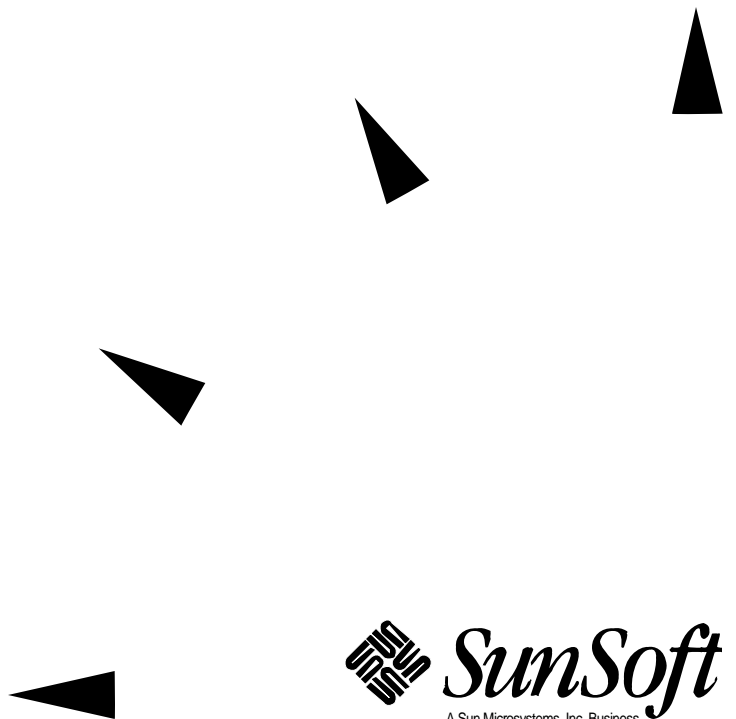


# Solstice AdminSuite 2.1 User's Guide

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U.S.A.

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# Contents

---

|   |          |
|---|----------|
| About This Book .....   | xv       |
| <i>Part 1 —Solstice AdminSuite Overview</i>                       |          |
| <b>1. Introduction .....</b>                                      | <b>1</b> |
| When to Use Solstice AdminSuite .....                             | 2        |
| Benefits of Solstice AdminSuite .....                             | 2        |
| Solstice AdminSuite Applications .....                            | 3        |
| Requirements for Using Solstice AdminSuite .....                  | 3        |
| Starting Solstice AdminSuite .....                                | 5        |
| Launching Applications From the Solstice Launcher .....           | 5        |
| Using Admin Help .....  | 6        |
| <b>2. Using Solstice AdminSuite in a Name Service Environment</b> | <b>9</b> |
| Name Service Environment .....                                    | 10       |
| Selecting a Name Service Environment .....                        | 10       |
| Using Solstice AdminSuite in a Name Service Environment ..        | 11       |
| In the NIS+ Environment .....                                     | 11       |

---

|   |           |
|---|-----------|
| ▼ How to Add a User to the Sysadmin Group . . . . .                           | 11        |
| In the NIS Environment . . . . .  | 12        |
| ▼ How to Add a User to the Sysadmin Group . . . . .                           | 12        |
| ▼ How to Use Solstice AdminSuite Without a Name Service                       | 13        |
| <b>3. Security . . . . .</b>  | <b>15</b> |
| Security Information. . . . .   | 15        |
| Security Levels. . . . .  | 16        |
| Changing the Security Level . . . . .   | 17        |
| Name Service Information . . . . .  | 18        |
| Creating a Security Policy. . . . .   | 19        |
| <i>Part 2 — Using Solstice AdminSuite Tools</i>                               |           |
| <b>4. Using the Solstice Launcher . . . . .</b>                               | <b>23</b> |
| Starting the Solstice Launcher . . . . .                                      | 24        |
| Registering Applications in the Solstice Launcher . . . . .                   | 25        |
| ▼ How to Privately Register Applications in the Solstice<br>Launcher. . . . . | 26        |
| ▼ How to Remove a Privately Registered Application . .                        | 27        |
| ▼ How to Locally Register Applications in the Solstice<br>Launcher. . . . .   | 27        |
| ▼ How to Remove a Locally Registered Application . . . .                      | 29        |
| ▼ How to Globally Register Applications in the Solstice<br>Launcher. . . . .  | 30        |
| ▼ How to Remove a Globally Registered Application . . .                       | 31        |
| Customizing the Solstice Launcher . . . . .                                   | 32        |

---

|   |           |
|---|-----------|
| ▼ How to Customize Application Properties in the Solstice Launcher.....   | 32        |
| Customizing Locally Registered Applications in the Solstice Launcher..... | 34        |
| ▼ How to Modify Properties of a Locally Registered Application.....       | 34        |
| ▼ How to Use the File Selection Window .....                              | 35        |
| <b>5. Managing Users With User Manager and Group Manager ..</b>           | <b>37</b> |
| Setting Up User Accounts.....   | 38        |
| ▼ How to Start Group Manager .....  | 39        |
| ▼ How to Add a Group .....  | 41        |
| ▼ How to Start User Manager .....   | 42        |
| ▼ How to Set Up User Account Defaults.....                                | 44        |
| ▼ How to Add a New User Account .....                                     | 45        |
| ▼ How to Copy an Existing User Account.....                               | 47        |
| Maintaining User Accounts .....   | 48        |
| ▼ How to Modify a Group.....  | 49        |
| ▼ How to Delete a Group.....  | 50        |
| ▼ How to Modify a User Account.....                                       | 51        |
| ▼ How to Delete a User Account.....                                       | 53        |
| <b>6. Managing Server and Client Support With Host Manager ..</b>         | <b>55</b> |
| What Are Servers and Clients .....  | 56        |
| What Does Support Mean.....   | 56        |
| Overview of System Types .....  | 57        |
| Servers.....  | 58        |

---

|   |    |
|---|----|
| Standalone Systems . . . . .  | 58 |
| Diskless Clients . . . . .  | 58 |
| Dataless Clients . . . . .  | 59 |
| What You Can Do With Host Manager . . . . .                         | 59 |
| Add and Modify System Support . . . . .                             | 60 |
| Update System Types . . . . .                                       | 60 |
| Convert System Types . . . . .                                      | 61 |
| Add OS Services . . . . .   | 61 |
| Set Up Remote Installation Services . . . . .                       | 62 |
| Queue Tasks . . . . .   | 62 |
| What You Can't Do With Host Manager . . . . .                       | 63 |
| Adding Server and Client Support . . . . .                          | 64 |
| ▼ How to Start Host Manager . . . . .                               | 66 |
| ▼ How to Update System Types . . . . .                              | 68 |
| ▼ How to Set Defaults for Adding Support . . . . .                  | 68 |
| ▼ How to Add Support for a Standalone System or OS Server . . . . . | 69 |
| ▼ How to Convert a Standalone System to an OS Server . . . . .      | 72 |
| ▼ How to Add SunOS 4.x OS Services to an OS Server . . . . .        | 74 |
| ▼ How to Add Solaris 2.x OS Services to an OS Server . . . . .      | 80 |
| ▼ How to Add Support for a Diskless Client . . . . .                | 82 |
| ▼ How to Add Support for a Dataless Client . . . . .                | 85 |
| Maintaining Server and Client Support . . . . .                     | 88 |
| ▼ How to Modify Support for a System . . . . .                      | 89 |

---

|   |            |
|---|------------|
| ▼ How to Delete Support for a System. . . . .                           | 89         |
| <b>7. Managing Network Service Files with Database Manager . .</b>      | <b>91</b>  |
| Overview of Database Manager. . . . .                                   | 92         |
| Managing Network Services Files . . . . .                               | 93         |
| ▼ How to Start Database Manager . . . . .                               | 93         |
| ▼ How to Add a System File Entry. . . . .                               | 95         |
| ▼ How to Modify a System File Entry . . . . .                           | 96         |
| ▼ How to Delete a System File Entry . . . . .                           | 97         |
| <b>8. Managing Terminals and Modems with Serial Port Manager</b>        | <b>99</b>  |
| Overview. . . . .   | 100        |
| Terminal and Modem Template Default Values. . . . .                     | 100        |
| ▼ How to Start Serial Port Manager . . . . .                            | 103        |
| ▼ How to Add a Terminal . . . . .                                       | 104        |
| ▼ How to Add a Modem . . . . .  | 105        |
| ▼ How to Configure a Modem for Use With UUCP. . . . .                   | 106        |
| ▼ How to Initialize a Port Without Configuring. . . . .                 | 107        |
| ▼ How to Disable a Port. . . . .  | 107        |
| ▼ How to Delete a Port Service . . . . .                                | 108        |
| <b>9. Setting Up SunSoft Print Client Software With Printer Manager</b> | <b>109</b> |
| Setting Up and Managing SunSoft Print Client Software. . . . .          | 110        |
| Starting Printer Manager . . . . .                                      | 111        |
| ▼ How to Start Printer Manager . . . . .                                | 111        |
| Installing a Printer . . . . .  | 113        |

---

|  |     |
|--|-----|
| ▼ How to Install a Printer .....   | 113 |
| Adding Access to a Printer .....   | 116 |
| ▼ How to Add Access to a Printer .....                                   | 116 |
| Modifying Printer Information .....                                      | 119 |
| ▼ How to Modify Printer Information .....                                | 119 |
| Deleting Access to a Printer .....                                       | 122 |
| ▼ How to Delete Access to a Printer .....                                | 122 |
| ▼ How to Delete a Printer From a Print Server (If No Name Service) ..... | 123 |
| Finding a Printer Entry .....  | 124 |
| ▼ How to Find a Printer Entry .....                                      | 124 |
| Where to Go From Here .....  | 125 |

*Part 3 — Solstice AdminSuite 2.1 Reference*

|   |            |
|---|------------|
| <b>10. General Solstice AdminSuite Tool Reference .....</b> | <b>129</b> |
| Main Windows .....  | 130        |
| Filtering Entries .....                                     | 131        |
| Typing in Text Boxes .....                                  | 132        |
| Buttons .....   | 132        |
| <b>11. Group Manager Reference .....</b>                    | <b>133</b> |
| Using Group Manager .....                                   | 134        |
| When to Use Group Manager .....                             | 134        |
| Requirements for Using Group Manager .....                  | 134        |
| Where to Find Specific Task Information .....               | 134        |
| Window, Menu, and Command Descriptions .....                | 135        |



---

|   |            |
|---|------------|
| Group Manager Main Window . . . . .               | 135        |
| Group Manager File Menu . . . . .                 | 135        |
| Group Manager Edit Menu . . . . .                 | 136        |
| Group Manager View Menu . . . . .                 | 136        |
| Group Manager Help Menu . . . . .                 | 137        |
| Files Modified by Group Manager . . . . .         | 137        |
| <b>12. User Manager Reference . . . . .</b>       | <b>139</b> |
| Using User Manager . . . . .                      | 140        |
| When to Use User Manager . . . . .                | 140        |
| Requirements for Using User Manager . . . . .     | 140        |
| Where to Find Specific Task Information . . . . . | 140        |
| Window, Menu, and Command Descriptions . . . . .  | 141        |
| User Manager Main Window . . . . .                | 141        |
| User Manager File Menu . . . . .                  | 141        |
| User Manager Edit Menu . . . . .                  | 141        |
| User Manager View Menu . . . . .                  | 143        |
| User Manager Help Menu . . . . .                  | 143        |
| Files Modified by User Manager . . . . .          | 144        |
| <b>13. Host Manager Reference . . . . .</b>       | <b>145</b> |
| Using Host Manager . . . . .                      | 146        |
| When to Use Host Manager . . . . .                | 146        |
| Requirements for Using Host Manager . . . . .     | 146        |
| Where to Find Specific Task Information . . . . . | 146        |
| Window, Menu, and Command Descriptions . . . . .  | 147        |

---

|  |            |
|--|------------|
| Host Manager Main Window . . . . .                   | 147        |
| Host Manager File Menu . . . . .                     | 147        |
| Host Manager Edit Menu . . . . .                     | 148        |
| Host Manager View Menu . . . . .                     | 149        |
| Host Manager Help Menu . . . . .                     | 150        |
| Files Modified by Host Manager . . . . .             | 151        |
| <b>14. Database Manager Reference . . . . .</b>      | <b>153</b> |
| Using Database Manager . . . . .                     | 154        |
| When to Use Database Manager . . . . .               | 154        |
| Requirements for Using Database Manager. . . . .     | 154        |
| Where to Find Information on Specific Tasks. . . . . | 154        |
| Window, Menu, and Command Descriptions . . . . .     | 155        |
| Database Manager Main Window . . . . .               | 155        |
| Database Manager File Menu. . . . .                  | 155        |
| Database Manager Edit Menu . . . . .                 | 155        |
| Database Manager View Menu . . . . .                 | 156        |
| Database Manager Help Menu . . . . .                 | 157        |
| Files Modified by Database Manager . . . . .         | 157        |
| <b>15. Serial Port Manager Reference . . . . .</b>   | <b>159</b> |
| Using Serial Port Manager . . . . .                  | 160        |
| When to Use Serial Port Manager . . . . .            | 160        |
| Requirements for Using Serial Port Manager. . . . .  | 160        |
| Alternative to Using Serial Port Manager. . . . .    | 160        |
| Where to Find Specific Task Information . . . . .    | 161        |

