



# About Solaris 9 Documentation

---

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

Part No: 806-5201-10  
May 2002

Copyright 2002 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. All rights reserved.

This product or document is protected by copyright and 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, docs.sun.com, AnswerBook, AnswerBook2, OpenWindows, ToolTalk, ONC+, JumpStart, SunOS, OpenBoot, Java, Solstice Enterprise Agents, WebNFS, iPlanet, SunSHIELD, Power Management, JDK, 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. Kodak Color Management System and KCMS are trademarks of Eastman Kodak Company. PostScript is a trademark or registered trademark of Adobe Systems, Incorporated, which may be registered in certain jurisdictions. Netscape Navigator is a trademark or registered trademark of Netscape Communications Corporation. Netscape is a trademark or registered trademark of Netscape Communications Corporation.

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.

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 U.S.A. Tous droits réservés

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 du système 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, docs.sun.com, AnswerBook, AnswerBook2, OpenWindows, ToolTalk, ONC+, JumpStart, SunOS, OpenBoot, Java, Solstice Enterprise Agents, WebNFS, iPlanet, SunSHIELD, Power Management, JDK, 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. Kodak Color Management System est de marque déposée de Eastman Kodak Company. KCMS est de marque déposée de Eastman Kodak Company. PostScript est une marque de fabrique d'Adobe Systems, Incorporated, laquelle pourrait être déposée dans certaines juridictions. Netscape Navigator est une marque de Netscape Communications Corporation. Netscape est une marque de Netscape Communications Corporation aux Etats-Unis et dans d'autres pays.

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.

CETTE PUBLICATION EST FOURNIE "EN L'ETAT" ET AUCUNE GARANTIE, EXPRESSE OU IMPLICITE, N'EST ACCORDEE, Y COMPRIS DES GARANTIES CONCERNANT LA VALEUR MARCHANDE, L'APTITUDE DE LA PUBLICATION A REpondre A UNE UTILISATION PARTICULIERE, OU LE FAIT QU'ELLE NE SOIT PAS CONTREFAISANTE DE PRODUIT DE TIERS. CE DENI DE GARANTIE NE S'APPLIQUERAIT PAS, DANS LA MESURE OU IL SERAIT TENU JURIDIQUEMENT NUL ET NON AVENU.



020115@3062



# Contents

---

|   |           |
|---|-----------|
| <b>Preface</b>  | <b>5</b>  |
| <b>1 Overview of Solaris 9 Documentation</b>                  | <b>7</b>  |
| Solaris 9 Documentation                                       | 7         |
| <b>2 Important Changes in the Solaris 9 Documentation Set</b> | <b>9</b>  |
| Documentation Changes   | 9         |
| Documentation Reorganizations                                 | 9         |
| Changes to Documentation Titles                               | 11        |
| Documentation Not in Solaris 9 Documentation Set              | 11        |
| Movement of Documentation                                     | 12        |
| New Documentation   | 13        |
| <b>3 Finding the Documentation for Your Task</b>              | <b>15</b> |
| Installing  | 15        |
| Using the Desktop   | 17        |
| Administering Systems, Networks, and Security Mechanisms      | 18        |
| Developing Applications                                       | 21        |
| Common Desktop Environment                                    | 25        |
| Asian Locales   | 28        |
| Man Page Documentation  | 29        |



# Preface

---

*About Solaris 9 Documentation* lists books and other documentation you might need for installing and using the Solaris™ 9 operating environment.

---

## How This Book is Organized

*About Solaris 9 Documentation* includes the following chapters:

- Chapter 1 describes how the Solaris 9 documentation set is organized.
- Chapter 2 summarizes the restructuring of the Solaris documentation set since the previous Solaris release.
- Chapter 3 lists Solaris 9 documents by tasks or subjects and provides a brief description of each document.

---

## Accessing Sun Documentation Online

The docs.sun.com<sup>SM</sup> Web site enables you to access Sun technical documentation online. You can browse the docs.sun.com archive or search for a specific book title or subject. The URL is <http://docs.sun.com>.

---

# Typographic Conventions

The following table describes the typographic changes used in this book.

**TABLE P-1** Typographic Conventions

| Typeface or Symbol | Meaning  | Example   |
|--------------------|--|---|
| AaBbCc123          | The names of commands, files, and directories; on-screen computer output | Edit your <code>.login</code> file.<br>Use <code>ls -a</code> to list all files.<br><code>machine_name%</code> you have mail. |
| <b>AaBbCc123</b>   | What you type, contrasted with on-screen computer output                 | <code>machine_name%</code> <b>su</b><br>Password:   |
| <i>AaBbCc123</i>   | Command-line placeholder: replace with a real name or value              | To delete a file, type <b>rm</b> <i>filename</i> .  |
| <i>AaBbCc123</i>   | Book titles, new words, or terms, or words to be emphasized.             | Read Chapter 6 in <i>User's Guide</i> .<br>These are called <i>class</i> options.<br>You must be <i>root</i> to do this.      |

---

# Shell Prompts in Command Examples

The following table shows the default system prompt and superuser prompt for the C shell, Bourne shell, and Korn shell.

**TABLE P-2** Shell Prompts

| Shell  | Prompt                     |
|--|----------------------------|
| C shell prompt                               | <code>machine_name%</code> |
| C shell superuser prompt                     | <code>machine_name#</code> |
| Bourne shell and Korn shell prompt           | <code>\$</code>            |
| Bourne shell and Korn shell superuser prompt | <code>#</code>             |

# Overview of Solaris 9 Documentation

---

This chapter provides an overview of Solaris 9 documentation.

---

## Solaris 9 Documentation

Solaris 9 documentation provides information on the installation and use of the Solaris 9 operating environment. Some printed documents are included in the Solaris media kit. Complete documentation is provided in both HTML and PDF formats on the Solaris 9 DVD and on the Solaris 9 Documentation CD. All documents can also be found at <http://docs.sun.com>.

---

**Note** – You might not have printed documents if your software was preinstalled. You might have printed documentation for other products that are packaged with the Solaris operating environment, but they are not described here.

---

---

**Note** – You might also want to refer to documentation that is provided by the manufacturer of your hardware. For example, you can refer to the *SPARC Hardware Platform Guide* or the OpenBoot™ manuals that are provided by Sun Microsystems, Inc.

