Guide and Release Notes, Solaris 8 2/02 (part number 816-5080-10).

If you are running the Solaris 9 operating environment on a Sun Fire 15K/12K system, you need to install additional patches to enable dynamic reconfiguration (DR). These patches, along with complete instructions for installing them on the Sun Fire 15K/12K system, are available at

http://www.sun.com/servers/highend/sunfire15k/

Make Sure CIMOM Is Running and Accepting Connections

On Both SCs Running the Solaris 8 2/02 Operating Environment

Log on to the SC as root and enter the following command:

```
# /etc/init.d/init.wbem status
```

If the message "SMC server version 2.0.0 running on port 898." is returned, then Solaris WBEM Services are running and accepting connections.

However, if the message "SMC server not running on port 898." is returned, check for smcboot processes by entering the following command:

ps -ef| /usr/xpg4/bin/grep -e smcboot

If two smcboot processes are displayed, then Solaris WBEM Services are running and accepting connections. If no processes are displayed, then you must start Solaris WBEM Services.

On Both SCs Running the Solaris 9 Operating Environment

Log on to the SC as root and enter the following command:

```
# /etc/init.d/init.wbem status
```

If the message "Solaris Management Console server version 2.1.0 running on port 898." is returned, then Solaris WBEM Services are running and accepting connections.

However, if the message "Solaris Management Console server not running on port 898." is returned, then you must start Solaris WBEM Services.

To Start Solaris WBEM Services

Enter the following command as root:

/etc/init.d/init.wbem start

Complete Sun Fire 15K/12K Installation Instructions

This section shows all the input that you enter on the command line as well as all the output that is displayed during a successful installation of WDR on both SCs of a Sun Fire 15K/12K system.

▼ Before installing WDR, uninstall any existing version of WDR

Note – Perform the steps in this section *only* if WDR has already been installed on your system. If you are installing WDR for the first time, proceed directly to the next section and install the WDR packages.

If You Installed WDR Using the Web Installer or the Solaris Supplement CD

- 1. Make sure CIMOM is running. See "Make Sure CIMOM Is Running and Accepting Connections" on page 3.
- 2. As root run the wdrunconfig script, which resides in the /opt/SUNWWDR/bin directory, to remove all WDR CIM classes:

```
# cd /opt/SUNWWDR/bin
```

```
# ./wdrunconfig
```

```
Do you want to delete the WBEM DR CIM classes now? [y,n] y
Please enter the root password:
deleting class ":Solaris_SystemBoardHasControllers"
deleting class ":Solaris_SystemBoardHasMemory"
deleting class ":Solaris_SystemBoardHasProcessors"
deleting class ":Solaris DomainHasSlots"
deleting class ":Solaris_SlotHasSystemBoard"
deleting class ":Solaris CHController"
deleting class ":Solaris_CHMemory"
deleting class ":Solaris_CHCPU"
deleting class ":Solaris CHSystemBoard"
deleting class ":Solaris_WDRAttachmentPoint"
deleting class ":Solaris XCDomain"
deleting class ":Solaris_WDRDomain"
deleting class ":Solaris XCSlot"
deleting class ":Solaris_WDRSlot"
deleting class ":Solaris_XCComponentRemove"
```

```
deleting class ":Solaris_XCComponentInsert"
deleting class ":Solaris_XCBoardPowerOn"
deleting class ":Solaris_XCBoardPowerOff"
deleting class ":Solaris_XCDomainConfigChange"
deleting class ":Solaris_XCDomainDown"
deleting class ":Solaris_XCDomainStop"
deleting class ":Solaris_XCDomainStateChange"
deleting class ":Solaris_XCEnvironmentalIndication"
deleting class ":Solaris_XCDomainIndication"
deleting class ":Solaris_YCDomainIndication"
deleting class ":Solaris_YCDomainIndication"
deleting class ":Solaris_WDRIndication"
deleting class ":Solaris_WDRIndication"
deleting class ":Solaris_YCDomainIndication"
deleting class ":Solaris_ProviderPath.pathurl=
"file:///usr/sadm/lib/wbem/wdr.jar""
WBEM DR CIM classes have been removed successfully.
```

- 3. Make sure the DISPLAY variable is set.
- 4. If you are running the Solaris 8 2/02 operating environment:
 - a. Run the prodreg utility.
 - b. Select "WBEM DR."
 - c. Click "Uninstall."
 - d. Click "Next."
 - e. Choose "Full" (the default).
 - f. Click "Next."
 - g. Click "Uninstall Now."
- 5. If you are running the Solaris 9 operating environment:
 - a. Enter cd /var/sadm/prod
 - b. Enter java uninstall_WBEM_DR_1_0
- 6. Check whether the packages were removed successfully:

```
# pkginfo | /usr/xpg4/bin/grep -e SUNWWDRr -e SUNWWDRcfg -e
SUNWmcfg
#
```