---

|   |            |
|---|------------|
| Window, Menu, and Command Descriptions .....  | 161        |
| Serial Port Manager Main Window .....         | 161        |
| Serial Port Manager File Menu .....           | 161        |
| Serial Port Manager Edit Menu .....           | 161        |
| Serial Port Manager View Menu .....           | 162        |
| Serial Port Manager Help Menu .....           | 163        |
| Files Modified by Serial Port Manager .....   | 163        |
| <b>16. Printer Manager Reference .....</b>    | <b>165</b> |
| Using Printer Manager .....                   | 166        |
| When to Use Printer Manager .....             | 166        |
| Requirements for Using Printer Manager .....  | 166        |
| Where to Find Specific Task Information ..... | 166        |
| Window, Menu, and Command Descriptions .....  | 167        |
| Printer Manager Main Window .....             | 167        |
| Printer Manager File Menu .....               | 167        |
| Printer Manager Edit Menu .....               | 168        |
| Printer Manager View Menu .....               | 169        |
| Printer Manager Help Menu .....               | 169        |
| Files Modified by Printer Manager .....       | 170        |
| Glossary .....                                | 171        |
| Index .....                                   | 181        |



## *Tables*

---

|           |   |      |
|-----------|---|------|
| Table P-1 | Typographic Conventions . . . . .                         | xvi  |
| Table P-2 | Shell Prompts . . . . .                                   | xvii |
| Table 1-1 | Solstice AdminSuite Applications . . . . .                | 3    |
| Table 1-2 | Admin Help Buttons . . . . .                              | 7    |
| Table 2-1 | Available Name Services . . . . .                         | 10   |
| Table 3-1 | Solstice AdminSuite Security Levels . . . . .             | 17   |
| Table 4-1 | Solstice Launcher Menus . . . . .                         | 24   |
| Table 5-1 | Task Map: Setting Up User Accounts . . . . .              | 38   |
| Table 5-2 | Task Map: Maintaining User Accounts . . . . .             | 48   |
| Table 6-1 | System Type Overview . . . . .                            | 57   |
| Table 6-2 | Supported Server-Client Configurations . . . . .          | 60   |
| Table 6-3 | Host Manager Limitations and Workarounds . . . . .        | 63   |
| Table 6-4 | Task Map: Adding Server and Client Support . . . . .      | 64   |
| Table 6-5 | Task Map: Maintaining Server and Client Support . . . . . | 88   |
| Table 8-1 | Terminal – Hardwired Default Values . . . . .             | 100  |
| Table 8-2 | Modem Default Values . . . . .                            | 101  |

---

|            |  |     |
|------------|--|-----|
| Table 8-3  | Initialize Only – No Connection Default Values. . . . .                | 102 |
| Table 8-4  | Modem Templates. . . . .   | 105 |
| Table 9-1  | Task Map: Setting Up and Managing SunSoft Print Client Software<br>110 |     |
| Table 10-1 | Filtering Commands . . . . .   | 131 |
| Table 10-2 | Solstice AdminSuite Buttons . . . . .                                  | 132 |
| Table 11-1 | Group Manager Task References . . . . .                                | 134 |
| Table 11-2 | Files Modified by Group Manager . . . . .                              | 137 |
| Table 12-1 | User Account Task References . . . . .                                 | 140 |
| Table 12-2 | Files Modified by User Manager. . . . .                                | 144 |
| Table 13-1 | Host Manager Task References . . . . .                                 | 146 |
| Table 14-1 | Database Manager Task References . . . . .                             | 154 |
| Table 14-2 | Files Modified by Database Manager . . . . .                           | 157 |
| Table 14-3 | System Files and Their Primary Management Tools . . . . .              | 158 |
| Table 15-1 | Serial Port Manager Task References . . . . .                          | 161 |
| Table 15-2 | Files Modified by Serial Port Manager. . . . .                         | 163 |
| Table 16-1 | Printer Manager Task References . . . . .                              | 166 |
| Table 16-2 | Files Modified by Printer Manager. . . . .                             | 170 |

## *About This Book*

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The *Solstice AdminSuite 2.1 User's Guide* provides product overview, task, and reference information for Solstice™ AdminSuite™ 2.1 (Motif® version), a suite of graphical user interface tools used to perform system administration tasks in the Solaris™ software environment.

### *Who Should Use This Book*

This book is intended for experienced and junior administrators who need information on using the Solstice AdminSuite software to perform administrative tasks such as setting up and modifying users, groups, servers, printers, clients, modems, or terminals.

This book assumes that you are familiar with the mouse-use terminology such as Select (click on an item once) and Choose (click on a menu button and slide the cursor to the item you would like to choose).

### *Before You Use This Product*

To use this product, you should be familiar with UNIX® system software concepts, the network configuration of your site, and your site policies for security.

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## How This Book Is Organized

This book has three parts:

- Part 1 – Solstice AdminSuite Overview  
Provides overview information on the Solstice AdminSuite software.
- Part 2 – Using Solstice AdminSuite Tools  
Provides task-specific information needed to use the Solstice AdminSuite software.
- Part 3 – Solstice AdminSuite 2.1 Reference  
Provides reference information about each tool's commands, menu, and windows.

## What Typographic Changes Mean

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>machine_name% You have mail.         |
| AaBbCc123          | What you type, contrasted with on-screen computer output                 | <pre>machine_name% su Password:</pre>  |
| AaBbCc123          | Command-line placeholder: replace with a real name or value              | To delete a file, type <code>rm filename</code> .  |
| AaBbCc123          | 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 <i>must</i> be root to do this. |



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## *Shell Prompts in Command Examples*

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

*Table P-2* Shell Prompts

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



## *Part 1 — Solstice AdminSuite Overview*

---

This part provides an overview of the Solstice AdminSuite software and contains these chapters.

**1**

### **Introduction**

An introduction to the Solstice AdminSuite product.

**2**

### **Using Solstice AdminSuite in a Name Service Environment**

Information on how to use the Solstice AdminSuite software in a name service environment .

**3**

### **Security**

Discussion on security issues and suggestions on how to use the Solstice AdminSuite software in a manner that conforms to your site security policies.



# *Introduction*

Solstice AdminSuite is a collection of graphical user interfaces used to perform administrative tasks such as managing users, groups, hosts, administrative data in system files, printers, and serial port software.

This is a list of the overview information in this chapter.

|   |               |
|---|---------------|
| <i>When to Use Solstice AdminSuite</i>            | <i>page 2</i> |
| <i>Benefits of Solstice AdminSuite</i>            | <i>page 2</i> |
| <i>Solstice AdminSuite Applications</i>           | <i>page 3</i> |
| <i>Requirements for Using Solstice AdminSuite</i> | <i>page 3</i> |
| <i>Starting Solstice AdminSuite</i>               | <i>page 5</i> |
| <i>Using Admin Help</i>                           | <i>page 6</i> |

## *When to Use Solstice AdminSuite*

Solstice AdminSuite applications enable you to manage:

- Important system database files such as `aliases` and `netmasks`
- User account information including tasks such as adding users, modifying password aging features, and removing user account information
- Group information
- Terminal and modem setup
- Diskless and dataless client setup
- Print server and print client setup

These tasks can be done on local and remote systems if the right access has been set up. See Chapter 2, “Using Solstice AdminSuite in a Name Service Environment,” for information on controlling access to the Solstice AdminSuite software.

## *Benefits of Solstice AdminSuite*

Using the Solstice AdminSuite graphical user interface to perform the administration tasks has these benefits:

- The application programs are faster than using numerous Solaris commands to perform the same tasks.
- System files are updated automatically without the risk of making errors by editing important system files manually.

## *Solstice AdminSuite Applications*

The Solstice AdminSuite software provides the applications listed in Table 1-1.

*Table 1-1 Solstice AdminSuite Applications*

| <b>This Application</b> | <b>Helps You Manage ...</b>   | <b>Described In ...</b>  |
|-------------------------|---|--|
| Database Manager        | Network-related system files such as <code>aliases</code> and <code>netmasks</code> | Chapter 7, “Managing Network Service Files with Database Manager”          |
| Group Manager           | UNIX group information  | Chapter 5, “Managing Users With User Manager and Group Manager”            |
| Host Manager            | System information and server support for diskless and dataless systems             | Chapter 6, “Managing Server and Client Support With Host Manager”          |
| Serial Port Manager     | Serial port software for terminals and modems                                       | Chapter 8, “Managing Terminals and Modems with Serial Port Manager”        |
| User Account Manager    | User account information  | Chapter 5, “Managing Users With User Manager and Group Manager”            |
| Printer Manager         | Printer software for print servers and clients                                      | Chapter 9, “Setting Up SunSoft Print Client Software With Printer Manager” |

## *Requirements for Using Solstice AdminSuite*

To use the Solstice AdminSuite software you must have:

- A bit-mapped display monitor – The Solstice AdminSuite software can be used only on a system where the console is a bit-mapped screen such as a standard display monitor that comes with a Sun<sup>®</sup> workstation.

If you want to perform administration tasks on a system with an ASCII terminal as the console, use Solaris commands.

- OpenWindows<sup>™</sup> software.

- Root privilege or membership in the sysadmin group (group 14) and the required access privileges for managing the NIS or NIS+ database. See Chapter 2, “Using Solstice AdminSuite in a Name Service Environment,” for more information.

You should use the Solstice AdminSuite software as a regular user who has membership in the sysadmin group rather than as root.

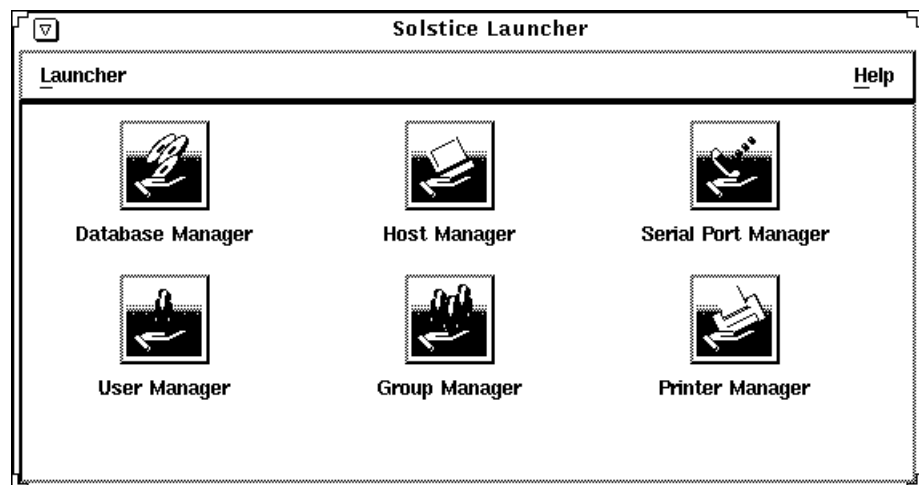


## Starting Solstice AdminSuite

The Solstice *Launcher* is used to start the Solstice AdminSuite applications. Start the Solstice Launcher from an OpenWindows or Motif CDE window as follows:

```
$ solstice &
```

You can also start the Solstice Launcher with the `-display` option to remotely display on a bit-mapped screen.



### Launching Applications From the Solstice Launcher

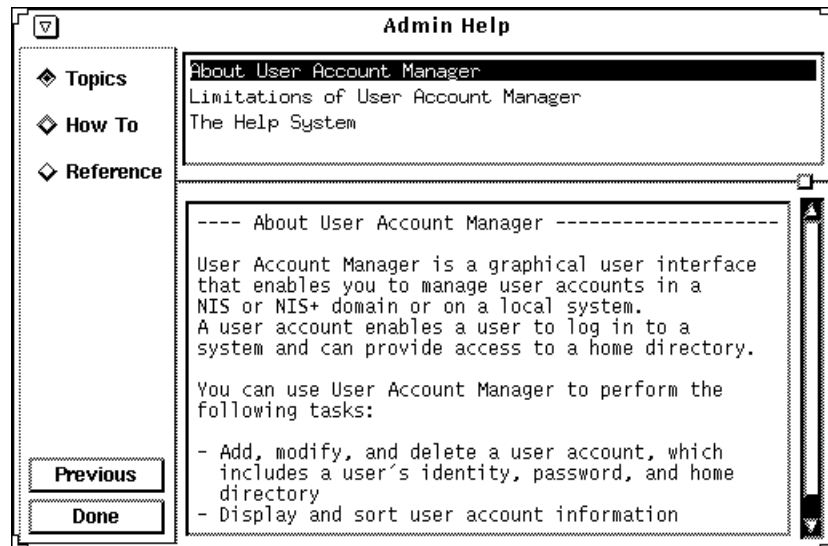
- Click on an icon in the Launcher to start an application tool. You can also use the Tab key to move from icon to icon, and press the Space bar to start an application tool.
- Close the Launcher (and each application) to an icon by clicking on the Window menu in the top left corner of each application's main window.