---

The documents in the Solaris 9 documentation set are grouped by topics. These topics are directed toward specific audiences such as desktop users, system administrators, and software developers. Documents are grouped into the following collections:

- Solaris 9 About What's New Collection

- Solaris 9 Asian Locales Collection
- Solaris 9 Common Desktop Environment Developer Collection
- Solaris 9 KCMS Collection
- Solaris 9 Reference Manual Collection
- Solaris 9 Release and Installation Collection
- Solaris 9 Software Developer Collection
- Solaris 9 System Administrator Collection
- Solaris 9 User Collection
- iPlanet Directory Server 5.1 Collection

For a description of changes to the documentation set since the release of the Solaris 8 operating environment, see Chapter 2.

For a list of documents that are grouped by tasks or subjects, see Chapter 3.



# Important Changes in the Solaris 9 Documentation Set

---

This chapter describes changes to the documentation set since the release of the Solaris 8 operating environment.

---

## Documentation Changes

This section describes major changes to the Solaris 9 documentation set. The tables that follow highlight changes that have been made to documentation that was published in previous Solaris releases. These changes include the following:

- Document reorganizations
- Document title changes
- Documentation that is not published in the Solaris 9 documentation set
- Documentation that has been moved
- Documentation that has been added to the Solaris 9 documentation set

## Documentation Reorganizations

The following documentation has been reorganized in the Solaris 9 release.

**TABLE 2-1** Reorganization List

| Documentation                                 | Reorganization  |
|---|---|
| Installation Documentation                    | <p>The <i>Solaris 9 Installation Guide</i> has incorporated several installation books from the Solaris 8 release into one volume. The revised version combines all of the previous Solaris 8 installation guides: <i>Solaris 8 (SPARC Platform Edition) Installation Guide</i>, <i>Solaris 8 (Intel Platform Edition) Installation Guide</i>, <i>Solaris 8 Advanced Installation Guide</i>, and the <i>Solaris 8 Installation Supplement</i>.</p> <p>The revision also includes the addition of information about new and enhanced Solaris installation technologies. The focus is on task-based procedures. Reference material appears separately in the guide.</p> <p>The lists of packages that were previously included in the <i>Solaris 8 (SPARC Platform Edition) Installation Guide</i> and the <i>Solaris 8 (Intel Platform Edition) Installation Guide</i> are now in the <i>Solaris 9 Package List</i>.</p>   |
| Solaris 9 Release and Installation Collection | <p>The Solaris 8 Installation Collection and the Solaris 8 Release Notes Collection have been combined into one collection, the Solaris 9 Release and Installation Collection.</p>  |
| Reference Manual                              | <p>The section of the <i>SunOS Reference Manual</i> that describes the interface that is provided by the Device Driver Interface (DDI) Driver-Kernel Interface (DKI) now contains three books instead of four. These books are as follows:</p> <ul style="list-style-type: none"> <li>■ <i>man pages section 9: DDI and DKI Driver Entry Points</i></li> <li>■ <i>man pages section 9: DDI and DKI Kernel Functions</i></li> <li>■ <i>man pages section 9: DDI and DKI Properties and Data Structures</i></li> </ul> <p>For more information, see the Solaris 9 Reference Manual Collection.</p>  |
| System Administration Guides                  | <p>Several new guides have been added to the Solaris 9 release. All of the guides focus on task-based procedures and provide general reference material.</p> <p>The <i>System Administration Guide, Volume 1</i> has been renamed to <i>System Administration Guide: Basic Administration</i>. The <i>System Administration Guide, Volume 2</i> has been renamed to <i>System Administration Guide: Advanced Administration</i>.</p> <p>The <i>System Administration Guide, Volume 3</i> has been split into the <i>System Administration Guide: IP Services</i> and the <i>System Administration Guide: Resource Management and Network Services</i>. The resource management material is new in this release. The IP services guide focuses on such technologies as TCP/IP, DHCP, IPv4 and IPv6, Mobile IP, IP Security, and IP Network Multipathing. The resource management and network services guide includes the following topics: resource management, remote file systems, mail, SLP, and PPP.</p> <p>The <i>System Administration Guide: Naming and Directory Services (DNS, NIS, and LDAP)</i> and the <i>System Administration Guide: Naming and Directory Services (FNS and NIS+)</i> are new documents that include information that was previously documented in the <i>Solaris Naming Administration Guide</i>, the <i>LDAP Setup and Configuration Guide</i>, the <i>NIS+ Transition Guide</i>, and the <i>Solaris Naming Setup and Configuration Guide</i>.</p> <p>The <i>System Administration Guide: Security Services</i> includes information from the <i>SunSHIELD Basic Security Module Guide</i>, as well as sections about RBAC, PAM, Solaris secure shell, and SEAM.</p> |

## Changes to Documentation Titles

These documents were published in a previous Solaris release under a different title. They have been renamed in the Solaris 9 documentation set.

**TABLE 2-2** Title Changes

| <b>Previous Title</b>                              | <b>New Title</b>  |
|--|---|
| <i>OpenWindows Advanced User's Guide</i>           | <i>Solaris Advanced User's Guide</i>                        |
| <i>Solaris Smart Cards Administration Guide</i>    | <i>Solaris Smartcard Administration Guide</i>               |
| <i>Solaris WBEM Services Administrator's Guide</i> | <i>Solaris WBEM Services Administration Guide</i>           |
| <i>Sun WBEM Services Developer's Guide</i>         | <i>Solaris WBEM SDK Developer's Guide</i>                   |
| <i>System Administration Guide, Volume 1</i>       | <i>System Administration Guide: Basic Administration</i>    |
| <i>System Administration Guide, Volume 2</i>       | <i>System Administration Guide: Advanced Administration</i> |

## Documentation Not in Solaris 9 Documentation Set

These documents are not published as part of the Solaris 9 documentation set. They were previously published as part of the Solaris 8 documentation set and can be found at <http://docs.sun.com>.

**TABLE 2-3** Documents Not Published in the Solaris 9 Release

| <b>Document Title</b>   | <b>Previous Collection</b>                |
|---|---|
| <i>Binary Compatibility Guide</i>                                     | Solaris 8 System Administrator Collection |
| <i>JDK 1.1 for Solaris Developer's Guide</i>                          | Solaris 8 Software Developer Collection   |
| <i>OpenWindows User's Guide</i>                                       | Solaris 8 User Collection                 |
| <i>Solaris 8 (Intel Platform Edition) Device Configuration Guide</i>  | Solaris 8 Installation Collection         |
| <i>Solaris 8 (Intel Platform Edition) Hardware Compatibility List</i> | Solaris 8 Installation Collection         |
| <i>Solaris Transition Guide</i>                                       | Solaris 8 System Administrator Collection |

**TABLE 2-3** Documents Not Published in the Solaris 9 Release (Continued)

| Document Title                         | Previous Collection                       |
|--|---|
| <i>Solaris Transition Guide Update</i> | Solaris 8 System Administrator Collection |
| <i>Source Compatibility Guide</i>      | Solaris 8 Software Developer Collection   |
| <i>WebNFS Developer's Guide</i>        | Solaris 8 Software Developer Collection   |

## Movement of Documentation

These documents were once published as part of the Solaris documentation set. They are now either published elsewhere, or their content has been moved into a different document.