If You Installed WDR Using the pkgadd(1M) Command

1. Make sure CIMOM is running. See "Make Sure CIMOM Is Running and Accepting Connections" on page 3.

2. As root run the wdrunconfig script, which resides in the /opt/SUNWWDR/bin directory, to remove all WDR CIM classes:

```
# cd /opt/SUNWWDR/bin
# ./wdrunconfig
Do you want to delete the WBEM DR CIM classes now? [y,n] y
Please enter the root password:
deleting class ":Solaris_SystemBoardHasControllers"
deleting class ":Solaris_SystemBoardHasMemory"
deleting class ":Solaris_SystemBoardHasProcessors"
deleting class ":Solaris DomainHasSlots"
deleting class ":Solaris SlotHasSystemBoard"
deleting class ":Solaris CHController"
deleting class ":Solaris CHMemory"
deleting class ":Solaris CHCPU"
deleting class ":Solaris_CHSystemBoard"
deleting class ":Solaris_WDRAttachmentPoint"
deleting class ":Solaris XCDomain"
deleting class ":Solaris WDRDomain"
deleting class ":Solaris XCSlot"
deleting class ":Solaris WDRSlot"
deleting class ":Solaris XCComponentRemove"
deleting class ":Solaris_XCComponentInsert"
deleting class ":Solaris XCBoardPowerOn"
deleting class ":Solaris XCBoardPowerOff"
deleting class ":Solaris XCDomainConfigChange"
deleting class ":Solaris XCDomainUp"
deleting class ":Solaris XCDomainDown"
deleting class ":Solaris XCDomainStop"
deleting class ":Solaris_XCDomainStateChange"
deleting class ":Solaris_XCEnvironmentalIndication"
deleting class ":Solaris_XCSystemBoardConfigChange"
deleting class ":Solaris XCDomainIndication"
deleting class ":Solaris_WDRIndication"
deleting instance ":Solaris ProviderPath.pathurl=
"file:///usr/sadm/lib/wbem/wdr.jar""
WBEM DR CIM classes have been removed successfully.
```

3. Remove the SUNWWDRcfg package:

pkgrm SUNWWDRcfg
The following package is currently installed:

SUNWWDRcfg WBEM-Based Dynamic Reconfiguration Config Files (sparc) 1.0.0, REV=2002.05.24.16.34 Do you want to remove this package? [y,n,?,q] y

```
## Removing installed package instance <SUNWWDRcfg>
  This package contains scripts which will be executed with
  super-user permission during the process of removing this
  package.
  Do you want to continue with the removal of this package
  [y,n,?,q] y
  ## Verifying package dependencies.
  ## Processing package information.
  ## Removing pathnames in class <none>
  /opt/SUNWWDR/bin/wdrunconfig
  /opt/SUNWWDR/bin/wdrconfig
  /opt/SUNWWDR/bin/newwdrlog
  /opt/SUNWWDR/bin
  /opt/SUNWWDR
  ## Executing postremove script.
  20 3 * * 6
                /opt/SUNWWDR/bin/newwdrlog # SUNWWDRcfg
  ## Updating system information.
  Removal of <SUNWWDRcfg> was successful.
4. Remove the SUNWWDRr package:
  # pkgrm SUNWWDRr
  The following package is currently installed:
    SUNWWDRr WBEM Automatic Dynamic Reconfiguration
             (sparc) 1.0.0, REV=2002.05.24.16.34
  Do you want to remove this package? y
  ## Removing installed package instance <SUNWWDRr>
  ## Verifying package dependencies.
  ## Processing package information.
  ## Removing pathnames in class <none>
  /usr/sadm/mof/WDR XC1.0.mof
  /usr/sadm/mof/WDR_SG1.0.mof
  /usr/sadm/mof/WDR_Core1.0.mof
  /usr/sadm/mof <shared pathname not removed>
  /usr/sadm/lib/wbem/wdr.jar
  /usr/sadm/lib/wbem/libwdr_xc.so.1
  /usr/sadm/lib/wbem/libwdr_sg.so.1
  /usr/sadm/lib/wbem/libwdr.so.1
  /usr/sadm/lib/wbem/libwdr.so
  /usr/sadm/lib/wbem <shared pathname not removed>
  /usr/sadm/lib <shared pathname not removed>
  /usr/sadm <shared pathname not removed>
  /usr/lib/locale/C/LC MESSAGES/SUNW WDR.mo
  /usr/lib/locale/C/LC_MESSAGES/SUNW_MCFG.mo
```

/usr/lib/locale/C/LC_MESSAGES <shared pathname not removed> /usr/lib/locale/C <shared pathname not removed> /usr/lib/locale <shared pathname not removed> /usr/lib <shared pathname not removed> ## Updating system information. Removal of <SUNWWDRr> was successful.