See Chapter 4, "Using the Solstice Launcher," for more information about using the Launcher.

## Using Admin Help

An important part of the Solstice AdminSuite software is a Help utility called Admin Help. Admin Help provides detailed information about Solstice AdminSuite applications and their functions.

- To access Admin Help from a Solstice AdminSuite application's main window, select "About xx Manager..." from the Help menu. The Admin Help window for that application is displayed.
- To access the online help from a Solstice AdminSuite application's command window, click on the Help button. The Admin Help window is displayed.



The titles displayed in the top window pane identify the list of topics available for each level of help.

The text displayed in the bottom window pane describes information about using the current menu or command.

Use the scrollbars to the right of each pane to scroll through the help information displayed.

---

On the left side of the Admin Help window are buttons used to find information and navigate through the help system. The buttons are described in Table 1-2.

*Table 1-2* Admin Help Buttons

| <b>Button</b> | <b>Use</b>                                   | <b>Notes</b>  |
|---------------|--|---|
| Topics        | Displays a list of overview topics           | Click on a title in the top window pane to view the accompanying help text. |
| How To        | Displays a list of step-by-step procedures   | Click on a title in the top window pane to view the accompanying help text. |
| Reference     | Displays a list of more detailed information | Click on a title in the top window pane to view the accompanying help text. |
| Previous      | Returns to the last accessed help text       | The help viewer automatically returns to the previous help selection.       |
| Done          | Exits the help system                        | The Admin Help system is closed.  |



## *Using Solstice AdminSuite in a Name Service Environment*

---



Solstice AdminSuite can be used in different name service environments. When you use each application, you specify the name service environment data you wish to modify with the application.

This is a list of the topics and step-by-step instructions in this chapter.

|  |                |
|--|----------------|
| <i>Selecting a Name Service Environment</i>                    | <i>page 10</i> |
| <i>Using Solstice AdminSuite in a Name Service Environment</i> | <i>page 11</i> |

---

## *Name Service Environment*

Solstice AdminSuite can be used to manage information on the local system or across the network using a name service. The sources of information that can be managed by Solstice AdminSuite are described in Table 2-1.

*Table 2-1 Available Name Services*

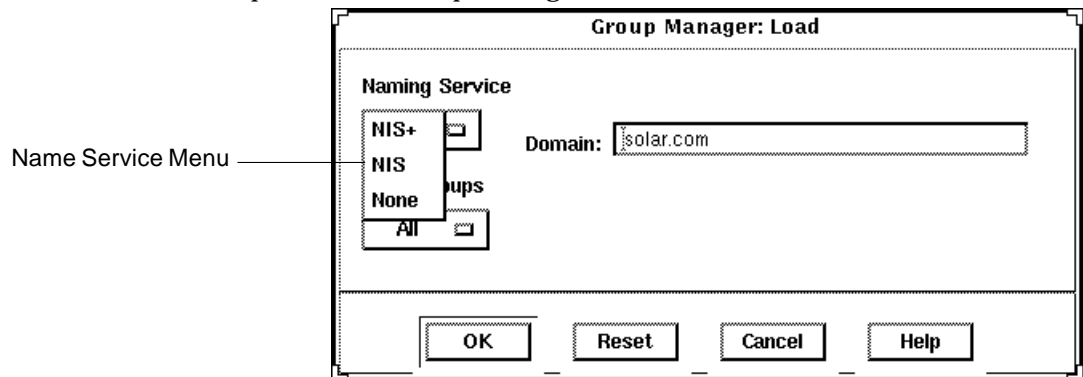
| <b>Name Service</b> | <b>Select This Name Service To Manage ...</b>   |
|---------------------|---|
| NIS+                | NIS+ table information. This requires sysadmin group (group 14) membership and the appropriate ownership and permission on the NIS+ tables to be modified.  |
| NIS                 | NIS map information. You must be a member of the sysadmin group and have explicit permissions on the NIS master server to update the maps. This means an entry for your host name and user name must reside in root's <code>.rhosts</code> file on the NIS master server. |
| None                | The <code>/etc</code> files on the local system. You must be root or a member of the sysadmin group on the local system. The local system (identified in the Host: field on the Load window) is selected by default.  |

See “Using Solstice AdminSuite in a Name Service Environment” for information on using Solstice AdminSuite with or without a name service environment.

## *Selecting a Name Service Environment*

After you start Solstice AdminSuite and click on an application icon, a window is displayed prompting you to select a name service. Select the name service that is appropriate for your environment.

This example is from Group Manager's Load window.



**Note** – The NIS and NIS+ environments are not available for Serial Port Manager.

## Using Solstice AdminSuite in a Name Service Environment

The following procedures describe how to use Solstice AdminSuite in each name service environment.

### *In the NIS+ Environment*

The requirements for viewing and modifying NIS+ table information are:

- Membership in the UNIX group, sysadmin, which allows use of Solstice AdminSuite applications.
- Membership in the NIS+ admin group
- Modify permissions on the NIS+ tables to be managed. These permissions are usually given to the NIS+ group members. See *NIS+ and FNS Administration Guide* for information on adding users to a NIS+ group.

#### ▼ How to Add a User to the Sysadmin Group

1. Verify that the prerequisites described in Chapter 1, “Introduction” are met.
2. Log in as an authorized user to a host in the NIS+ domain.

3. **Type `solstice &` in a Shell or Command Tool window.**  
The Solstice Launcher is displayed.
4. **Click on the Group Manager icon.**  
The Group Manager Load window is displayed.
5. **Select the NIS+ name service.**
6. **Click on OK.**  
The Group Manager main window is displayed.
7. **Click on the `sysadmin` group in the main window.**
8. **Select Modify from the Edit Menu.**  
The Modify window is displayed.
9. **Add a comma-separated list of members to the Members List text box.**  
The list must not contain spaces.
10. **Click on OK.**

### *In the NIS Environment*

The requirements for viewing and modifying NIS map information are:

- Membership in the UNIX group, `sysadmin`, which provides use of Solstice AdminSuite applications
- An entry for your host name and user name in root's `.rhosts` file on the NIS master server
- Running `ypbind` with the `-broadcast` option, which is the default form, if you want to manage NIS map information in domains other than your own.

#### ▼ How to Add a User to the Sysadmin Group

1. **Verify that the prerequisites described in Chapter 1, "Introduction" are met.**
2. **Log in as root on the NIS master server.**



**3. Edit the `/etc/group` file.**

Add a comma-separated list of members to the `sysadmin` group.

```
sysadmin: :14: user-name , user-name , user-name
```

**4. Remake the NIS maps.**

```
# cd /var/yp
# make group
```

---

**Note** – Depending on the size of the NIS maps, it may take several minutes or several hours to update the maps and propagate the changes throughout the network.

---

**5. Create a `.rhosts` entry in the root (`/`) directory on the NIS master server for users authorized to modify NIS maps. Use the following format:**

```
host-name user-name
```

**▼ How to Use Solstice AdminSuite Without a Name Service**

Use this procedure if you will use Solstice AdminSuite on the local system only.

**1. Become root on your system.****2. Edit the `/etc/group` file.**

Add a comma-separated list of members to the `sysadmin` group.

```
sysadmin: :14: user-name , user-name , user-name
```



An important part of using the Solstice AdminSuite software is understanding its security features and setting up security policies to protect your administrative data.

This is a list of the topics and step-by-step instructions in this chapter.

|                                   |                |
|-----------------------------------|----------------|
| <i>Security Information</i>       | <i>page 15</i> |
| <i>Creating a Security Policy</i> | <i>page 19</i> |

## *Security Information*

Solstice AdminSuite uses the distributed system administration daemon (`sadmin`) to carry out security tasks when you perform administrative tasks across the network. The `sadmin` daemon executes the request on the server on behalf of the client process and controls who can access Solstice AdminSuite.

Administering security involves *authentication* of the user ID (UID) and *authorization* of permissions.

- Authentication means that the `sadmin` daemon must verify the identity of the client making the request before the `sadmin` daemon can execute the request.

- Authorization means that `sadmind` verifies that the authenticated user has permission to execute Solstice AdminSuite on the server. After the client identity is verified, `sadmind` uses the client identity to perform authorization checks.

If you have permission to use Solstice AdminSuite, you also need to have create, delete, or modify permission before you can change an NIS+ file. See *NIS+ and DNS Setup and Configuration Guide* for a description of NIS+ security.

User and group identities are used for authorization checking as follows:

- **Root identity** – The root identity has privileges (to access and update data) only on the local system. If the server is the local system (in other words, if the user has logged in as root on the server), the user will be allowed to perform Solstice AdminSuite functions on the server under the root identity.
- **User ID** – A regular user can only view, but not change, information using Solstice AdminSuite.
- **User ID who is a member of sysadmin group (group 14)** – Solstice AdminSuite permissions are granted to users who are members of the `sysadmin` group (group 14). This means that a user modifying administration data must be a member of the `sysadmin` group on the system where the task is being executed.

## *Security Levels*

Each request to change administration data contains a set of credentials with a user ID and a set of group IDs to which the user belongs. The server uses these credentials to perform identity and permission checks. Three levels of authentication security are available.

The security levels are described in Table 3-1.

*Table 3-1 Solstice AdminSuite Security Levels*

| Level | Level Name | Description  |
|-------|------------|--|
| 0     | NONE       | No identity checking is done by the server. All user IDs are set to the <code>nobody</code> identity. This level is used mostly for testing.   |
| 1     | SYS        | The server accepts the original user and group identities from the client system and uses them as the identities for the authorization checks. There is no checking to be sure that the user ID of the client represents the same user on the server system. That is, it is assumed the administrator has made the user IDs and group IDs consistent on all systems in the network. Checks are made to see if the client has permission to execute the request.  |
| 2     | DES        | Credentials are validated using DES authentication, and checks are made to be sure that the client has permission to execute the request. The user and group identities are obtained from files on the server system by mapping the user's DES network identity to a local user ID and set of group IDs. The file used depends on which name service is selected on the server system. This level provides the most secure environment for performing administrative tasks and requires that a <code>publickey</code> entry exists for all server systems where the <code>sadmind</code> daemon is running, and for all users accessing the tools. |

**Note** – Level 1 is the default security used by `sadmind`.

### *Changing the Security Level*

You can change the security level from Level 1 to Level 2 by editing the `/etc/inetd.conf` file on each system, and adding the `-S 2` option to the `sadmind` entry. If you do this, make sure that the servers on the domain are set up to use DES security.

You do not need to maintain the same level of security on all systems in the network. You can run some systems, such as file servers requiring strict security, at security Level 2, while running other systems at the default Level 1 security.

See the description of how to set up security for NIS+ in *NIS+ and FNS Administration Guide*.

### *Name Service Information*

The `sadmind` daemon uses information held by the name service. The three sources of information are:

- Files in the `/etc` directory such as `passwd`, `group`, and `shadow`, referred to as the keyword files
- The NIS name service referred to as the keyword `nis`
- The NIS+ name service referred to as the keyword `nisplus`

On each system, the `/etc/nsswitch.conf` file lists several administrative files, followed by a list of one or more keywords that represent the name services to be searched for information. If more than one keyword is listed, they are searched in the order given. For example, the entry

```
group: files nisplus
```

indicates that the security mechanism looks first in the local `/etc/group` file for an entry. If the entry exists, the security mechanism uses the information in this entry. If the entry doesn't exist, the NIS+ `group` file is searched.

By default, systems running the Solaris 2.4 and Solaris 2.5 OS release have an entry for the `sysadmin` group in the local `/etc/group` file. If you want to set up your system to use network-wide information, do not add members to the `sysadmin` group on the local system. Instead, update the `sysadmin` entry found in the group table stored in the name service.

When running under Level 2 security, the security mechanisms use the public/private key information. Make sure that the entry for `publickey` is followed by either `nis` or `nisplus` (depending on which name service you are using), and remove the `files` designation. See *NIS+ and FNS Administration Guide* for more information about the `nsswitch.conf` file.

---

## Creating a Security Policy

Consider the following when creating a security policy for using Solstice AdminSuite in a name service environment.

- Determine how much trust is needed.

If your network is secure and you do not need to use authentication security, you can use Solstice AdminSuite applications with the default Level 1 security.

If you need to enforce a higher level of security, you can set the security level of `sadmin` to Level 2. Level 2 security is primarily used with the NIS+ name service.