**TABLE 2-4** Relocated Documentation

| Document Title   | Now Located   |
|--|---|
| <i>IP Network Multipathing Administration Guide</i>      | <i>System Administration Guide: IP Services</i>   |
| <i>LDAP Setup and Configuration Guide</i>                | <i>System Administration Guide: Naming and Directory Services (DNS, NIS, and LDAP)</i>  |
| <i>Mobile IP Administration Guide</i>                    | <i>System Administration Guide: IP Services</i>   |
| <i>Network Interface Guide</i>                           | <i>Programming Interfaces Guide</i>   |
| <i>NIS+ Transition Guide</i>                             | <i>System Administration Guide: Naming and Directory Services (FNS and NIS+)</i>  |
| <i>OpenBoot 2.x Command Reference Manual</i>             | Software Supplement for the Solaris 9 Operating Environment   |
| <i>OpenBoot 2.x Quick Reference</i>                      | Software Supplement for the Solaris 9 Operating Environment   |
| <i>OpenBoot 3.x Command Reference Manual</i>             | Software Supplement for the Solaris 9 Operating Environment   |
| <i>OpenBoot 3.x Quick Reference</i>                      | Software Supplement for the Solaris 9 Operating Environment   |
| <i>Service Location Protocol Administration Guide</i>    | <i>System Administration Guide: Resource Management and Network Services</i>  |
| <i>Solaris Common Messages and Troubleshooting Guide</i> | Man Pages and System Administration Guides  |
| <i>Solaris Naming Administration Guide</i>               | <i>System Administration Guide: Naming and Directory Services (DNS, NIS, and LDAP)</i> and <i>System Administration Guide: Naming and Directory Services (FNS and NIS+)</i> |
| <i>Solaris Naming Setup and Configuration Guide</i>      | <i>System Administration Guide: Naming and Directory Services (DNS, NIS, and LDAP)</i> and <i>System Administration Guide: Naming and Directory Services (FNS and NIS+)</i> |

**TABLE 2-4** Relocated Documentation (Continued)

| Document Title                               | Now Located   |
|--|---|
| <i>SunShield Basic Security Module Guide</i> | <i>System Administration Guide: Security Services</i>       |
| <i>System Interface Guide</i>                | <i>Programming Interfaces Guide</i>                         |
| <i>Using Power Management</i>                | <i>Solaris Common Desktop Environment: User's Guide</i>     |
| <i>Writing FCode 3.x Programs</i>            | Software Supplement for the Solaris 9 Operating Environment |

## New Documentation

A new collection, the iPlanet Directory Server 5.1 Collection, has been added to the Solaris 9 documentation set.

**TABLE 2-5** Added Collection

| New Collection                          | Books in Collection   |
|---|---|
| iPlanet Directory Server 5.1 Collection | <p>The iPlanet™ Directory Server delivers open, scalable identity management infrastructure to enterprises that handle high volumes of information and users who are distributed worldwide. The iPlanet Directory Server documentation provides the information you need to understand, design, deploy, and maintain iPlanet Directory Server 5.1 technology. This new collection includes the following books:</p> <ul style="list-style-type: none"> <li>■ <i>iPlanet Directory Server 5.1 Deployment Guide</i></li> <li>■ <i>iPlanet Directory Server 5.1 Administrator's Guide</i></li> <li>■ <i>iPlanet Directory Server 5.1 Configuration, Command, and File Reference</i></li> <li>■ <i>iPlanet Directory Server 5.1 Schema Reference</i></li> </ul> <p>For further information on these iPlanet books, see Chapter 3.</p> |



## Finding the Documentation for Your Task

---

This chapter provides Solaris 9 documentation that is organized by tasks or subjects. The documents are grouped under these subjects:

- “Installing” on page 15
- “Using the Desktop” on page 17
- “Administering Systems, Networks, and Security Mechanisms” on page 18
- “Developing Applications” on page 21
- “Common Desktop Environment” on page 25
- “Asian Locales” on page 28
- “Man Page Documentation” on page 29

Documents available on the Solaris 9 documentation set are grouped under collection headings. The table titles list the name of the collection where you can find the document. Some printed documents are provided in the Solaris 9 software media kits.

---

### Installing

The following tables list documentation that describes installation issues, features, and functionality. The table title lists the name of the collection where you can find the document in the Solaris 9 documentation set.

**TABLE 3-1** Solaris 9 About What's New Collection

| Document   | Description   |
|--|---|
| <i>What's New in the Solaris 9 Operating Environment</i> | This book contains high-level feature descriptions of new functionality in the Solaris 9 operating environment. Chapters summarize new features for desktop users, system administrators and software developers. The system administration chapter includes Solaris 9 installation features. New Java™ features are also summarized. |

**TABLE 3-2** Solaris 9 Release and Installation Collection

| Document  | Description  |
|---|--|
| <i>Solaris 9 Installation Guide</i>                         | This book describes how to install the Solaris operating environment on both networked and non-networked systems. The book describes how to use the Solaris Web Start installation program and the <code>suninstall</code> program to install systems interactively. The book contains instructions for using the Web Start Flash or the custom JumpStart™ technology to set up, automate, customize, and automatically install Solaris on any number of systems, primarily in enterprise network environments. This book also describes how to use Solaris Live Upgrade to substantially reduce the usual service outage that is associated with an operating system upgrade. |
| <i>Solaris 9 Package List</i>                               | This book contains the list of packages that are installed with the Solaris operating environment. Also included are package descriptions and the software group in which each package is installed.   |
| <i>Solaris 9 Release Notes</i> for the appropriate platform | These books, published in the Solaris 9 documentation set and in the Installation Kiosk, describe important installation and runtime issues and bugs. These Release Notes also include new feature descriptions, end-of-software support statements, and documentation issues.<br><br>For any updates, see the <i>Solaris 9 Release Notes</i> on <a href="http://docs.sun.com">http://docs.sun.com</a> .   |

**TABLE 3-3** Solaris 9 Printed Documentation

| Document   | Description   |
|--|---|
| <i>Solaris 9 Installation Release Notes</i> for the appropriate platform | These books, printed and included in the Solaris 9 Media folder, describe critical installation issues and bugs for the Solaris 9 operating environment.<br><br>For runtime issues, see the <i>Solaris 9 Release Notes</i> for the appropriate platform. Also, for any updates, see the <i>Solaris 9 Release Notes</i> on <a href="http://docs.sun.com">http://docs.sun.com</a> . |
| <i>Solaris 9 Start Here</i>  | This booklet outlines the process of installing the Solaris operating environment and related software.   |



---

# Using the Desktop

The following tables list documentation that describes desktop features and procedures. These documents are relevant to users of workstations, and includes use of the Common Desktop Environment software. The table title lists the name of the collection where you can find the document in the Solaris 9 documentation set.