5. Check whether the packages were removed successfully:

```
# pkginfo | /usr/xpg4/bin/grep -e SUNWWDRr -e SUNWWDRcfg
#
```

▼ To Install WDR Using the Web Installer

- 1. Download the file wdr1.0.zip to a new directory.
- 2. In the new directory enter unzip wdrl.0.zip.
- 3. Enter ./installer and follow the prompts.

▼ To Install WDR from the Solaris Supplement CD

- 1. Insert the Solaris Supplement CD in a CDROM drive.
- 2. Enter cd /cdrom/cdrom0/WBEM_DR_1.0
- 3. Enter ./installer and follow the prompts.

▼ To Install WDR Using the pkgadd(1M) command:

- Go to the directory where the WDR packages reside, for example: # cd /tmp/packages/wdr1.0
- Check that only the following three packages are available in the directory:
 # ls

SUNWWDRcfg SUNWWDRr SUNWmcfg

3. Run the pkgadd(1M) command and follow the installation program prompts to add the SUNWWDRr and SUNWWDRcfg packages, in that order.

Note – The SUNWmcfg package is installed only on Sun Fire 6800, 4810, 4800, and 3800 systems.

```
# pkgadd -d .
The following packages are available:
```

1 SUNWWDRcfg WBEM-Based Dynamic Reconfiguration Config Files (sparc) 1.0.0, REV=2002.05.24.16.34 WBEM Dynamic Reconfiguration 2 SUNWWDRr (sparc) 1.0.0, REV=2002.05.24.16.34 3 SUNWmcfg SunMC/WDR Management Workstation Shared Config File (sparc) 1.0.0, REV=2002.05.24.16.34 Select package(s) you wish to process (or 'all' to process all packages). (default: all) [?,??,g]: 2 Processing package instance <SUNWWDRr> from </ws/cadr1.0gate/packages/sparc/wdr1.0_28> WBEM Dynamic Reconfiguration (sparc) 1.0.0, REV=2002.05.24.16.34 Copyright 2002 Sun Microsystems, Inc. All rights reserved. Use is subject to license terms. ## Executing checkinstall script. Using </usr> as the package base directory. ## Processing package information. ## Processing system information. 8 package pathnames are already properly installed. ## Verifying package dependencies. ## Verifying disk space requirements. ## Checking for conflicts with packages already installed. ## Checking for setuid/setgid programs. This package contains scripts which will be executed with super-user permission during the process of installing this package. Do you want to continue with the installation of <SUNWWDRr> [y,n,?] y Installing WBEM Dynamic Reconfiguration as <SUNWWDRr> ## Installing part 1 of 1. /usr/lib/locale/C/LC_MESSAGES/SUNW_MCFG.mo /usr/lib/locale/C/LC_MESSAGES/SUNW_WDR.mo /usr/sadm/lib/wbem/libwdr_sq.so.1 /usr/sadm/lib/wbem/libwdr_xc.so.1 /usr/sadm/lib/wbem/wdr.jar /usr/sadm/mof/WDR_Core1.0.mof /usr/sadm/mof/WDR_SG1.0.mof /usr/sadm/mof/WDR XC1.0.mof [verifying class <none>] ## Executing postinstall script.

```
Installation of <SUNWWDRr> was successful.
The following packages are available:
1 SUNWWDRcfg WBEM-Based Dynamic Reconfiguration Config Files
                 (sparc) 1.0.0, REV=2002.05.24.16.34
2 SUNWWDRr WBEM Dynamic Reconfiguration
                 (sparc) 1.0.0, REV=2002.05.24.16.34
3 SUNWmcfg SunMC/WDR Management Workstation Shared Config File
                 (sparc) 1.0.0, REV=2002.05.24.16.34
Select package(s) you wish to process (or 'all' to process
all packages). (default: all) [?,??,g]: 1
Processing package instance <SUNWWDRcfg> from </ws/cadr1.0-
gate/packages/sparc/wdr1.0_28>
WBEM-Based Dynamic Reconfiguration Config Files
(sparc) 1.0.0, REV=2002.05.24.16.34
Copyright 2002 Sun Microsystems, Inc. All rights reserved.
Use is subject to license terms.
Using </opt> as the package base directory.
## Processing package information.
## Processing system information.
## Verifying package dependencies.
## Verifying disk space requirements.
## Checking for conflicts with packages already installed.
## Checking for setuid/setgid programs.
This package contains scripts which will be executed with
super-user permission during the process of installing this
package.
Do you want to continue with the installation of <SUNWWDRcfq>
[y,n,?] y
Installing WBEM-Based Dynamic Reconfiguration Config Files as
<SUNWWDRcfg>
## Installing part 1 of 1.
/opt/SUNWWDR/bin/newwdrlog
/opt/SUNWWDR/bin/wdrconfig
/opt/SUNWWDR/bin/wdrunconfig
[ verifying class <none> ]
## Executing postinstall script.
Installation of <SUNWWDRcfg> was successful.
The following packages are available:
1 SUNWWDRcfg WBEM-Based Dynamic Reconfiguration Config Files
                 (sparc) 1.0.0, REV=2002.05.24.16.34
```

4. Check whether the WDR packages have been added successfully:

```
# pkginfo | /usr/xpg4/bin/grep -e SUNWWDRcfg -e SUNWWDRr
application SUNWWDRcfg WBEM-Based Dynamic Reconfiguration Config
Files
application SUNWWDRr WBEM Dynamic Reconfiguration
```

▼ The final step is to compile the .mof files:

The WDR script that compiles the .mof files is called wdrconfig, and resides in the /opt/SUNWWDR/bin directory. Enter the following commands:

The installation process is now complete.