- Determine which name service will be used.

The name service determines where the security methods get information about user and group identities. The name services are designated in the `/etc/nsswitch.conf` file (see “Name Service Information” on page 18).

- Decide which users have access to Solstice AdminSuite.

Decide which users will perform administrative functions over the network with Solstice AdminSuite. List these users as members of the `sysadmin` group accessed by the server system, as defined in the `/etc/nsswitch.conf` configuration file. The `sysadmin` group must be accessible from each system where administration data will be updated by Solstice AdminSuite. The `sysadmin` group can be established locally on each system or can be used globally within a name service domain, depending upon the policy established by the administrator.

- Determine global and local policies.

The *global policy* affects all hosts in the network. For example, you can add members to the `sysadmin` group in the NIS or NIS+ `group` file. Members of this group will have permission to perform administrative tasks on all server systems that list the network name service as the primary source of information. The name services are listed in the `/etc/nsswitch.conf` file. For more information about the `nsswitch.conf` file, see “Name Service Information” on page 18.

A user can establish a local policy that is different from the global policy by creating a `sysadmin` group in the local `/etc/group` file and listing the users who have access to the local system. The members of this group will have permission to manipulate or run Solstice AdminSuite methods on the user's local system.

- Set up permissions for NIS+ management.

You need the proper permissions when using Solstice AdminSuite to modify or update the NIS+ files. In addition to the permissions required by Solstice AdminSuite, the NIS+ security mechanisms impose their own set of access permissions. The NIS+ security mechanisms are described in *NIS+ and FNS Administration Guide*.

- Set up access for NIS management.

In addition to the permissions required by Solstice AdminSuite, a user must have a `.rhosts` entry on the NIS master server to modify the NIS files.



## *Part 2 — Using Solstice AdminSuite Tools*

---

This part provides instructions for how to use the Solstice Launcher and the individual Solstice AdminSuite applications. This part contains these chapters.

**4**

### **Using the Solstice Launcher**

Provides instructions on how to start the Solstice Launcher and add applications to the launcher.

**5**

### **Managing Users With User Manager and Group Manager**

Provides instructions for how to create and manage user information with User Manager and Group Manager.

**6**

### **Managing Server and Client Support With Host Manager**

Provides instructions for how to set up a system with Host Manager. Also describes how to add diskless and dataless client support to a server.

**7**

### **Managing Network Service Files with Database Manager**

Provides instructions for how to manage network service files with Database Manager.

**8**

### **Managing Terminals and Modems with Serial Port Manager**

Provides instructions for setting up the serial port software to work with terminals and modems with the Serial Port Manager.

**9**

### **Setting Up SunSoft Print Client Software With Printer Manager**

Provides instructions for how to set up print servers and print clients with Printer Manager.



## Using the Solstice Launcher

---



The Solstice Launcher provides access to the Solstice product family of administration tools. The tools that appear in the Launcher depend on what Solstice products you have installed on your system.

This is a list of the topics and step-by-step instructions in this chapter.

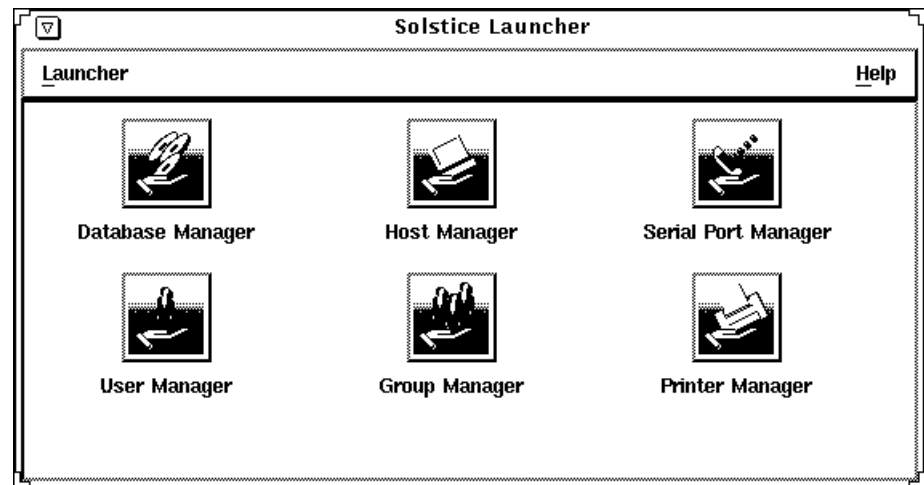
|   |                |
|---|----------------|
| <i>Starting the Solstice Launcher</i>                                   | <i>page 24</i> |
| <i>How to Privately Register Applications in the Solstice Launcher</i>  | <i>page 26</i> |
| <i>How to Remove a Privately Registered Application</i>                 | <i>page 27</i> |
| <i>How to Globally Register Applications in the Solstice Launcher</i>   | <i>page 30</i> |
| <i>How to Remove a Globally Registered Application</i>                  | <i>page 31</i> |
| <i>How to Customize Application Properties in the Solstice Launcher</i> | <i>page 32</i> |
| <i>How to Modify Properties of a Locally Registered Application</i>     | <i>page 34</i> |
| <i>How to Use the File Selection Window</i>                             | <i>page 35</i> |

## Starting the Solstice Launcher

Start the Solstice Launcher from a window as follows:

```
$ solstice &
```

The Solstice Launcher is displayed.



The Solstice Launcher menus are described in Table 4-1.

Table 4-1 Solstice Launcher Menus

| Use This Menu ... | To Access This Command ... | That Performs This Function ...  |
|-------------------|----------------------------|--|
| Launcher          | Add Applications           | Adds and registers applications with the Launcher.   |
|                   | Properties                 | Provides ability to show, hide, or remove applications in the Launcher; reorder the icons; change the Launcher window width; modify application properties; add applications |
|                   | Exit                       | Stops running the Solstice Launcher. Does not affect open or iconified applications.   |
| Help              | Check Help                 | Access the Help system.  |

---

## Registering Applications in the Solstice Launcher

Applications that display in the Solstice Launcher are registered. This means that you can add and remove applications, including custom applications, to and from the Launcher main window.

Applications are registered in three ways:

- **Private registry** – Registered applications are private to the user. Applications are registered privately with the Add Application command from the Launcher menu. See “How to Privately Register Applications in the Solstice Launcher” on page 26 for instructions on registering applications privately.

Privately registered applications can be added, removed, and their properties can be modified from the Solstice Launcher.

- **Local registry** – Registered applications are local to the system. Applications registered locally are available to all local users of the system. Applications can only be registered locally with the `/usr/snadm/bin/soladdapp` command. See “How to Locally Register Applications in the Solstice Launcher” on page 27 for information on using the `soladdapp` command to register applications locally.

Locally registered applications can only be added or removed using the `soladdapp` and `soldelapp` commands. Their properties cannot be modified from the Solstice Launcher.

- **Global registry** – Registered applications are shared by all local and remote users using the Solstice Launcher in a particular `/opt` directory. Applications can only be registered globally with the `/usr/snadm/bin/soladdapp` command. See “How to Globally Register Applications in the Solstice Launcher” on page 30 for information on using the `soladdapp` command to register applications globally.

Globally registered applications can only be added or removed using the `soladdapp` and `soldelapp` commands. Their properties cannot be modified from the Solstice Launcher.

If the user has a local registry file, and both a local registry and global registry file are in place, then the applications from all files are displayed.

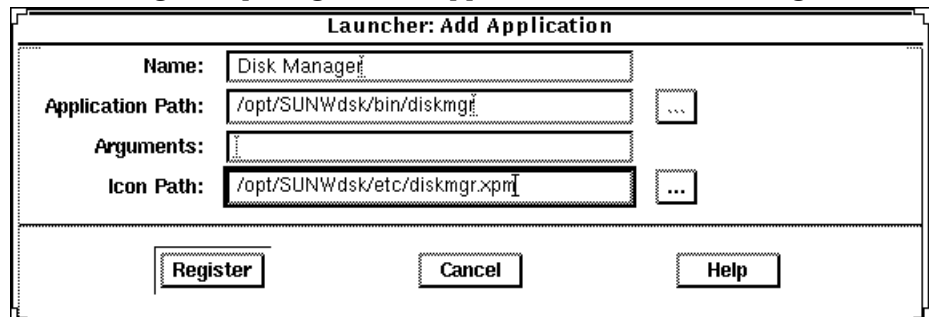
▼ **How to Privately Register Applications in the Solstice Launcher**

The following procedure describes how to privately register applications in the \$HOME/.solstice\_registry file.

1. **Select Add Application from the Launcher menu.**
2. **Enter the following application information in the Add Application window.**
  - a. **Identify the application name in the Name text box.**  
This name is displayed in the Launcher window.
  - b. **Identify the application path name in the Application Path text box.**  
If you are not sure of the application path name, click on the ... box, which displays the Application Path Selection window. See “How to Use the File Selection Window” on page 35 for information on using this window.
  - c. **Identify any command-line arguments for the application in the Arguments text box.**  
These arguments are passed to the application when it is started.
  - d. **Identify the application icon path name in the Icon Path text box.**  
If you are not sure of the icon path name, click on the ... box, which displays the Application Path Selection window. See “How to Use the File Selection Window” on page 35 for information on using this window.
3. **Click on Register to add the application.**

*Example*

The following example registers an application called Disk Manager.



## ▼ How to Remove a Privately Registered Application

1. **Select Properties from the Launcher menu.**  
The Properties window is displayed.
2. **Select an application from the Hide or Show lists.**
3. **Click on the Remove button in the Properties window.**
4. **Click on OK.**

## ▼ How to Locally Register Applications in the Solstice Launcher

1. **Become root.**
2. **Register an application with the `soladdapp` command.**

```
# /usr/snadm/bin/soladdapp \  
-r /etc/.solstice_registry \  
-n "Tool Name" \  
-i /opt/pkgname/etc/tool.icon \  
-e /opt/pkgname/bin/command  
args
```

In this command,

|  |  |
|--|--|
| <code>/usr/snadm/bin/soladdapp</code>      | Is the Solstice command for registering applications.        |
| <code>-r /etc/.solstice_registry</code>    | Specifies the path name of the Solstice local registry file. |
| <code>-n "Tool Name"</code>                | Specifies the name of the tool to be registered.             |
| <code>-i /opt/pkgname/etc/tool.icon</code> | Specifies the path name of the tool icon.                    |
| <code>-e /opt/pkgname/bin/command</code>   | Specifies the path name of the tool executable.              |
| <code>args</code>                          | Specifies optional arguments to use with the executable      |

### *Example*

The following example uses the `soldaddapp` command to locally register an application called Disk Manager.

```
# /usr/snadm/bin/soladdapp \  
-r /etc/.solstice_registry \  
-n "Disk Manager" \  
-i /opt/SUNWdsk/etc/diskmgr.xpm \  
-e /opt/SUNWdsk/bin/diskmgr
```



## ▼ How to Remove a Locally Registered Application

1. Become root.
2. Remove an application with the `soldelapp` command.

```
# /usr/snadm/bin/soldelapp \  
    -r /etc/.solstice_registry \  
    -n "Tool Name"
```

In this command,

|   |   |
|---|---|
| <code>/usr/snadm/bin/soldelapp</code>   | Is the Solstice command for removing applications from the local registry file. |
| <code>-r /etc/.solstice_registry</code> | Specifies the path name of the Solstice local registry file.                    |
| <code>-n "Tool Name"</code>             | Specifies the name of the tool to be removed.                                   |

### *Example*

The following example uses the `soldelapp` command to remove an application called Disk Manager.

```
# /usr/snadm/bin/soldelapp \  
    -r /etc/.solstice_registry \  
    -n "Disk Manager"
```

## ▼ How to Globally Register Applications in the Solstice Launcher

1. Become root.
2. Register an application with the `soladdapp` command.

```
# /usr/snadm/bin/soladdapp \  
-r /opt/SUNWadm/etc/.solstice_registry \  
-n "Tool Name" \  
-i /opt/pkgname/etc/tool.icon \  
-e /opt/pkgname/bin/command \  
args
```

In this command,

|   |   |
|---|---|
| <code>/usr/snadm/bin/soladdapp</code>               | Is the Solstice command for registering applications.         |
| <code>-r /opt/SUNWadm/etc/.solstice_registry</code> | Specifies the path name of the Solstice global registry file. |
| <code>-n "Tool Name"</code>                         | Specifies the name of the tool to be registered.              |
| <code>-i /opt/pkgname/etc/tool.icon</code>          | Specifies the path name of the tool icon.                     |
| <code>-e /opt/pkgname/bin/command</code>            | Specifies the path name of the tool executable.               |
| <code>args</code>                                   | Specifies optional arguments to use with the executable       |