**TABLE 3-4** Solaris 9 About What's New Collection

| Document   | Description   |
|--|---|
| <i>What's New in the Solaris 9 Operating Environment</i> | This book contains high-level feature descriptions of new functionality in the Solaris 9 operating environment. Chapters summarize new features for desktop users, system administrators, and software developers. The system administration chapter includes Solaris 9 installation features. New Java features are also summarized. |

**TABLE 3-5** Solaris 9 User Collection

| Document  | Description   |
|---|---|
| <i>Solaris Advanced User's Guide</i>  | This book is for advanced users of the Solaris operating environment. This book describes how to use the Solaris command-line interface to perform the following tasks. <ul style="list-style-type: none"><li>■ Log in and log out of a session</li><li>■ Enter commands</li><li>■ Access online documentation</li><li>■ Work with files and directories</li><li>■ Search the file system</li><li>■ Monitor processes and disk usage</li><li>■ Use the vi editor</li><li>■ Print documents</li><li>■ Use the network</li><li>■ Customize the operating environment</li><li>■ Modify keyboard equivalents</li><li>■ Run networked applications</li></ul> |
| <i>Solaris Common Desktop Environment: Advanced User's and System Administrator's Guide</i> | This book explains the advanced tasks that are needed to customize the appearance and behavior of the Solaris Common Desktop Environment (CDE). The book includes chapters on customizing system initialization; login; session initiation; and adding applications and providing interface representations for applications and their data. Other topics include configuring desktop processes, applications, and data across the network; and customizing desktop services such as window management, printing, colors, and fonts.  |

**TABLE 3-5** Solaris 9 User Collection (Continued)

| Document   | Description  |
|--|--|
| <i>Solaris Common Desktop Environment: User's Guide</i>            | This book describes the basic features of the Common Desktop Environment (CDE). This book also describes how to use the desktop and desktop applications.  |
| <i>Solaris Common Desktop Environment: User's Transition Guide</i> | This book is for users who are making the transition from the OpenWindows™ environment to the Common Desktop Environment (CDE). The book discusses CDE as a graphical operating environment and, where helpful, identifies the differences in behavior between OpenWindows and CDE. The answers to frequently asked questions have been integrated into the relevant topics. |

## Administering Systems, Networks, and Security Mechanisms

The following tables list documentation that describes system administration features, procedures, SunOS commands, and security mechanisms. The table title lists the name of the collection where you can find the document in the Solaris 9 documentation set.

**TABLE 3-6** Solaris 9 About What's New Collection

| Document   | Description   |
|--|---|
| <i>What's New in the Solaris 9 Operating Environment</i> | This book contains high-level feature descriptions of new functionality in the Solaris 9 operating environment. Chapters summarize new features for desktop users, system administrators, and software developers. The system administration chapter includes Solaris 9 installation features. New Java features are also summarized. |

**TABLE 3-7** Solaris 9 Release and Installation Collection

| Document  | Description  |
|---|--|
| <i>Solaris 9 Release Notes</i> for the appropriate platform | <p>These books, published in the Solaris 9 documentation set and in the Installation Kiosk, describe important installation and runtime issues and bugs. These Release Notes also include new feature descriptions, end-of-software support statements, and documentation issues.</p> <p>For any updates, see the <i>Solaris 9 Release Notes</i> on <a href="http://docs.sun.com">http://docs.sun.com</a>.</p> |

**TABLE 3-8** Solaris 9 System Administrator Collection

| Document   | Description   |
|--|---|
| <i>Font Administrator User's Guide</i>                   | This book provides detailed instructions for managing fonts in the OpenWindows environment.   |
| <i>Solaris Java Plug-in User's Guide</i>                 | This book describes the Java Plug-In component of the Java 2 Platform for the Solaris operating environment. This book contains information that is useful to applet developers and web site managers who host applets on their web pages. The Java Plug-in component is an add-on product for Netscape Navigator™ and the Netscape™ Communicator web browser. This component enables Java applets to run on the latest version of the Java Runtime Environment rather than the default Java Runtime Environment that ships with the browser. |
| <i>Solaris Smartcard Administration Guide</i>            | This book is intended for Solaris system and network administrators who are responsible for setting up smart cards on systems that require secure login authentication. Although no new software features are in this release, obsolete or inaccurate references have been removed from the documentation, bug fixes have been incorporated, and some new explanatory text has been added.  |
| <i>Solaris Tunable Parameters Reference Manual</i>       | This book provides reference information on Solaris tunable parameters. The book is intended for experienced Solaris system administrators who might need to change kernel tunable parameters in certain situations.  |
| <i>Solaris Volume Manager Administration Guide</i>       | This book provides instructions on using Solaris Volume Manager to manage disk storage. This book describes the creation, modification, and use of RAID 0 (concatenation and stripe) volumes, RAID 1 (mirror) volumes, and RAID 5 volumes, in addition to soft partitions and transactional logging devices.  |
| <i>Solaris WBEM Services Administration Guide</i>        | This book explains Common Information Model (CIM) concepts and describes how to administer Web-Based Enterprise Management (WBEM) services in the Solaris operating environment.  |
| <i>Solstice Enterprise Agents 1.0 User Guide</i>         | This book covers Solstice Enterprise Agents™, an extensible agent technology that uses the Simple Network Management Protocol (SNMP) to manage different components and applications separately within a device. The book describes how to install and configure Solstice Enterprise Agents components, how to invoke Master Agents and subagents, and how to use the Desktop Management Interface (DMI).   |
| <i>System Administration Guide: Basic Administration</i> | This book is for anyone responsible for administering one or more systems that run the Solaris 9 release. The book covers a broad range of Solaris system administration topics. These topics include managing user accounts and groups, managing server and client support, shutting down and booting a system, managing removable media, managing software (packages and patches), managing disks and devices, managing file systems, and backing up and restoring data.  |