Establishing User Groups on the Sun Fire 15K/12K System

On a Sun Fire 15K/12K system controller, you look in the /etc/group file for information about the group to which the user who is currently logged in is assigned. To change the group to which the user is assigned, you run the

/opt/SUNWSMS/bin/smsconfig script with appropriate arguments to modify the /etc/group file. For complete information about SMS security, administration models, and groups on Sun Fire 15K/12K systems, see the System Management Services (SMS) 1.2 Administrator Guide (part number 816-5259).

Groups determine the operations that a user can perform. The groups on the Sun Fire 15K/12K system are: platadmn, platoper, dmn*x*adm, and dmn*x*rcfg, where *x* is a domain identifier.

- A user who is a member of the platadmn group can assign, unassign, power-on, and power-off boards.
- A user who is a member of the platoper group has no special privileges.
- A user who is a member of the dmnxadm group can enumerate attachment points in domain x; enumerate all attachment points if the user is a member of the dmnxadm group in all domains in the system; and change an attachment point state, assign, unassign, power-on, and power-off a board that is in the access control list (ACL) of domain x.
- A user who is a member of the dmnxrcfg group can enumerate attachment points in domain x; enumerate all attachment points if the user is a member of the dmnxrcfg group in all domains in the system; and change an attachment point state, assign, unassign, power-on, and power-off a board that is in the ACL of domain x.

Installing WDR on a Sun Fire 6800, 4810, 4800, or 3800 System

Note – On the Sun Fire 6800, 4810, 4800, and 3800 systems, WDR cannot be installed on the SC; it is installed on the Midframe Service Processor (MSP).

Prerequisites

Before installing WDR on a Sun Fire 6800, 4810, 4800, or 3800 system, make sure that all the following requirements are met, on the MSP, on system domains, and on the SC.

Midframe Service Processor (MSP) Prerequisites

Software Requirements

Make sure that one of the following is installed:

- The Solaris 8 2/02 operating environment.
- The Solaris 9 operating environment.

Documentation for the Solaris operating environment is available for download at docs.sun.com.

Hardware Requirements

The minimum hardware requirements for an MSP are:

- sun4u architecture
- 8 GB available disk space
- 128 MB RAM
- CD-ROM drive
- SunSwiftTM card or (preferably) a QuadFast Ethernet card

Sun Fire 6800/4810/4800/3800 System Prerequisites

Make sure that one of the following is installed on each domain:

- The Solaris 8 2/02 operating environment.
- The Solaris 9 operating environment.

Make sure that the following is installed on the SC:

Version 5.13.0 of the system controller (SC) software

Domain Configuration Server (DCS)

Make sure that DCS is installed and running on Sun Fire 6800/4810/4800/3800 by following these steps:

1. Check whether the DCS packages were installed by entering the following command:

pkginfo | grep dcs

The following messages indicate that the DCS packages are present:

```
system SUNWdcsr Domain Configuration Server, (Root)
```

```
system SUNWdcsu Domain Configuration Server
```

2. If the DCS packages are not installed, use the pkgadd(1M) command to add the SUNWdcsr and SUNWdcsu packages.

Make Sure CIMOM Is Running and Accepting Connections

On an MSP Running the Solaris 8 2/02 Operating Environment

Log on to the MSP as root and enter the following command:

```
# /etc/init.d/init.wbem status
```

If the message "SMC server version 2.0.0 running on port 898." is returned, then Solaris WBEM Services are running and accepting connections.

However, if the message "SMC server not running on port 898." is returned, check for smcboot processes by entering the following command:

```
# ps -ef| /usr/xpg4/bin/grep -e smcboot
```

If two smcboot processes are displayed, then Solaris WBEM Services are running and accepting connections. If no processes are displayed, then you must start Solaris WBEM Services.

On an MSP Running the Solaris 9 Operating Environment

Log on to the MSP as root and enter the following command:

/etc/init.d/init.wbem status

If the message "Solaris Management Console server version 2.1.0 running on port 898." is returned, then Solaris WBEM Services are running and accepting connections.

However, if the message "Solaris Management Console server not running on port 898." is returned, then you must start Solaris WBEM Services.

To Start Solaris WBEM Services

Enter the following command as root:

Complete Sun Fire 6800, 4810, 4800, and 3800 Installation Instructions

This section shows all the input that you enter on the command line as well as all the output that is displayed during a successful installation of WDR on a Sun Fire 6800, 4810, 4800, or 3800 system.