### *Example*

The following example uses the `soladdapp` command to globally register an application called Disk Manager.

```
# /usr/snadm/bin/soladdapp \  
-r /opt/SUNWadm/etc/.solstice_registry \  
-n "Disk Manager" \  
-i /opt/SUNWdsk/etc/diskmgr.xpm \  
-e /opt/SUNWdsk/bin/diskmgr
```

## ▼ How to Remove a Globally Registered Application

1. Become root.
2. Remove an application with the `soldelapp` command.

```
# /usr/snadm/bin/soldelapp \  
-r /opt/SUNWadm/etc/.solstice_registry \  
-n "Tool Name"
```

In this command,

|   |  |
|---|--|
| <code>/usr/snadm/bin/soldelapp</code>               | Is the Solstice command for removing applications from the global registry file. |
| <code>-r /opt/SUNWadm/etc/.solstice_registry</code> | Specifies the path name of the Solstice global registry file.                    |
| <code>-n "Tool Name"</code>                         | Specifies the name of the tool to be removed.                                    |

### *Example*

The following example uses the `soldelapp` command to remove an application called Disk Manager.

```
# /usr/snadm/bin/soldelapp \  
-r /opt/SUNWadm/etc/.solstice_registry \  
-n "Disk Manager"
```

## *Customizing the Solstice Launcher*

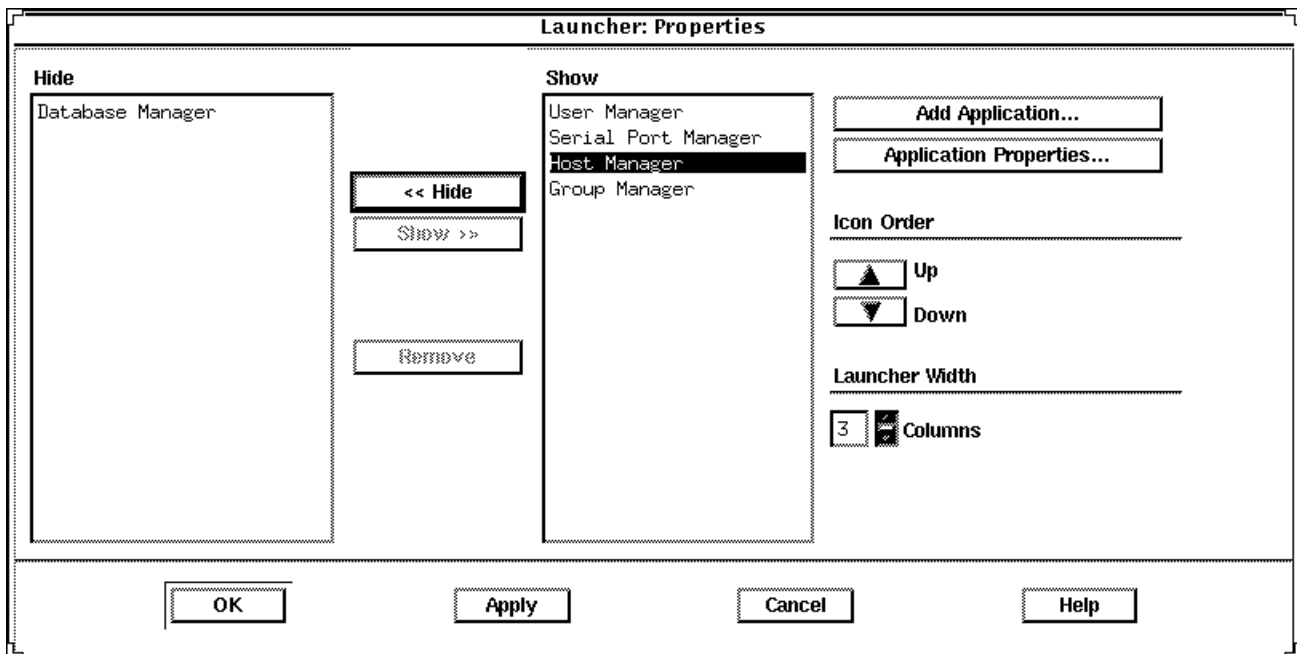
### ▼ How to Customize Application Properties in the Solstice Launcher

- 1. Select Properties from the Launcher menu.**  
The Properties window is displayed.
- 2. Use the Hide/Show buttons to disable or enable the display of applications in the Launcher window.**
  - a. Select an application from the Show list and click on the Hide button to hide an application.**  
The application is moved to the Hide list.
  - b. Select an application from the Hide list and click on the Show button to show an application.**  
The application is moved to the Show list.
  - c. Click on OK when you are finished moving applications to and from the Show and Hide lists.**
- 3. Use the Remove button to remove an application from a local registry file.**  
See “How to Remove a Privately Registered Application” on page 27 for information on removing a locally registered application.
- 4. Click on the Add Application button to add an application to the Launcher window.**  
The Add Application window is displayed. This window is equivalent to the Add Application command from the Launcher menu.  
  
See “How to Privately Register Applications in the Solstice Launcher” on page 26 for information on adding applications to the Launcher.
- 5. If you select an application from the Hide or Show lists and click on the Application Properties button, the Application Properties window is displayed.**  
See “How to Modify Properties of a Locally Registered Application” on page 34 for information on modifying the properties of a locally registered application.
- 6. Change how the tool icons are displayed in the Launcher window.**
  - a. Select an application in the Show list and click on the Up or Down arrow under Icon Order to change the location of an icon.**

- b. Use the up/down arrows under Launcher Width to indicate the number of columns that will display in the Launcher window.**
- 7. If you increase the number of icons to be wider than the width of the Launcher window, use the scrollbar at the bottom of the Launcher to view any icons that moved off the window.**
- 8. Click on OK.**

### *Example*

The following example shows that Database Manager has been moved to the Hide list. This means it will not be displayed in the Solstice Launcher.



## *Customizing Locally Registered Applications in the Solstice Launcher*

Locally registered applications can be customized in the following ways:

- Applications can be hidden or redisplayed by using the Hide/Show feature.
- The number of columns in the Launcher window can be expanded and contracted, which affects how the applications are displayed.
- The application icons can be moved up or down to change the order in which the application icons are displayed.

See “How to Customize Application Properties in the Solstice Launcher” on page 32 for more information on customizing applications.

### ▼ How to Modify Properties of a Locally Registered Application

- 1. Select Properties from the Launcher menu.**  
The Properties window is displayed.
- 2. Select an application from the Hide or Show lists.**
- 3. Click on the Application Properties button.**  
The Application Properties window is displayed.
- 4. Modify the following application properties:**
  - a. The application name in the Name text box.**

---

**Note** – The application name must be changed in order for any application properties changes to be successful.

---

- b. The application path name in the Application Path text box.**  
If you are not sure of the application path name, click on the ... box, which displays the Application Path Selection window. See “How to Use the File Selection Window” on page 35 for information on using this window.
- c. Any command-line arguments to the application in the Arguments text box.**  
These arguments are passed to the application when it is started.

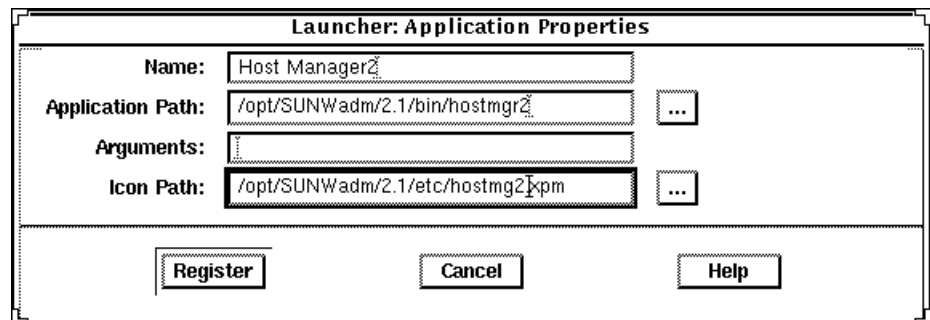
**d. The icon path name in the Icon Path text box.**

If you are not sure of the icon path name, click on the ... box, which displays the Application Path Selection window. See “How to Use the File Selection Window” on page 35 for information on using this window.

**5. Click on Register.**

*Example*

The following example provides an alternative executable and icon for Host Manager.



▼ **How to Use the File Selection Window**

**1. Use the Filter text box in the Application Path Selection window to specify a path name using a regular expression, such as the wildcard character (\*).**

When a new value is entered, the Directories and File lists are updated appropriately.

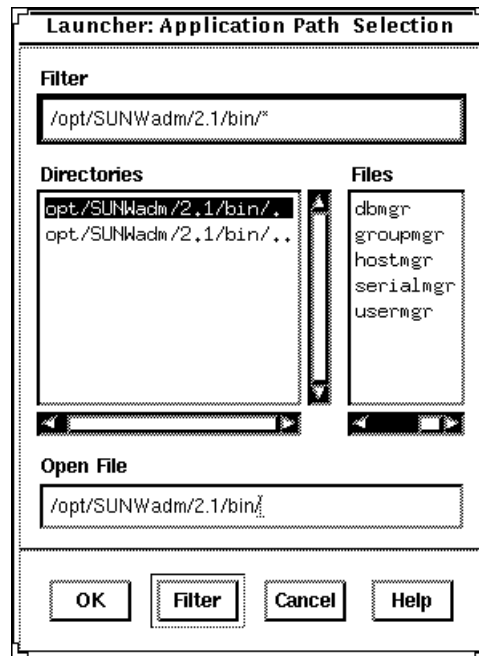
**2. Select a file name from the Files list to update the Open File text box.**

**3. Click on OK to place the Open File text box value into the field from which the File Selection window was invoked.**

The application file name is displayed in the Application Path text box in the Application window.

### Example

The following example of the Application Path Selection window uses a filter to search the `/opt/SUNWadm/2.1/bin` directory for application tool executables, which are displayed under the Files list.





# Managing Users With User Manager and Group Manager

This chapter describes how to manage user accounts using two applications within the Solstice AdminSuite software:

- Group Manager, a graphical user interface for managing group information
- User Manager, a graphical user interface used to manage user account information

This is a list of the step-by-step instructions in this chapter.

|   |                |
|---|----------------|
| <i>How to Start Group Manager</i>           | <i>page 39</i> |
| <i>How to Add a Group</i>                   | <i>page 41</i> |
| <i>How to Start User Manager</i>            | <i>page 42</i> |
| <i>How to Set Up User Account Defaults</i>  | <i>page 44</i> |
| <i>How to Add a New User Account</i>        | <i>page 45</i> |
| <i>How to Copy an Existing User Account</i> | <i>page 47</i> |
| <i>How to Modify a Group</i>                | <i>page 49</i> |
| <i>How to Delete a Group</i>                | <i>page 50</i> |
| <i>How to Modify a User Account</i>         | <i>page 51</i> |
| <i>How to Delete a User Account</i>         | <i>page 53</i> |

See Chapter 11, “Group Manager Reference,” and Chapter 12, “User Manager Reference,” for additional information on each tool’s menus and menu commands.

## Setting Up User Accounts

Table 5-1 Task Map: Setting Up User Accounts

| Activity                         | Description   | For Instructions, Go To                        |
|----------------------------------|---|--|
| <b>Add Groups</b>                | Optional. To help administer users, add groups by choosing Add from the Group Manager's Edit menu. This is usually a one-time task.   | ▼ How to Add a Group page 41                   |
| <b>Set User Account Defaults</b> | Optional. Before you add several user accounts, set up defaults for the User Manager by choosing Set Defaults from the User Manager's Edit menu. Setting up defaults can increase the consistency and efficiency of adding user accounts. | ▼ How to Set Up User Account Defaults page 44  |
| <b>Add a User Account</b>        | <p><b>Add a New User Account</b><br/>Add a user account by choosing Add from the User Manager's Edit menu.</p>  | ▼ How to Add a New User Account page 45        |
|                                  | <p><b>Copy an Existing User Account</b><br/>Copy an existing user account by choosing Copy from the User Manager's Edit menu. This is useful if you need to add a user account that is similar to an existing user account.</p>           | ▼ How to Copy an Existing User Account page 47 |

## ▼ How to Start Group Manager

1. **Verify that the prerequisites described in Chapter 1, “Introduction” are met.**
2. **Start the Solstice Launcher.**

```
$ solstice &
```

The Solstice Launcher is displayed.