**TABLE 3-8** Solaris 9 System Administrator Collection (Continued)

| Document   | Description   |
|--|---|
| <i>System Administration Guide: Advanced Administration</i>                            | This book is for anyone responsible for administering one or more systems that run the Solaris 9 release. The book covers a broad range of Solaris system administration topics. These topics include managing printing services, managing terminals and modems, managing system resources (disk quotas, accounting, and crontabs), managing system processes, and troubleshooting Solaris software problems. |
| <i>System Administration Guide: IP Services</i>  | This book is for anyone responsible for administering one or more systems that run the Solaris 9 release. The book covers a broad range of Internet Protocol (IP) network administration services. These services include managing TCP/IP networks, IPv4 and IPv6, DHCP, IP Security, Mobile IP, and IP Network Multipathing.   |
| <i>System Administration Guide: Naming and Directory Services (DNS, NIS, and LDAP)</i> | This book covers the setup and administration of the naming and directory services that are currently supported in the Solaris operating environment. DNS, NIS and LDAP are included in this book.  |
| <i>System Administration Guide: Naming and Directory Services (FNS and NIS+)</i>       | This book covers the setup and administration of the naming and directory services that are currently supported in the Solaris operating environment. FNS and NIS+ are included in this book.   |
| <i>System Administration Guide: Resource Management and Network Services</i>           | This book is for anyone responsible for administering one or more systems that run the Solaris 9 release. The book covers a broad range of Solaris network administration topics such as resource management, modems, remote file systems, mail, SLP, and PPP.  |
| <i>System Administration Guide: Security Services</i>                                  | This book is for anyone responsible for administering the security requirements for one or more systems that run the Solaris 9 release. The book covers a broad range of Solaris security-related topics such as auditing, PAM, RBAC, SEAM, and Solaris secure shell.   |

**TABLE 3-9** Solaris 9 User Collection

| Document  | Description  |
|---|--|
| <i>Solaris Common Desktop Environment: Advanced User's and System Administrator's Guide</i> | This book explains the advanced tasks that are needed to customize the appearance and behavior of the Solaris Common Desktop Environment (CDE). The book includes chapters on customizing system initialization, login, session initiation, and adding applications and providing interface representations for applications and their data. Other topics include configuring desktop processes, applications, and data across the network; and customizing desktop services such as window management, printing, colors, and fonts. |

**TABLE 3–10** iPlanet Directory Server 5.1 Collection

| Document   | Description   |
|--|---|
| <i>iPlanet Directory Server 5.1 Deployment Guide</i>                           | This book provides directory decision-makers, designers, and administrators with a foundation for planning your iPlanet Directory Server implementation. This book covers aspects of directory design, including schema design, the directory tree, topology, replication, and security. The book also provides sample deployment scenarios to help you plan simple deployments as well as complex deployments designed to support users who are distributed worldwide. |
| <i>iPlanet Directory Server 5.1 Administrator's Guide</i>                      | This book provides practical instructions on configuring, populating and replicating directory databases; creating and managing access control, directory entries, indexes, and user accounts; monitoring and tuning directory performance, and much more.  |
| <i>iPlanet Directory Server 5.1 Configuration, Command, and File Reference</i> | This book offers administrators and experienced users a complete reference for configuring the iPlanet Directory Server and managing it with the command-line tools.  |
| <i>iPlanet Directory Server 5.1 Schema Reference</i>                           | This book describes the standard user directory schema for the iPlanet Directory Server. This book covers all object classes and attributes that are defined by the standard schema, and the operational attributes in the server. The information provided here is intended for the administrator who manages and maintains the schema.  |

---

## Developing Applications

The following tables list documentation that describes software development features and procedures. The table title lists the name of the collection where you can find the document in the Solaris 9 documentation set.

**TABLE 3–11** Solaris 9 About What's New Collection

| Document   | Description   |
|--|---|
| <i>What's New in the Solaris 9 Operating Environment</i> | This book contains high-level feature descriptions of new functionality in the Solaris 9 operating environment. Chapters summarize new features for desktop users, system administrators, and software developers. The system administration chapter includes Solaris 9 installation features. New Java features are also summarized. |

**TABLE 3–12** Solaris 9 Software Developer Collection

| <b>Document</b>                                   | <b>Description</b>   |
|---|--|
| <i>Application Packaging Developer's Guide</i>    | This book provides step-by-step instructions and relevant background information for designing, building, and verifying packages. This document also includes information on, and examples of, advanced techniques that you might find helpful during the package creation process.  |
| <i>Federated Naming Service Programming Guide</i> | This book provides support for flexible composition of different, autonomous naming systems into a single service that you can access with a single, simple naming system interface.   |
| <i>GSS-API Programming Guide</i>                  | This book instructs developers on how to use the Generic Security Services Application Interface (GSS-API) to make their network-based programs secure. The GSS-API provides developers with a way to use installed security mechanisms, and the authentication, confidentiality, and data integrity features they provide, to protect transmissions over networks. The GSS-API eliminates the necessity for data-transmission programs to be platform-specific or mechanism-specific.   |
| <i>International Language Environments Guide</i>  | <p>This book describes internationalization features in the Solaris 9 operating environment. The book contains important information on how to use Solaris 9 software to build software products that support various languages and cultural conventions. This book also contains guidelines for developers on how to use Solaris 9 software to write applications for international markets.</p> <p>The euro is introduced, along with such concepts as Codeset Independence (CSI), keyboard support, and how to localize the multilingual Solaris product. Other topics include printing support for European and Asian printing, and Unicode locale support features.</p> |
| <i>Java 2 SDK for Solaris Developer's Guide</i>   | This book gives developers information about using the Java programming language in the Solaris 9 operating environment. The book includes overviews and descriptions of the new features and enhancements in the Java 2 Platform for Solaris, with notes about compatibility issues.  |
| <i>Linker and Libraries Guide</i>                 | This book describes the operations of the Solaris link-editor and runtime linker, and the objects on which they operate. The book covers the Link-Editor: <code>ld(1)</code> , the Runtime Linker: <code>ld.so.1(1)</code> , Shared Objects (sometimes referred to as Shared Libraries), and the ELF object file format.   |
| <i>Multithreaded Programming Guide</i>            | <p>This book covers the POSIX and Solaris threads APIs, programming with synchronization objects, compiling multithreaded programs, and finding analysis tools for multithreaded programs.</p> <p>This book is for developers who want to use multithreading to separate a process into many independent execution threads to improve application performance and structure.</p>   |