Before installing WDR, uninstall any existing version of WDR

Note – Perform the steps in this section *only* if WDR has already been installed on your system. If you are installing WDR for the first time, proceed directly to the next section and install the WDR packages.

If You Installed WDR Using the Web Installer or the Solaris Supplement CD

- 1. Make sure CIMOM is running. See "Make Sure CIMOM Is Running and Accepting Connections" on page 3.
- 2. As root run the wdrunconfig script, which resides in the /opt/SUNWWDR/bin directory, to remove all WDR CIM classes:

```
# cd /opt/SUNWWDR/bin
# ./wdrunconfig
```

```
Do you want to delete the WBEM DR CIM classes now? [y,n] y
Please enter the root password:
deleting class ":Solaris_SystemBoardHasControllers"
deleting class ":Solaris_SystemBoardHasProcessors"
deleting class ":Solaris_DomainHasSlots"
deleting class ":Solaris_SlotHasSystemBoard"
deleting class ":Solaris_CHController"
deleting class ":Solaris_CHController"
deleting class ":Solaris_CHCPU"
deleting class ":Solaris_CHSystemBoard"
deleting class ":Solaris_CHSystemBoard"
deleting class ":Solaris_CHSystemBoard"
deleting class ":Solaris_WDRAttachmentPoint"
deleting class ":Solaris_XCDomain"
```

```
deleting class ":Solaris_XCSlot"
deleting class ":Solaris_WDRSlot"
deleting class ":Solaris_XCComponentRemove"
deleting class ":Solaris_XCComponentInsert"
deleting class ":Solaris XCBoardPowerOn"
deleting class ":Solaris_XCBoardPowerOff"
deleting class ":Solaris_XCDomainConfigChange"
deleting class ":Solaris XCDomainUp"
deleting class ":Solaris XCDomainDown"
deleting class ":Solaris XCDomainStop"
deleting class ":Solaris XCDomainStateChange"
deleting class ":Solaris_XCEnvironmentalIndication"
deleting class ":Solaris_XCSystemBoardConfigChange"
deleting class ":Solaris_XCDomainIndication"
deleting class ":Solaris WDRIndication"
deleting instance ":Solaris_ProviderPath.pathurl=
"file:///usr/sadm/lib/wbem/wdr.jar""
WBEM DR CIM classes have been removed successfully.
```

- 3. Make sure the DISPLAY variable is set.
- 4. If you are running the Solaris 8 2/02 operating environment:
 - a. Run the prodreg utility.
 - b. Select "WBEM DR."
 - c. Click "Uninstall."
 - d. Click "Next."
 - e. Choose "Full" (the default).
 - f. Click "Next."
 - g. Click "Uninstall Now."
- 5. If you are running the Solaris 9 operating environment:
 - a. Enter cd /var/sadm/prod
 - b. Enter java uninstall_WBEM_DR_1_0
- 6. Check whether the packages were removed successfully:

```
# pkginfo | /usr/xpg4/bin/grep -e SUNWWDRr -e SUNWWDRcfg -e
SUNWmcfg
```

```
#
```

If You Installed WDR Using the pkgadd(1M) Command

- 1. Make sure CIMOM is running. See "Make Sure CIMOM Is Running and Accepting Connections" on page 3.
- 2. As root run the wdrunconfig script, which resides in the /opt/SUNWWDR/bin directory, to remove all WDR CIM classes:

```
# cd /opt/SUNWWDR/bin
# ./wdrunconfig
Do you want to delete the WBEM DR CIM classes now? [y,n] y
Please enter the root password:
deleting class ":Solaris_SystemBoardHasControllers"
deleting class ":Solaris SystemBoardHasMemory"
deleting class ":Solaris_SystemBoardHasProcessors"
deleting class ":Solaris_DomainHasSlots"
deleting class ":Solaris SlotHasSystemBoard"
deleting class ":Solaris CHController"
deleting class ":Solaris_CHMemory"
deleting class ":Solaris CHCPU"
deleting class ":Solaris CHSystemBoard"
deleting class ":Solaris_WDRAttachmentPoint"
deleting class ":Solaris XCDomain"
deleting class ":Solaris WDRDomain"
deleting class ":Solaris_XCSlot"
deleting class ":Solaris_WDRSlot"
deleting class ":Solaris_XCComponentRemove"
deleting class ":Solaris_XCComponentInsert"
deleting class ":Solaris XCBoardPowerOn"
deleting class ":Solaris_XCBoardPowerOff"
deleting class ":Solaris_XCDomainConfigChange"
deleting class ":Solaris XCDomainUp"
deleting class ":Solaris XCDomainDown"
deleting class ":Solaris_XCDomainStop"
deleting class ":Solaris XCDomainStateChange"
deleting class ":Solaris XCEnvironmentalIndication"
deleting class ":Solaris_XCSystemBoardConfigChange"
deleting class ":Solaris XCDomainIndication"
deleting class ":Solaris WDRIndication"
deleting instance ":Solaris ProviderPath.pathurl=
"file:///usr/sadm/lib/wbem/wdr.jar""
WBEM DR CIM classes have been removed successfully.
```