3. **Click on the Group Manager icon.**

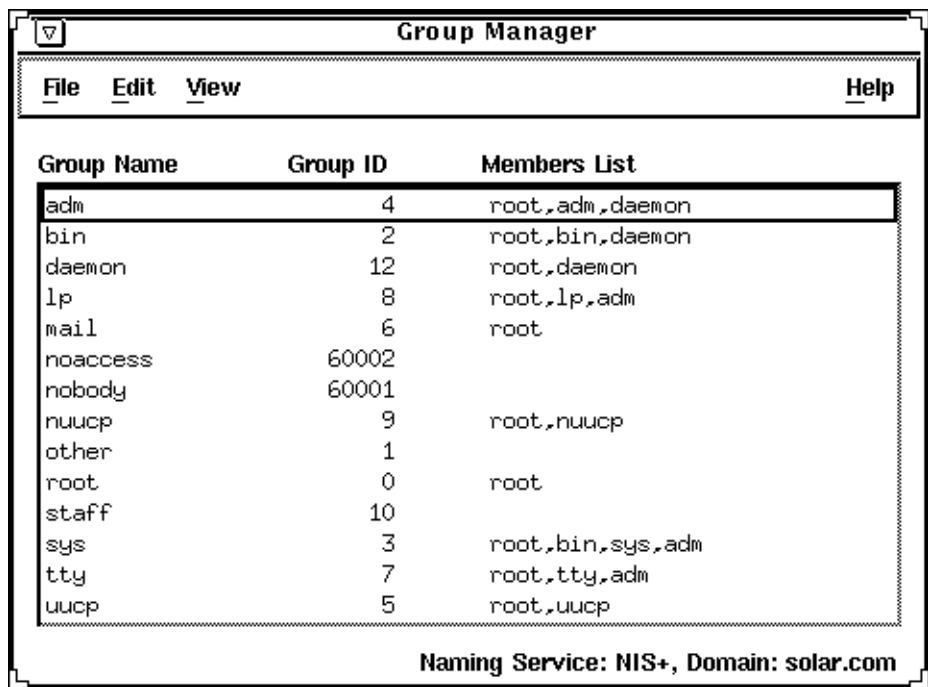


**Group Manager**

The Load window is displayed.

4. **Select the name service used in your network.**
5. **Check that the domain or host name is correct.**  
If not, type the name of the domain or host you need to access.
6. **Click on OK.**  
The Group Manager main window is displayed.

*Example of the Group Manager Main Window*

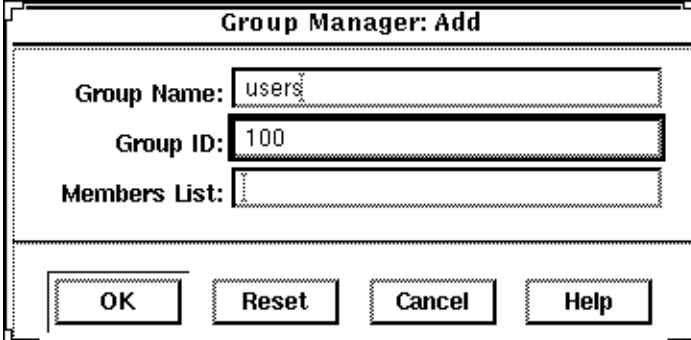


## ▼ How to Add a Group

- 1. Start Group Manager from the Solstice Launcher and select the name service, if not done already.**  
See “How to Start Group Manager” on page 39 for more information.
- 2. Choose Add from the Edit menu on the Group Manager main window.**  
The Add window is displayed. If you need information to complete a field, click on the Help button to see field definitions for this window.
- 3. Type the name of the new group in the Group Name text box.**
- 4. Type the group ID for the new group in the Group ID text box.**  
The group ID should be unique.
- 5. (Optional) Type user names in the Members List text box.**  
The list of users will be added to the group. User names must be separated by commas.
- 6. Click on OK.**  
The list of groups displayed in the Group Manager main window is updated to include the new group.

### *Example of Completed Add Window*

The following example adds a group named `users` that has a group ID of 100.



The screenshot shows a dialog box titled "Group Manager: Add". It contains three text input fields: "Group Name" with the text "users", "Group ID" with the text "100", and "Members List" which is empty. At the bottom, there are four buttons: "OK", "Reset", "Cancel", and "Help".

**▼ How to Start User Manager**

- 1. Verify that the prerequisites described in Chapter 1, “Introduction” are met.**
- 2. Start the Solstice Launcher.**

```
$ solstice &
```

The Solstice Launcher is displayed.

- 3. Click on the User Manager icon from the Solstice Launcher.**

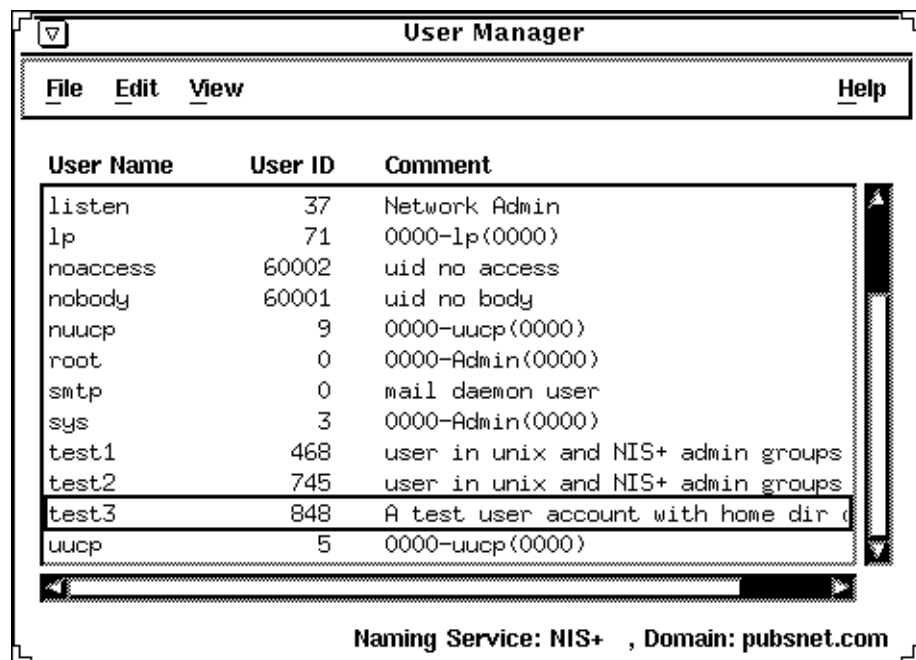


**User Manager**

The Load window is displayed.

- 4. Select the name service used in your network.**
- 5. Check that the domain or host name is correct.**  
If not, type the name of the domain or host you need to access.
- 6. Click on OK.**  
The User Manager main window is displayed.

### Example of the User Manager Main Window



**▼ How to Set Up User Account Defaults**

- 1. Start User Manager from the Solstice Launcher and select the name service, if not done already.**

See “How to Start User Manager” on page 42 for more information.

- 2. Choose Set Defaults from the Edit menu.**  
The Set Add Defaults window is displayed.

- 3. Fill in the Set Add Defaults window.**

The defaults you select will be the initial defaults values in the Add window. If you need information to complete a field, click on the Help button to see field definitions for this window.

You can set the following defaults:

- Primary and Secondary Groups
- Login Shell
- Password Policy
- Creating a Home Directory
- Home Directory Server
- Skeleton Path (Path to User Initialization Files)
- Using AutoFS (AutoHome Setup)
- Permissions in Home Directory
- Mail Server

- 4. Click on OK.**



---

## ▼ How to Add a New User Account

- 1. Start User Manager from the Solstice Launcher and select the name service, if not done already.**

See “How to Start User Manager” on page 42.

- 2. Choose Add from the Edit menu.**

The Add window is displayed.

- 3. Fill in the Add window.**

If you need information to complete a field, click on the Help button to see field definitions for this window.

- 4. Click on OK.**

The list of user accounts displayed in the User Manager main window is updated to include the new user account.

*Example of Completed Add Window*

**User Manager: Add**

**USER IDENTITY**

User Name: kryteri

User ID: 101

Primary Group: users

Secondary Groups:

Comment: Kryten Series 4000

Login Shell: C /bin/csh

**ACCOUNT SECURITY**

Password: Normal Password...

Min Change: days

Max Change: days

Max Inactive: days

Expiration Date: None None None

Warning: days

**HOME DIRECTORY**

Create Home Dir:

Path: /export/home/kryteri

Server: jupiter

Skeleton Path: /etc/ske

AutoHome Setup:

|             |                                     |                                     |                                     |
|-------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Permissions | Read                                | Write                               | Execute                             |
| Owner:      | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Group:      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| World:      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |

**MISCELLANEOUS**

Mail Server:

Cred. Table Setup:

OK Apply Reset Cancel Help

The server where the home directory is located.

The path (on the system running User Manager) from which to copy user initialization files into the user's home directory. You can also specify an auto-mounted path to user initialization files on another system.

---

## ▼ How to Copy an Existing User Account

- 1. Start User Manager from the Solstice Launcher and select the name service, if not done already.**

See “How to Start User Manager” on page 42.

- 2. Select a user account entry to copy from the main window.**

- 3. Choose Copy from the Edit menu.**

The Copy window is displayed with the following fields copied from the selected user account:

- Primary Group
- Secondary Groups
- Comment
- Login Shell
- Path
- Server
- Skeleton Path

- 4. Fill in the fields in the Copy window.**

If you need information to complete a field, click on the Help button to see field definitions for this window.

- 5. Click on OK.**

The list of user accounts displayed in the User Manager main window is updated to include the new user account.

## Maintaining User Accounts

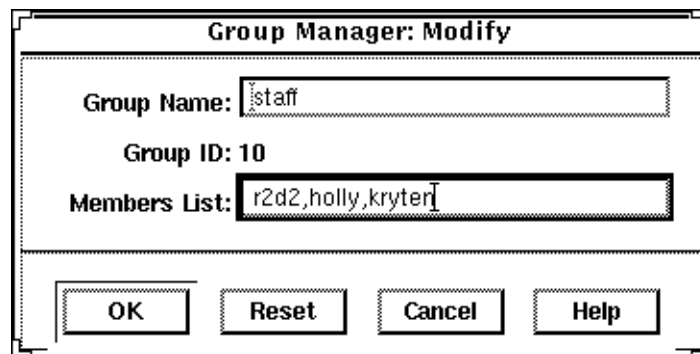
*Table 5-2* Task Map: Maintaining User Accounts

| Activity                     | Description  | For Instructions, Go To                |
|------------------------------|--|--|
| <b>Modify a Group</b>        | Modify a group's name or the users in a group by choosing Modify from the Group Manager's Edit menu.                 | ▼ How to Modify a Group page 49        |
| <b>Delete a Group</b>        | Delete a group by choosing Delete from the Group Manager's Edit menu.  | ▼ How to Delete a Group page 50        |
| <b>Modify a User Account</b> | If a user account needs to be changed, modify the user account by choosing Modify from the User Manager's Edit menu. | ▼ How to Modify a User Account page 51 |
| <b>Delete a User Account</b> | Delete a user account by choosing Modify from the User Manager's Edit menu.  | ▼ How to Delete a User Account page 53 |

## ▼ How to Modify a Group

- 1. Start Group Manager from the Solstice Launcher and select the name service, if not done already.**  
See “How to Start Group Manager” on page 39 for more information.
- 2. Select the group entry to modify from the Group Manager main window.**
- 3. Choose Modify from the Edit menu.**  
The Modify window is displayed containing the selected group entry.
- 4. Either modify the group’s name or the users in the group.**  
User names must be separated by commas. If you need information to complete a field, click on the Help button to see field definitions for this window.
- 5. Click on OK.**  
The group information displayed in the main window is updated.

### *Example of Completed Modify Window*



**Group Manager: Modify**

Group Name:

Group ID: 10

Members List:

▼ **How to Delete a Group**

- 1. Start Group Manager from the Solstice Launcher and select the name service, if not done already.**  
See “How to Start Group Manager” on page 39 for more information.
- 2. Select the group entry you want to delete from the Group Manager main window.**
- 3. Choose Delete from the Edit menu.**  
A window is displayed asking you to confirm the deletion.
- 4. Click on OK.**  
The group entry is deleted from the Group Manager main window.

---

## ▼ How to Modify a User Account

- 1. Start User Manager from the Solstice Launcher and select the name service, if not done already.**  
See “How to Start User Manager” on page 42 for more information.
- 2. Select the user account entry to modify from the User Manager main window.**
- 3. Choose Modify from the Edit menu.**  
The Modify window is displayed containing the selected user account entry.
- 4. Modify the user account.**  
If you need information to complete a field, click on the Help button to see field definitions for this window.
- 5. Click on OK.**

### *Verification*

Double-click on the modified user account entry in the User Manager main window to verify that the modifications were made. Click on cancel to close the window without making any modifications.

### Example of Completed Modify Window

The following example adds the lp secondary group membership to the rimmer user account.