**TABLE 3-12** Solaris 9 Software Developer Collection (Continued)

| Document   | Description  |
|--|--|
| <i>ONC+ Developer's Guide</i>                    | <p>This book describes the ONC+™ distributed services that were developed at Sun Microsystems. ONC+ technologies consist of a family of technologies, services, and tools. The technologies include the following:</p> <ul style="list-style-type: none"><li>■ Transport-independent remote procedure call (TI-RPC) was developed to make RPC applications transport-independent.</li><li>■ External data representation (XDR) is an architecture-independent specification for representing data.</li><li>■ Network Information Services Plus (NIS+) is the enterprise naming service in the Solaris environment. This service provides a scalable and secure information base.</li></ul> |
| <i>Programming Interfaces Guide</i>              | <p>This book describes interfaces specific to the Solaris 9 environment in areas such as shared memory, transport selection, and real-time administration. This book also describes applications that relate to API/ABI compliance, such as <code>appcert</code>. The <i>ONC+ Developer's Guide</i> describes higher-level networking interfaces.</p>  |
| <i>Solaris 64-bit Developer's Guide</i>          | <p>This book is written primarily for the application developer and provides guidance on choosing whether to use the 32-bit or 64-bit Solaris application programming environment. The book explains the similarities and differences between the 32-bit and 64-bit application environments and explains how to write code that is portable between the two environments. This book also describes some of the tools that are provided by the operating system for developing 64-bit applications.</p>  |
| <i>Solaris DHCP Service Developer's Guide</i>    | <p>This book provides information for developers who want to support a new data service to store Solaris DHCP service information.</p>   |
| <i>Solaris Modular Debugger Guide</i>            | <p>This book describes the Solaris Modular Debugger (MDB), which is a general-purpose debugging tool for the Solaris operating environment. The primary feature of MDB is its extensibility. This book describes how to use MDB to debug complex software systems, with a particular emphasis on the facilities available for debugging the Solaris kernel and associated device drivers and modules. The book also includes a complete reference for and discussion of the MDB language syntax, debugger features, and MDB Module Programming API.</p>  |
| <i>Solaris WBEM SDK Developer's Guide</i>        | <p>This book describes the components of the Sun WBEM Software Development Kit (SDK) and explains how to use the components to develop WBEM-enabled applications and programs.</p>   |
| <i>Solaris X Window System Developer's Guide</i> | <p>This book provides detailed information for software developers who are designing applications for the Solaris X server. Read this book for detailed information about features of the Solaris X server, the DPS imaging system, and supported display devices. Other topics include authorization schemes and protocols for server connections, and differences from and enhancements to the X Consortium sample server.</p>   |

**TABLE 3–12** Solaris 9 Software Developer Collection (Continued)

| <b>Document</b>                                 | <b>Description</b>   |
|---|--|
| <i>SPARC Assembly Language Reference Manual</i> | This book describes the assembler that runs on the SPARC system and translates source files that are in assembly language format into object files in linking format. The text in this book is current to Solaris 7 software.  |
| <i>STREAMS Programming Guide</i>                | This book describes the STREAMS facilities for UNIX® system communications services in the Solaris environment. For application developers, this book includes information about constructing, using, and dismantling a stream; messaging; administration; and using STREAMS-based pipes and named pipes. For module and driver developers, this book describes the STREAMS framework, messaging, driver design, module design, configuration, multithreading, and multiplexing.   |
| <i>ToolTalk User's Guide</i>                    | This book describes the ToolTalk™ service and how to modify applications to send and receive ToolTalk messages. This document is for developers who create or maintain applications that use the ToolTalk service to interoperate with other applications. This book is also useful if you are a system administrator who sets up workstations. This book assumes familiarity with Solaris operating environment commands, system administrator commands, and system terminology.  |
| <i>Writing Device Drivers</i>                   | <p>This book provides information on developing device drivers for character-oriented devices, block-oriented devices, and SCSI target and HBA devices for the Solaris operating environment. This book discusses how to develop multithreaded reentrant device drivers for all architectures that conform to the Solaris DDI/DKI. A common driver programming approach is described that allows drivers to be written without concern for platform-specific issues such as endianness and data ordering.</p> <p>Additional topics include the porting of Solaris drivers to a 64-bit environment, cluster-aware drivers, driver autoconfiguration, programmed I/O, Direct Memory Access (DMA), and power management. Other topics include device context management; compilation, installation, and testing of drivers; and debugging of drivers.</p> |

**TABLE 3–13** Solaris 9 KCMS Collection

| <b>Documentation</b>                      | <b>Description</b>  |
|---|---|
| <i>KCMS Application Developer's Guide</i> | This book describes the Kodak Color Management System™ (KCMS™) framework application programming interface (API). The KCMS framework enables the accurate reproduction, and improves the appearance of, digital color images on desktop computers and associated peripherals. With this API, you can write applications that perform correct color conversions and manipulations. |



**TABLE 3–13** Solaris 9 KCMS Collection (Continued)

| <b>Documentation</b>                                 | <b>Description</b>   |
|--|--|
| <i>KCMS Calibrator Tool Loadable Interface Guide</i> | This book describes how to create a dynamically loadable device handler module that provides the KCMS Calibrator Tool with color correction data to update ICC format files. The document presents an overview of the interaction between the dynamically loadable module and the KCMS Calibrator Tool. Read this document if you are a driver developer who is writing a color module for color management technology.  |
| <i>KCMS CMM Developer's Guide</i>                    | This book describes how to create a KCMS color management module (CMM). This book provides information on how to use the KCMS foundation library, which is a graphics porting interface (GPI) that is implemented in C++. These interfaces link the device-independent layer of the KCMS library with the color module and enable the flow of data from the application to the color module. Read this document if you are a driver developer who is writing a color module for color management technology. |
| <i>KCMS CMM Reference Manual</i>                     | This book describes each C++ class in the KCMS foundation library. This library is a graphics porting interface that is implemented in C++ for creating KCMS color modules. Read this document if you are a driver developer who is writing a color module for color management technology.  |
| <i>KCMS Test Suite User's Guide</i>                  | This book describes a suite of test scripts and the testing facility the CMM developer can use to ensure that a CMM is compliant with the KCMS framework. The document is also a reference for anyone who is interested in the development and use of the KCMS framework.  |

---

## Common Desktop Environment

The following tables list documentation relevant for users of the Common Desktop Environment (CDE). Also included is documentation for software developers who are programming in this environment. The table title lists the name of the collection where you can find the document in the Solaris 9 documentation set.