- 3. Remove the SUNWWDRcfg package:
 - # pkgrm SUNWWDRcfg

The following package is currently installed: SUNWWDRcfg WBEM-Based Dynamic Reconfiguration Config Files (sparc) 1.0.0, REV=2002.05.24.16.34 Do you want to remove this package? [y,n,?,q] y ## Removing installed package instance <SUNWWDRcfg> This package contains scripts which will be executed with super-user permission during the process of removing this package. Do you want to continue with the removal of this package [y,n,?,q] y ## Verifying package dependencies. ## Processing package information. ## Removing pathnames in class <none> /opt/SUNWWDR/bin/wdrunconfig /opt/SUNWWDR/bin/wdrconfig /opt/SUNWWDR/bin/newwdrlog /opt/SUNWWDR/bin /opt/SUNWWDR ## Executing postremove script. 20 3 * * 6 /opt/SUNWWDR/bin/newwdrlog # SUNWWDRcfg ## Updating system information. Removal of <SUNWWDRcfg> was successful. 4. Remove the SUNWWDRr package:

```
# pkgrm SUNWWDRr
```

The following package is currently installed: SUNWWDRr WBEM Dynamic Reconfiguration (sparc) 1.0.0, REV=2002.05.24.16.34 Do you want to remove this package? [y,n,?,q] y ## Removing installed package instance <SUNWWDRr> ## Verifying package dependencies. ## Processing package information. ## Removing pathnames in class <none> /usr/sadm/mof/WDR_XC1.0.mof /usr/sadm/mof/WDR_SG1.0.mof /usr/sadm/mof/WDR Core1.0.mof /usr/sadm/mof <shared pathname not removed> /usr/sadm/lib/wbem/wdr.jar /usr/sadm/lib/wbem/libwdr xc.so.1 /usr/sadm/lib/wbem/libwdr_sq.so.1 /usr/sadm/lib/wbem/libwdr.so.1 /usr/sadm/lib/wbem/libwdr.so /usr/sadm/lib/wbem <shared pathname not removed>

/usr/sadm/lib <shared pathname not removed>
/usr/sadm <shared pathname not removed>
/usr/lib/locale/C/LC_MESSAGES/SUNW_WDR.mo
/usr/lib/locale/C/LC_MESSAGES <shared pathname not removed>
/usr/lib/locale/C <shared pathname not removed>
/usr/lib/locale shared pathname not removed>
/usr/lib/locale <shared pathname not removed>
/usr/lib/locale <shared pathname not removed>
/usr/lib/locale shared pathname not shared pathname not shared shared

Removal of <SUNWWDRr> was successful.

- 5. Remove the SUNWmcfg package:
- # pkgrm SUNWmcfg

The following package is currently installed: SUNWmcfg SunMC / WDR Management Workstation Shared Configuration File (sparc) 1.0.0, REV=2002.05.24.16.34

Do you want to remove this package? [y,n,?,q] y

Removing installed package instance <SUNWmcfg>

This package contains scripts which will be executed with super-user permission during the process of removing this package.

Do you want to continue with the removal of this package [y,n,?,q] y ## Verifying package dependencies. ## Processing package information. ## Executing preremove script. ## Removing pathnames in class <none> /opt/SUNWmcfg/lib/libmcfg.so.1 /opt/SUNWmcfg/lib/libmcfg.so /opt/SUNWmcfg/lib /opt/SUNWmcfg/lib

```
/opt/SUNWmcfg/bin/mcfgconfig
```

```
/opt/SUNWmcfg/bin
```

/opt/SUNWmcfg

Updating system information.

Removal of <SUNWmcfg> was successful.

6. Check whether the packages were removed successfully:

```
# pkginfo | /usr/xpg4/bin/grep -e SUNWWDRr -e SUNWWDRcfg -e
SUNWmcfg
```

#

▼ To Install WDR Using the Web Installer

- 1. Download the file wdr1.0.zip to a new directory.
- 2. In the new directory enter unzip wdr1.0.zip.
- 3. Enter ./installer and follow the prompts.

▼ To Install WDR from the Solaris Supplement CD

- 1. Insert the Solaris Supplement CD in a CDROM drive.
- 2. Enter cd /cdrom/cdrom0/WBEM_DR_1.0
- 3. Enter ./installer and follow the prompts.