The screenshot shows a dialog box titled "User Manager: Modify" with the following fields and options:

- USER IDENTITY**
  - User Name:
  - User ID: 468
  - Primary Group:
  - Secondary Groups:
  - Comment:
  - Login Shell:  /bin/sh
- ACCOUNT SECURITY**
  - Password:
  - Min Change:  days
  - Max Change:  days
  - Max Inactive:  days
  - Expiration Date:
  - Warning:  days
- HOME DIRECTORY**
  - Path:
  - Server: rogue
  - AutoHome Setup:
- MISCELLANEOUS**
  - Mail Server:
  - Cred. Table Setup:

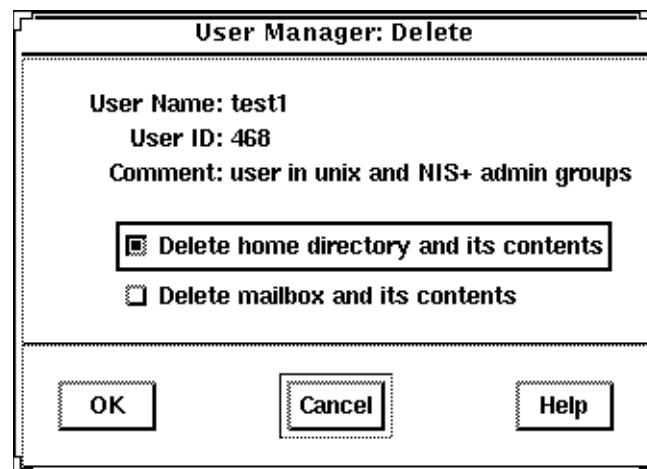
Buttons at the bottom: OK, Apply, Reset, Cancel, Help.



## ▼ How to Delete a User Account

1. **Start User Manager from the Solstice Launcher and select the name service, if not done already.**  
See “How to Start User Manager” on page 42 for more information.
2. **Select the user account entry to remove from the main window.**
3. **Choose Delete from the Edit menu.**  
The Delete window is displayed to confirm the removal of the user account.
4. **(Optional) Click on the check box to delete the user’s home directory and its contents.**
5. **(Optional) Click on the check box to delete the user’s mailbox and its contents.**
6. **Click on OK when you are ready to delete the user account.**  
The user account entry is deleted from the User Manager main window.

### *Example of Delete Window*





# Managing Server and Client Support With Host Manager

---



This chapter describes how to set up and maintain server and client support using the Solstice Host Manager.

This is a list of the step-by-step instructions in this chapter.

|  |                |
|--|----------------|
| <i>How to Start Host Manager</i>                               | <i>page 66</i> |
| <i>How to Update System Types</i>                              | <i>page 68</i> |
| <i>How to Set Defaults for Adding Support</i>                  | <i>page 68</i> |
| <i>How to Add Support for a Standalone System or OS Server</i> | <i>page 69</i> |
| <i>How to Convert a Standalone System to an OS Server</i>      | <i>page 72</i> |
| <i>How to Add SunOS 4.x OS Services to an OS Server</i>        | <i>page 74</i> |
| <i>How to Add Solaris 2.x OS Services to an OS Server</i>      | <i>page 80</i> |
| <i>How to Add Support for a Diskless Client</i>                | <i>page 82</i> |
| <i>How to Add Support for a Dataless Client</i>                | <i>page 85</i> |
| <i>How to Modify Support for a System</i>                      | <i>page 89</i> |
| <i>How to Delete Support for a System</i>                      | <i>page 89</i> |

See Chapter 13, “Host Manager Reference,” for additional information on each Host Manager’s menus and menu commands.

## *What Are Servers and Clients*

Systems on the network can usually be described as one of the following:

- **Server** – A system that provides a services to other systems in its network. There are file servers, boot servers, database servers, license servers, print servers, installation servers, and even servers for particular applications. This chapter uses the term server to mean a system that provides file systems and installation software for other systems on the network.
- **Client** – A system that uses remote services from a server. Some clients have limited disk storage capacity, or perhaps none at all, and they have to rely on remote file systems from a server to function. Diskless and dataless clients are examples of this type of client.

Other clients may use remote services (such as installation software) from a server, but they don't rely on a server to function. A standalone system, which has its own hard disk containing the root (/), /usr, and /home file systems and swap space, is a good example of this type of client.

## *What Does Support Mean*

Providing support for a system means providing software and services to help another system function. Support can include:

- Making a system known to the network (i.e., host name and ethernet address information)
- Providing installation services to remotely boot and install a system
- Providing operating system (OS) services to a system with limited or no disk space

## Overview of System Types

System types are basically defined by how they access the root (/) and /usr file systems, including the swap area. For example, standalone and server systems mount these file systems from a local disk, while diskless and dataless clients mount the file systems remotely, relying on servers to provide these services. Table 6-1 lists these and other differences for each system type.

Table 6-1 System Type Overview

| System Type       | Local File Systems  | Local Swap? | Remote File Systems               | Network Use | Relative Performance |
|-------------------|---|-------------|-----------------------------------|-------------|----------------------|
| Server            | root (/)<br>/usr<br>/home<br>/opt<br>/export/home<br>/export/root | Yes         | - none -                          | high        | high                 |
| Standalone System | root (/)<br>/usr<br>/export/home                                  | Yes         | - none -                          | low         | high                 |
| Dataless Client   | root (/)  | Yes         | /usr<br>/home                     | medium      | medium               |
| Diskless Client   | - none -  | No          | root (/)<br>swap<br>/usr<br>/home | high        | low                  |

## *Servers*

A server system has the following file systems:

- The root (/) and /usr file systems, plus swap space.
- The /export, /export/swap, and /export/home file systems, which support client systems and provide home directories for users.
- The /opt directory or file system for storing application software.

Servers can also contain the following software to support other systems:

- Operating system (OS) services for diskless and dataless clients that want to run a different release or are a different platform than the server.
- Solaris CD image and boot software for networked systems to perform remote installations.
- JumpStart directory for networked systems to perform custom JumpStart installations.

## *Standalone Systems*

A *networked standalone system* can share information with other systems in the network, but it could continue to function if detached from the network.

A standalone system can function autonomously because it has its own hard disk containing the root (/), /usr, and /home file systems and swap space. The standalone system thus has local access to operating system software, executables, virtual memory space, and user-created files.

Note that a standalone system requires sufficient disk space to hold the four necessary file systems.

A *non-networked standalone system* is a standalone system with all the characteristics listed above except that it is not connected to a network.

## *Diskless Clients*

A *diskless client* has no disk and depends on a server for all its software and storage area. A diskless client remotely mounts its root (/), /usr, and /home file systems from a server.

---

A diskless client generates significant network traffic due to its continual need to procure operating system software and virtual memory space from across the network. A diskless client cannot operate if it is detached from the network or if its server malfunctions.

### *Dataless Clients*

A *dataless client* has local storage for its root (/) file system and swap space. The dataless client cannot function if detached from the network, because its executables (/usr) and user files (/home) are located across the network on the disk of a server.

---

**Note** – SunSoft plans to remove support for dataless clients after Solaris 2.5. You can add this system type now using Host Manager, but in future releases of the Solaris operating environment you will need to choose a different type.

---

A dataless client places far less demand on the server and the network than a diskless client does. Because dataless clients require less network access, a server can accommodate many more dataless clients than it can diskless clients.

Dataless clients are less expensive to manage than standalone systems. Also, the user files of all the dataless clients are stored centrally (on a server) and can be backed up and administered centrally.

### *What You Can Do With Host Manager*

Host Manager is a graphical user interface that enables you to add and maintain server and client support on a network. With a name service like NIS+, you can manage system information in a centralized manner so that important system information, such as host names, do not have to be duplicated on every system in the network.

Host Manager enables you to:

- Add and Modify System Support
- Update System Types
- Convert System Types
- Add OS Services
- Set up remote installation services

- Queue Tasks

### Add and Modify System Support

Host Manager enables you to add and modify support for the following system types:

- Solaris Diskless
- Solaris Dataless
- Solaris Standalone
- Solaris OS Server

Table 6-2 describes the server-client configurations that are supported by the Solstice AdminSuite 2.1 release of Host Manager.

Table 6-2 Supported Server-Client Configurations

|        |             |       | Client    |     |             |     |             |     |             |  |
|--------|-------------|-------|-----------|-----|-------------|-----|-------------|-----|-------------|--|
|        |             |       | SunOS 4.x |     | Solaris 2.3 |     | Solaris 2.4 |     | Solaris 2.5 |  |
|        |             |       | SPARC     | x86 | SPARC       | x86 | SPARC       | x86 | SPARC       |  |
| Server | Solaris 2.3 | x86   | -         | -   | -           | -   | -           | -   | -           |  |
|        |             | SPARC | Yes       | -   | Yes         | Yes | Yes         | Yes | Yes         |  |
|        | Solaris 2.4 | x86   | Yes       | -   | Yes         | Yes | Yes         | Yes | Yes         |  |
|        |             | SPARC | Yes       | -   | Yes         | Yes | Yes         | Yes | Yes         |  |
|        | Solaris 2.5 | x86   | Yes       | -   | Yes         | Yes | Yes         | Yes | Yes         |  |
|        |             | SPARC | Yes       | -   | Yes         | Yes | Yes         | Yes | Yes         |  |

**Note** – The SunOS 4.x release is supported on SPARC systems based on the Sun4c and Sun4m platform groups only. SunSoft plans to remove support for the SunOS 4.x release in a later version of the Solstice AdminSuite software.

### Update System Types

Host Manager cannot recognize all previously added system types until you use the Update System Types option from the File menu. This option will probe client systems and identify their system types. Host Manager will mark systems as `generic` if they are not running the Solaris software or if they use local or loghost entries.



---

**Note** – Previously added systems running Solaris 2.5 must also have the Solstice AdminSuite software installed for Host Manager to update their system type.

---

The system type information is stored in the `bootparams` file in the local `/etc` files or a name service database. Host Manager will either modify an existing `bootparams` entry or add a new one such as the following for a Solaris standalone system named `mars`:

```
mars boottype=:st
```

## *Convert System Types*

Host Manager enables you to convert one system type to another. Currently, you can only convert:

- A generic system to a standalone system
- A standalone system to an OS server

You can add Solaris 2.x OS services during the standalone system to OS server conversion.

## *Add OS Services*

A Solaris OS server is a server that provides operating system (OS) services to support diskless or dataless clients. By using Host Manager, you can add support for an OS server or convert a standalone system to an OS server.

By default, an OS server can support clients that are the same platform group and require the same Solaris release as the OS server. To support clients of a different platform group or clients that require a different Solaris release than the OS server, you must add the particular OS service to the OS server. You must have the appropriate Solaris CD image to add OS services.

For example, if you have a OS server running Solaris 2.5 and you want it to support diskless clients running Solaris 2.4, you must add Solaris 2.4 OS services to the OS server. You would also have to add services to a SPARC OS server if you want it to support x86 diskless clients running Solaris 2.4. In this example, both the server and client are running the same Solaris release, but they are different platform groups.

---

**Note** – Although Host Manager enables you to add support for diskless and dataless clients running the Sun4.x release, you cannot add SunOS 4.x OS services using Host Manager. You must use the `install4x` command to add OS services to an OS server and then use Host Manager to add support for the SunOS 4.x client.

---

## *Set Up Remote Installation Services*

Host Manager enables you to set up systems to provide Solaris 2.x installation services for other systems on the network. You can set up the following types of installation services on a system:

- **An install server** – A system on the network that provides a Solaris CD image (either from a CD-ROM drive or the copy on the hard disk) for other systems to install from.
- **A boot server** – A system that provides boot information to other systems on the network. The boot server and the install server are usually the same system.
- **A profile server** – A system that contains Jumpstart files for systems to perform a custom JumpStart installation.

---

**Note** – A boot server and install server are typically the same system. However, if the system to be installed is on a different subnet than the install server, a boot server is required on that subnet.

---

## *Queue Tasks*

Host Manager enables you to queue tasks such as converting system types and adding OS services. Since these tasks may require several minutes to process, Host Manager enables you to set up tasks to be performed without requiring you to wait for each task to be completed. After setting up the tasks, choose Save Changes from File menu. Host Manager's progress is displayed in the message bar located at the bottom of the window as each task is processed.

## What You Can't Do With Host Manager

Table 6-3 shows the limitations of Host Manager and their suggested workarounds.