**TABLE 3-14** Solaris 9 Common Desktop Environment Developer Collection

| Document   | Description   |
|--|---|
| <i>Common Desktop Environment: Application Builder User's Guide</i>            | This book introduces the Application Builder and shows you how to use it. The Application Builder is an interactive tool for developing applications. This tool provides features that facilitate both the construction of an application's graphical user interface and the incorporation of CDE's desktop services, including the Help System, ToolTalk messaging, drag and drop, and the Session Manager.  |
| <i>Common Desktop Environment: Desktop KornShell User's Guide</i>              | This book explains how to use the Desktop KornShell to create Motif applications. It introduces basic <code>dtksh</code> skills and provides several sample scripts. The samples are presented in order of increasing complexity so that you can gradually build your understanding of how <code>dtksh</code> works. The book also includes a list of the commands that are supported by <code>dtksh</code> and their syntaxes.   |
| <i>Common Desktop Environment: Help System Author's and Programmer's Guide</i> | This book describes how to develop online help for Common Desktop Environment application software. The book explains how to create help topics and how authors and developers collaborate to integrate online help into a Motif application. For authors, this document is a step-by-step guide to creating and testing online help that can contain multiple text styles, graphics, and hyperlinks. For application developers, this document describes the Help System application programming interface that enables the application to invoke help topics. The book explains the help dialog widgets, how to respond to help requests, and how to navigate hyperlink data. |
| <i>Common Desktop Environment: Internationalization Programmer's Guide</i>     | This book provides information for internationalizing an application so that it can support various languages and cultural conventions in a consistent user interface. This document contains guidelines and hints for developers on how to write applications for worldwide distribution. This book also includes an overall view of internationalization topics that span different layers within the desktop, and pointers to reference more detailed documentation.   |
| <i>Common Desktop Environment: Product Glossary</i>                            | This book provides a comprehensive list of terms that are used in the Common Desktop Environment and is a resource and reference base for all users of CDE. Glossary definitions can include information about the audience, where the term originated, and the CDE component that uses the term in its graphical user interface. A preferred term is listed where appropriate.   |
| <i>Common Desktop Environment: Programmer's Overview</i>                       | This book provides a high-level discussion of the CDE development environment and the developer documentation set. The book also contains an architectural overview of the entire CDE desktop.  |

**TABLE 3–14** Solaris 9 Common Desktop Environment Developer Collection (Continued)

| Document   | Description  |
|--|--|
| <i>Common Desktop Environment: Style Guide and Certification Checklist</i> | This book provides application-design style guidelines and the list of requirements for Common Desktop Environment application-level certification. This document provides information to assist the application designer in developing consistent applications and behaviors within the applications. By default, this checklist assumes that your application is being designed for a left-to-right language environment in an English-language locale. These style requirements consist of the Motif 2.1 requirements with Solaris Common Desktop Environment-specific additions. Though Solaris 9 software predates the Open Group's CDE 2.1 standard, you can also consult the Style Guide Set that is published by the Open Group for additional style considerations. |
| <i>Common Desktop Environment: ToolTalk Messaging Overview</i>             | This book describes the ToolTalk components, commands, and error messages that are offered as routines to enable your application to conform to the Media Exchange and Desktop Services message set conventions. This document is for developers who create or maintain applications that use the ToolTalk service to interoperate with other applications in the Common Desktop Environment.  |
| <i>Solaris Common Desktop Environment: Motif Transition Guide</i>          | This book addresses issues of concern to Sun Motif developers. Those issues include how to run existing OPEN LOOK and Motif applications on the OpenWindows and Solaris Common Desktop Environment desktops, and how to port OPEN LOOK and Motif applications to the Solaris CDE environment. This document assumes familiarity with OPEN LOOK or Motif programming.   |
| <i>Solaris Common Desktop Environment: Programmer's Guide</i>              | This book is for programmers who are interested in integrating an existing application into the Common Desktop Environment (CDE), or in developing a new application that uses the features and functionality of CDE. This book describes the CDE development environment, and assumes that you are familiar with Motif, X, UNIX, or C programming.  |

**TABLE 3–15** Solaris 9 User Collection

| Document  | Description  |
|---|--|
| <i>Solaris Common Desktop Environment: Advanced User's and System Administrator's Guide</i> | This book explains the advanced tasks that are needed to customize the appearance and behavior of the Solaris Common Desktop Environment (CDE). The book includes chapters on customizing system initialization, login, session initiation, and adding applications and providing interface representations for applications and their data. Other topics include configuring desktop processes, applications, and data across the network; and customizing desktop services such as window management, printing, colors, and fonts. |

**TABLE 3–15** Solaris 9 User Collection (Continued)

| Document   | Description   |
|--|---|
| <i>Solaris Common Desktop Environment: User's Guide</i>            | This book describes the basic features of the Common Desktop Environment (CDE). This book also describes how to use the desktop and desktop applications.   |
| <i>Solaris Common Desktop Environment: User's Transition Guide</i> | This book is for users who are making the transition from the OpenWindows environment to the Common Desktop Environment. The book discusses CDE as a graphical operating environment and, where helpful, identifies the differences in behavior between OpenWindows and CDE. The answers to frequently asked questions have been integrated into the relevant topics. |

---

## Asian Locales

The following table lists the documentation that provides information specific to Simplified Chinese, Traditional Chinese, and Korean locales in English. The table title lists the name of the collection where you can find the document in the Solaris 9 documentation set.

**TABLE 3–16** Solaris 9 Asian Locales Collection

| Document   | Description  |
|--|--|
| <i>Korean Solaris Release Overview</i>                         | This book summarizes the localized features of the Korean Solaris operating environment.   |
| <i>Korean Solaris System Administrator's Guide</i>             | This book provides system administration information specific to the Korean Solaris operating environment. The book also includes additional information that advanced users and developers can use to access and control features of the operating environment.             |
| <i>Korean Solaris User's Guide</i>                             | This book describes the locale-specific desktop tools and user utilities that are provided by the Korean Solaris operating environment. These tools and utilities include Korean input methods, fonts, and printing.   |
| <i>Simplified Chinese Solaris Release Overview</i>             | This book summarizes the localized features of the Simplified Chinese Solaris operating environment.   |
| <i>Simplified Chinese Solaris System Administrator's Guide</i> | This book provides system administration information specific to the Simplified Chinese Solaris operating environment. The book also includes additional information that advanced users and developers can use to access and control features of the operating environment. |

**TABLE 3–16** Solaris 9 Asian Locales Collection (Continued)

| Document  | Description   |
|---|---|
| <i>Simplified Chinese Solaris User's Guide</i>                  | This book describes the locale-specific desktop tools and user utilities that are provided by the Simplified Chinese Solaris operating environment. These tools and utilities include Simplified Chinese input methods, fonts, and printing.                                  |
| <i>Traditional Chinese Solaris Release Overview</i>             | This book summarizes the localized features of the Traditional Chinese Solaris operating environment.   |
| <i>Traditional Chinese Solaris System Administrator's Guide</i> | This book provides system administration information specific to the Traditional Chinese Solaris operating environment. The book also includes additional information that advanced users and developers can use to access and control features of the operating environment. |
| <i>Traditional Chinese Solaris User's Guide</i>                 | This book describes the locale-specific desktop tools and user utilities that are provided by the Traditional Chinese Solaris operating environment. These tools and utilities include Traditional Chinese input methods, fonts, and printing.                                |

---

## Man Page Documentation

The following table lists the sections of the *Solaris 9 Reference Manual*. To access these documents, use the `man` command, or refer to the Solaris 9 Reference Manual Collection in the Solaris 9 documentation set.