▼ To Install WDR Using the pkgadd(1M) command:

- Go to the directory where the WDR packages reside, for example: # cd /tmp/packages/wdr1.0
- Check that only the following three packages are available in the directory:
 # ls

SUNWWDRcfg SUNWWDRr SUNWmcfg

3. Run the pkgadd(1M) command and follow the installation program prompts to add the SUNWWDRr, SUNWWDRcfg and SUNWmcfg packages, in that order:

pkgadd -d . The following packages are available: 1 SUNWWDRcfg WBEM-Based Dynamic Reconfiguration Config Files (sparc) 1.0.0, REV=2002.05.24.16.34 2 SUNWWDRr WBEM Dynamic Reconfiguration (sparc) 1.0.0, REV=2002.05.24.16.34 3 SUNWmcfq SunMC/WDR Management Workstation Shared Config File (sparc) 1.0.0, REV=2002.05.24.16.34 Select package(s) you wish to process (or 'all' to process all packages). (default: all) [?,??,q]: 2 Processing package instance <SUNWWDRr> from </ws/cadr1.0gate/packages/sparc/wdr1.0_28> WBEM Dynamic Reconfiguration (sparc) 1.0.0, REV=2002.05.24.16.34 Copyright 2002 Sun Microsystems, Inc. All rights reserved. Use is subject to license terms. ## Executing checkinstall script. Using </usr> as the package base directory.

```
## Processing package information.
## Processing system information.
   8 package pathnames are already properly installed.
## Verifying package dependencies.
## Verifying disk space requirements.
## Checking for conflicts with packages already installed.
## Checking for setuid/setgid programs.
This package contains scripts which will be executed with
super-user permission during the process of installing this
package.
Do you want to continue with the installation of <SUNWWDRr>
[y,n,?] y
Installing WBEM Dynamic Reconfiguration as <SUNWWDRr>
## Installing part 1 of 1.
/usr/lib/locale/C/LC_MESSAGES/SUNW_MCFG.mo
/usr/lib/locale/C/LC_MESSAGES/SUNW_WDR.mo
/usr/sadm/lib/wbem/libwdr_sq.so.1
/usr/sadm/lib/wbem/libwdr_xc.so.1
/usr/sadm/lib/wbem/wdr.jar
/usr/sadm/mof/WDR_Core1.0.mof
/usr/sadm/mof/WDR_SG1.0.mof
/usr/sadm/mof/WDR XC1.0.mof
[ verifying class <none> ]
## Executing postinstall script.
Installation of <SUNWWDRr> was successful.
The following packages are available:
1 SUNWWDRcfg WBEM-Based Dynamic Reconfiguration Config Files
                 (sparc) 1.0.0, REV=2002.05.24.16.34
2 SUNWWDRr WBEM Dynamic Reconfiguration
                 (sparc) 1.0.0, REV=2002.05.24.16.34
3 SUNWmcfg SunMC/WDR Management Workstation Shared Config File
                 (sparc) 1.0.0, REV=2002.05.24.16.34
Select package(s) you wish to process (or 'all' to process
all packages). (default: all) [?,??,q]: 1
Processing package instance <SUNWWDRcfg> from </ws/cadr1.0-
gate/packages/sparc/wdr1.0_28>
WBEM-Based Dynamic Reconfiguration Config Files
(sparc) 1.0.0, REV=2002.05.24.16.34
Copyright 2002 Sun Microsystems, Inc. All rights reserved.
```

Use is subject to license terms. Using </opt> as the package base directory. ## Processing package information. ## Processing system information. ## Verifying package dependencies. ## Verifying disk space requirements. ## Checking for conflicts with packages already installed. ## Checking for setuid/setgid programs. This package contains scripts which will be executed with super-user permission during the process of installing this package. Do you want to continue with the installation of <SUNWWDRcfg> [y,n,?] y Installing WBEM-Based Dynamic Reconfiguration Config Files as <SUNWWDRcfg> ## Installing part 1 of 1. /opt/SUNWWDR/bin/newwdrlog /opt/SUNWWDR/bin/wdrconfig /opt/SUNWWDR/bin/wdrunconfig [verifying class <none>] ## Executing postinstall script. Installation of <SUNWWDRcfg> was successful. The following packages are available: 1 SUNWWDRcfg WBEM-Based Dynamic Reconfiguration Config Files (sparc) 1.0.0, REV=2002.05.24.16.34 2 SUNWWDRr WBEM Dynamic Reconfiguration (sparc) 1.0.0, REV=2002.05.24.16.34 3 SUNWmcfg SunMC/WDR Management Workstation Shared Config File (sparc) 1.0.0, REV=2002.05.24.16.34 Select package(s) you wish to process (or 'all' to process all packages). (default: all) [?,??,q]: 3 Processing package instance <SUNWmcfg> from </net/twinsun.west/export/workspace/d4/issakov/cadr1.0packages/wdr1.0_28> SunMC / WDR Management Workstation Shared Configuration File (sparc) 1.0.0, REV=2002.05.24.16.34 Copyright 2002 Sun Microsystems, Inc. All rights reserved. Use is subject to license terms. Using </opt> as the package base directory. ## Processing package information. ## Processing system information.

```
## Verifying package dependencies.
  ## Verifying disk space requirements.
  ## Checking for conflicts with packages already installed.
  ## Checking for setuid/setgid programs.
  Installing SunMC / WDR Management Workstation Shared
  Configuration File as <SUNWmcfg>
  ## Installing part 1 of 1.
  /opt/SUNWmcfg/bin/mcfgconfig
  /opt/SUNWmcfg/bin/setconfigfile
  /opt/SUNWmcfg/lib/libmcfg.so <symbolic link>
  /opt/SUNWmcfg/lib/libmcfg.so.1
  [ verifying class <none> ]
  Installation of <SUNWmcfg> was successful.
  The following packages are available:
  1 SUNWWDRcfg WBEM-Based Dynamic Reconfiguration Config Files
                   (sparc) 1.0.0, REV=2002.05.24.16.34
  2 SUNWWDRr
             WBEM Dynamic Reconfiguration
                   (sparc) 1.0.0, REV=2002.05.24.16.34
              SunMC/WDR Management Workstation Shared Config File
  3 SUNWmcfq
              (sparc) 1.0.0, REV=2002.05.24.16.34
  Select package(s) you wish to process (or 'all' to process
  all packages). (default: all) [?,??,g]: q
4. Check whether the WDR packages have been added successfully:
  # pkginfo | /usr/xpq4/bin/grep -e SUNWWDRcfg -e SUNWWDRr -e
  SUNWmcfg
  application SUNWWDRcfg WBEM-Based Dynamic Reconfiguration Config
                         Files
```

application SUNWWDRr WBEM Dynamic Reconfiguration

application SUNWmcfg SunMC / WDR Management Workstation Shared Configuration File

▼ Configure WDR

Enter the following command:

```
# /opt/SUNWmcfg/bin/mcfgconfig
Do you want to configure the shared config file now? [yes]
Initiate Shared Configuration File
------
SC IP Address or Hostname: <my_SC_hostname>
platformRComm: P-public
```

```
platformWComm: P-private
domainA IP Address or Hostname: <my_domain_A__hostname>
domainB IP Address or Hostname:
domainC IP Address or Hostname: <my_domain_C__hostname>
domainD IP Address or Hostname:
#
```

Note – The P-public and P-private community strings shown above are default SNMP community strings. You should enter the community strings that were set on your SCs.

The final step is to compile the .mof files:

The WDR script that compiles the .mof files is called wdrconfig, and resides in the /opt/SUNWWDR/bin directory. Enter the following commands:

- 1. # cd /opt/SUNWWDR/bin/
- # 1s newwdrlog wdrconfig wdrunconfig
- 3. Run the wdrconfig script.

Note – If you are running the Sun MC Platform Agent on the MSP where WDR is installed, then the SC must be configured to send traps to two trap ports: one for the Sun MC Platform Agent (default port: 162); and the other for WDR (which is the port number that should be used to configure SCTrapPort below).

The installation process is now complete.

Configuring for Process Indications

To receive process indications on the Sun Fire 6800, 4810, 4800, or 3800 system, you need to configure the SC to send traps to both the WDR WBEM Provider and the Sun MC platform agent. If both are installed on the same host, then each must use a different port.

Perform the following tasks:

- Ensure that each domain is configured to deliver traps to the Midframe Service Processor (MSP). See the Sun Fire 6800/4810/4800/3800 Systems Platform Administration Manual (part number 805-7373) for instructions.
 - Use the setupdomain(1M) command to set up trap hosts and community strings on each domain.
 - Use the setupplatform(1M) command to set up trap hosts and community strings for the SC.
- To ensure that you are receiving traps, snoop the configured trap port for traps on the MSP, using the following command: snoop port trap_port
- Ensure that the client's subscription handler is an instance of the Solaris_RMIDelivery class, which is described in the *WDR Developer's Guide*.

Establishing User Groups on the Sun Fire 6800, 4810, 4800, or 3800 System

On a Sun Fire 6800/4810/4800/3800 system, you look in the /etc/group file for information about the group to which the user who is currently logged in is assigned. To change the group to which user is assigned, you modify the /etc/group file manually.

Groups determine the operations that a user can perform. Any user can enumerate domains and slots on a Sun Fire 6800/4810/4800/3800 system.

The groups on the Sun Fire 6800/4810/4800/3800 system are: spltadmn, spltop, sdxadm, sdxop, where x is a domain identifier.

- A user who is a member of the spltadmn group can assign and unassign boards.
- A user who is a member of the spltop group has no special privileges.
- A user who is a member of the sdxadm group can enumerate attachment points in domain x; enumerate all attachment points if the user is a member of the sdxadm group in all domains in the system; and change the attachment point state, assign, unassign, power-on, and power-off a board that is in the ACL of domain x.
- A user who is a member of the sdxop group can enumerate attachment points in domain x; and enumerate all attachment points if the user is a member of the sdxop group in all domains in the system.