**TABLE 3–17** Solaris 9 Reference Manual Collection

| Section                                   | Description  |
|---|--|
| <i>man pages section 1: User Commands</i> | <p>This section describes the commands and utilities available with this operating system, including commands that are found only in the SunOS/BSD Compatibility Package. Also described are commands for communicating with other systems, commands associated with the Form and Menu Language Interpreter (FMLI), and commands specific to the SunOS™ system.</p> <p>The available options, arguments, and operands for each command are provided in accordance with standard rules of command syntax. Also provided are availability attributes, diagnostic information, and cross-references to other document pages and reference material with relevant information.</p> <p>This section is for all UNIX system users.</p> |

**TABLE 3-17** Solaris 9 Reference Manual Collection (Continued)

| Section  | Description   |
|--|---|
| <i>man pages section 1M: System Administration Commands</i>        | This section describes the Solaris system administration and maintenance utilities and is for system and network administrators.  |
| <i>man pages section 2: System Calls</i>                           | This section describes the system calls. A system call is a C library function that requests kernel services. Readers of this section should be familiar with C programming language constructs.  |
| <i>man pages section 3: Basic Library Functions</i>                | This section describes the core library functions found in the standard C library ( <code>libc</code> ), the dynamic linking library ( <code>libdl</code> ), the SunOS/BSD compatibility library ( <code>libcub</code> ), and the various memory allocation libraries. Readers of this section should be familiar with C programming language constructs.   |
| <i>man pages section 3: Curses Library Functions</i>               | This section describes the functions in the libraries that provide graphics and character screen-updating capabilities. Those functions include the curses library ( <code>libcurses</code> ), the forms library ( <code>libform</code> ), the menus library ( <code>libmenu</code> ), the panels library ( <code>libpanel</code> ), and the graphics interface library ( <code>libplot</code> ). Readers of this section should be familiar with C programming language constructs.  |
| <i>man pages section 3: Extended Library Functions</i>             | This section describes the functions in the various specialized libraries. Those functions include device ID ( <code>libdevic</code> ) and device information ( <code>libdevinfo</code> ) libraries, executable and linking format (ELF) library ( <code>libelf</code> ), kernel statistics ( <code>libkstat</code> ) and kernel VM ( <code>libkvm</code> ) libraries, and the mathematical library ( <code>libm</code> ). Readers of this section should be familiar with C programming language constructs.   |
| <i>man pages section 3: Library Interfaces and Headers</i>         | This section describes the interface libraries that are implemented as shared objects and the headers that are used by the functions that make up these libraries. Headers contain function prototypes, definitions of symbolic constants, common structures, preprocessor macros, and defined types. Readers of this section should be familiar with C programming language constructs.  |
| <i>man pages section 3: Networking Library Functions</i>           | This section describes the functions in the various networking libraries. Those functions include the Kerberos library ( <code>libkrb</code> ), the Lightweight Directory Access Protocol (LDAP) library ( <code>libldap</code> ), the network service library ( <code>libnsl</code> ), and the remote asynchronous calls library ( <code>librac</code> ). Also included are the resolver library ( <code>libresolv</code> ), the remote procedure call libraries ( <code>librpcsvc</code> and <code>librpcsoc</code> ), the sockets library ( <code>libsocket</code> ), the X/Open Federated Naming (XFN) library ( <code>libxfn</code> ), and the X/Open network service library ( <code>libxnet</code> ). Readers of this section should be familiar with C programming language constructs. |
| <i>man pages section 3: Threads and Realtime Library Functions</i> | This section describes the functions in the threads libraries ( <code>libthread</code> and <code>libpthread</code> ), the real-time library ( <code>librt</code> ), and other related libraries. Readers of this section should be familiar with C programming language constructs.   |

**TABLE 3-17** Solaris 9 Reference Manual Collection (Continued)

| Section  | Description   |
|--|---|
| <i>man pages section 4: File Formats</i>                               | <p>This section outlines the formats of various files that include the C structure declarations where applicable. The headers that contain these structure declarations are generally found in the directories <code>/usr/include</code> or <code>/usr/include/sys</code>.</p> <p>In the pages that outline the various library structures, both public and private interfaces are listed. A public interface provides a stable, committed set of symbols for application development. Private interfaces are for internal use only and can change at any time.</p> <p>This section is for software developers.</p> |
| <i>man pages section 5: Standards, Environments, and Macros</i>        | <p>This section describes miscellaneous subjects, including headers, environments, macro packages, character sets, and standards. These descriptions provide further elaboration on Solaris constructs that are described elsewhere in this section.</p>  |
| <i>man pages section 6: Demos</i>                                      | <p>This section describes audio and video games and demos that are provided by Solaris software.</p>  |
| <i>man pages section 7: Device and Network Interfaces</i>              | <p>This section describes the various device and network interfaces that are available on the system. The section includes descriptions of character and block devices, STREAMS modules, network protocols, file systems, and <code>ioctl()</code> requests for driver subsystems and classes.</p> <p>This section is for software developers who write, maintain, or modify device drivers.</p>  |
| <i>man pages section 9: DDI and DKI Driver Entry Points</i>            | <p>This section describes entry-point routines a developer can use to provide call and return syntax from the kernel to the device driver.</p> <p>This section is for software developers who write, modify, or maintain device drivers. Readers should be familiar with the C programming language as well as system internals.</p>  |
| <i>man pages section 9: DDI and DKI Kernel Functions</i>               | <p>This section describes functions a developer can use to provide call and return syntax from a device driver to the kernel.</p> <p>This section is for software developers who write, modify, or maintain device drivers. Readers should be familiar with the C programming language as well as system internals.</p>   |
| <i>man pages section 9: DDI and DKI Properties and Data Structures</i> | <p>Section 9P describes kernel properties that are used by device drivers. Section 9S describes the data structures that are used by drivers to share information between the kernel and device drivers.</p> <p>These sections are for software developers who write, modify or maintain device drivers. Readers should be familiar with the C programming language as well as system internals.</p>  |