*Table 6-3* Host Manager Limitations and Workarounds

| <b>Limitation</b>  | <b>Workaround</b>   |
|--|---|
| Host Manager cannot automatically recognize all previously added system types.   | Use the Update System Type option from the File menu. This option will probe systems on the network and identify their system types.                |
| Host Manager cannot add or maintain AutoClient systems.  | Use the Solstice AutoClient Manager to create and maintain AutoClient systems. AutoClient Manager is provided with the Solstice AutoClient product. |
| Host Manager can't add SunOS 4.x services to an OS server.   | Mount a SunOS 4.x CD image and add OS services by using the <code>install4x</code> command.   |
| Host Manager can't provide remote installations services for SunOS 4.x systems.  | Install SunOS 4.x systems from the local CD-ROM drive.  |
| Host Manager does not enable you to add multiple host entries for a system with the same Ethernet address (needed for servers with multiple Ethernet interfaces, also known as multi-homed hosts). | Use command-line equivalents to enter the host information into the name service.   |
| Host Manager does not enable you to convert a generic system type to a server system type.   | Convert the generic system to a standalone system type first.   |

## Adding Server and Client Support

Table 6-4 Task Map: Adding Server and Client Support

| Activity  | Description  | For Instructions, Go To  |
|---|--|--|
| <p><b>Update System Types</b></p>                 | <p>Optional. Make sure Host Manager recognizes all the previously added system types. This is usually a one-time task before using the AdminSuite 2.1 Host Manager for the first time.</p>   | <p>▼ How to Update System Types page 68</p>                              |
| <p><b>Set Defaults for Adding Support</b></p>     | <p>Optional. Before you add support for several clients, set up defaults for the Add window by choosing Set Defaults from the Host Manager's Edit menu. Setting up defaults can increase the consistency and efficiency of adding support for systems.</p> | <p>▼ How to Set Defaults for Adding Support page 68</p>                  |
| <p><b>Add Support for a Standalone System</b></p> | <p><b>Add Support for a Standalone System</b><br/>Add support for a standalone system by choosing Add from the Host Manager's Edit menu. Once in the Add window, choose Standalone System from the System Type menu.</p>                                   | <p>▼ How to Add Support for a Standalone System or OS Server page 69</p> |
| <p><b>Add Support for an OS Server</b></p>        | <p><b>Add Support for an OS Server</b><br/>Add support for an OS server by choosing Add from the Host Manager's Edit menu. Once in the Add window, choose OS Server from the System Type menu.</p>   | <p>▼ How to Add Support for a Standalone System or OS Server page 69</p> |
|   | <p><b>Convert a Standalone System to an OS Server</b><br/>Convert a standalone system to an OS server by choosing Convert from the Host Manager's Edit menu. You can add Solaris 2.x OS services during the conversion.</p>                                | <p>▼ How to Convert a Standalone System to an OS Server page 72</p>      |

Table 6-4 Task Map: Adding Server and Client Support (Continued)

| Activity  | Description  | For Instructions, Go To                                      |
|---|--|--|
| <b>Add OS Services to an OS Server</b>              | <b>Add SunOS 4.x OS Services</b><br>If you need to add support for SunOS 4.x diskless or dataless clients, an OS server must have the appropriate SunOS 4.x services added.                                | ▼ How to Add SunOS 4.x OS Services to an OS Server page 74   |
|   | <b>Add Solaris 2.x OS Services</b><br>If you need to add support for Solaris 2.x diskless or dataless clients, an OS server must have the appropriate Solaris 2.x services added.                          | ▼ How to Add Solaris 2.x OS Services to an OS Server page 80 |
| <b>Add Support for Diskless or Dataless Clients</b> | <b>Add Support for a Diskless Client</b><br>Add support for a diskless client by choosing Add from the Host Manager's Edit menu. Once in the Add window, choose diskless client from the System Type menu. | ▼ How to Add Support for a Diskless Client page 82           |
|   | <b>Add Support for a Dataless Client</b><br>Add support for a dataless client by choosing Add from the Host Manager's Edit menu. Once in the Add window, choose dataless client from the System Type menu. | ▼ How to Add Support for a Dataless Client page 85           |

**▼ How to Start Host Manager**

- 1. Verify that the prerequisites described in Chapter 1, “Introduction” are met.**
- 2. Start the Solstice Launcher.**

```
$ solstice &
```

The Solstice Launcher is displayed.

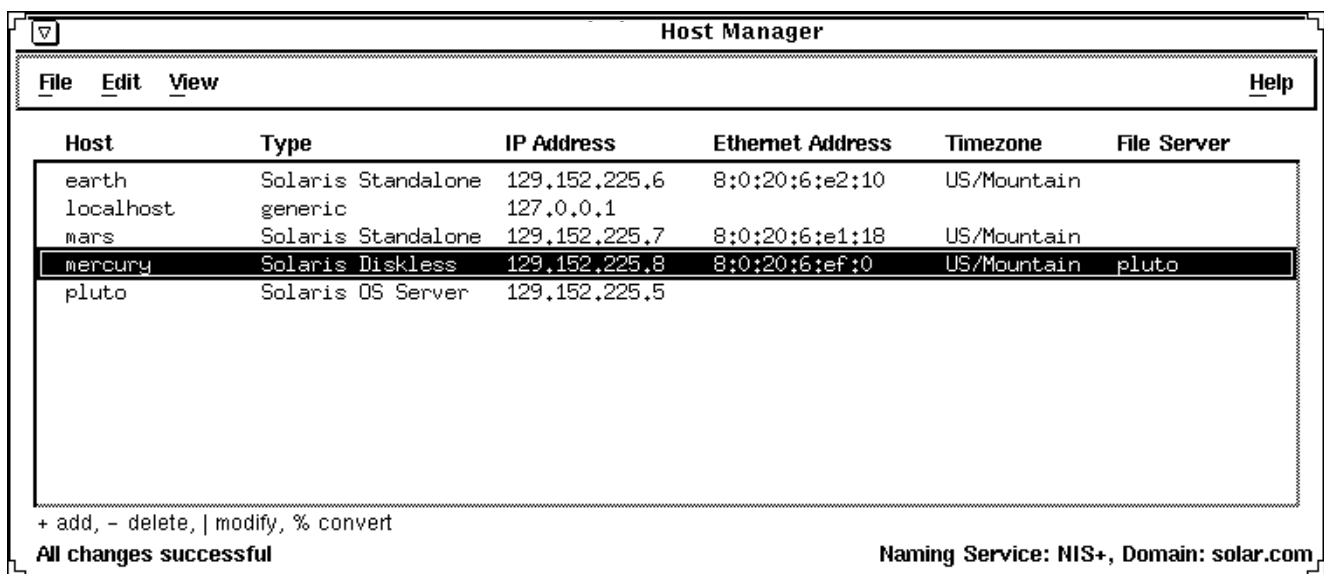
- 3. Click on the Host Manager icon.**



**Host Manager**

The Load window is displayed.

- 4. Select the name service used in your network.**
- 5. Check that the domain or host name is correct.**  
If not, type the domain or host name you need to access.
- 6. Click on OK.**  
The Host Manager main window is displayed.

*Example of a Host Manager Main Window*

The screenshot shows a window titled "Host Manager" with a menu bar containing "File", "Edit", "View", and "Help". Below the menu bar is a table with the following columns: Host, Type, IP Address, Ethernet Address, Timezone, and File Server. The table contains five rows of data. The row for "mercury" is highlighted. Below the table, there is a status bar with the text "+ add, - delete, | modify, % convert" and "All changes successful". In the bottom right corner, it says "Naming Service: NIS+, Domain: solar.com".

| Host      | Type               | IP Address    | Ethernet Address | Timezone    | File Server |
|-----------|--------------------|---------------|------------------|-------------|-------------|
| earth     | Solaris Standalone | 129.152.225.6 | 8:0:20:6:e2:10   | US/Mountain |             |
| localhost | generic            | 127.0.0.1     |                  |             |             |
| mars      | Solaris Standalone | 129.152.225.7 | 8:0:20:6:e1:18   | US/Mountain |             |
| mercury   | Solaris Diskless   | 129.152.225.8 | 8:0:20:6:ef:0    | US/Mountain | pluto       |
| pluto     | Solaris OS Server  | 129.152.225.5 |                  |             |             |

+ add, - delete, | modify, % convert  
All changes successful  
Naming Service: NIS+, Domain: solar.com

**▼ How to Update System Types**

This procedure converts system types that are identified as unknown.

- 1. Start Host Manager from the Solstice Launcher and select the name service, if not done already.**

See “How to Start Host Manager” on page 66 for more information.

- 2. Select Update System Types from the File menu on the Host Manager Window.**

The Update Systems Types window is displayed.

- 3. Click on Update to identify unknown system types.**

**▼ How to Set Defaults for Adding Support**

- 1. Start Host Manager from the Solstice Launcher and select the name service, if not done already.**

See “How to Start Host Manager” on page 66 for more information.

- 2. Choose Set Defaults from the Edit menu.**

The Set Add Defaults window is displayed.

- 3. Fill in the Set Add Defaults window.**

The defaults you select will be the initial defaults values in the Add window. If you need information to complete a field, click on the Help button to see field definitions for this window.

- 4. Click on OK.**



## ▼ How to Add Support for a Standalone System or OS Server

The high-level steps in this procedure are:

- Add system information about the system
- (Optional) Set up remote install capabilities for the system
- (Optional) Install the system

**1. Start Host Manager from the Solstice Launcher and select the name service, if not done already.**

See “How to Start Host Manager” on page 66 for more information.

**2. Select Add from the Edit menu on the Host Manager window.**

The Add window is displayed.

**3. Fill in the system information, selecting Solaris Standalone or OS Server as the system type.**

The system information includes all the fields from the host name through the time zone. If you need information to complete a field, click on the Help button to see field definitions for this window.

**4. If you want to set up remote install capabilities for the system, continue to Step 5. If not, skip to Step 10.**

**5. Click on Enable Remote Install.**

**6. Select an Install Server.**

The Install Server defaults to the current host. Select Other from the Install Server menu to specify another host as the install server.

**7. Click on Set Media Path to identify the path to the Solaris CD image on the install server.**

| <b>If You Are Using ...</b>  | <b>And ...</b>                                     | <b>Then Enter the Path ...</b>  |
|--|--|---|
| The Solaris CD as the Solaris CD image   | The Solaris CD is managed by Volume Management     | /cdrom/cdrom0/s0 or /cdrom/cdrom0/s2 on SPARC systems, /cdrom/cdrom0 on x86 systems |
|  | The Solaris CD is not managed by Volume Management | Where you mounted the Solaris CD  |
| A copy of the Solaris CD on the Install Server's hard disk (by using setup_install_server) |  | Where you specified setup_install_server to copy the Solaris CD                     |

**8. Select the system's architecture type and OS release from the OS Release menu.**

The architecture type must match the system's architecture and the OS release should match the Solaris release you want to remotely install on the system.

**9. If necessary, specify a boot server or profile server.**

To specify another server other than the default, select Other from the menu. Select a Profile Server from the Profile Server pull-down menu. You must also specify a path to the boot software on the boot server or the custom JumpStart directory on the profile server.

**10. Click on OK on the Add window.**

**11. Select Save Changes from the File menu to add support for the standalone system or OS server.**

The standalone system or OS server is displayed in the Host Manager main window.

**12. (Optional) Boot and install the standalone system or OS server.**

For more information about booting and installing, see *SPARC: Installing Solaris Software* for SPARC systems or *x86: Installing Solaris Software* for x86 systems.

**Note** – If you are installing an OS server, you must allocate space in `/export` and `/export/swap` for the desired number of clients.

### *Example of Completed Add Window for a Standalone System*

The screenshot shows a dialog box titled "Host Manager: Add" with the following fields and values:

|                   |   |
|-------------------|---|
| Host Name:        | venus   |
| IP Address:       | 129.152.225.2   |
| Ethernet Address: | 8:0:20:b:40:e9  |
| System Type:      | Solaris Standalone  |
| Timezone Region:  | United States   |
| Timezone:         | Mountain  |
| Remote Install:   | <input type="checkbox"/> Enable Remote Install                            |
| Install Server:   | pluto <input type="checkbox"/> <input type="button" value="Set Path..."/> |
| OS Release:       | <input type="checkbox"/>  |
| Boot Server:      | none <input type="checkbox"/> <input type="text"/>                        |
| Profile Server:   | none <input type="checkbox"/> <input type="text"/>                        |

At the bottom of the dialog box are five buttons: OK, Apply, Reset, Cancel, and Help.

### *Where to Go From Here*

If you want to add OS services after you install an OS server, see “How to Add Solaris 2.x OS Services to an OS Server” on page 80.

#### ▼ How to Convert a Standalone System to an OS Server

- 1. Start Host Manager from the Solstice Launcher and select the name service, if not done already.**  
See “How to Start Host Manager” on page 66 for more information.
- 2. Select a standalone system host entry from Host Manager’s main window.**
- 3. Select Convert to OS Server from the Edit menu.**  
The Convert window is displayed, and the selected standalone system is displayed in the host name field.
- 4. Click on the Add button in the OS Services window to add services.**
- 5. Click on Set Media Path to identify the path to the Solaris CD image from which to add the client services.**  
The Install Server defaults to the current host. Select Other from the Install Server menu to specify another host as the install server.

| <b>If You Are Using ...</b>  | <b>And ...</b>                                     | <b>Then Enter the Path ...</b>  |
|--|--|---|
| The Solaris CD as the Solaris CD image   | The Solaris CD is managed by Volume Management     | /cdrom/cdrom0/s0 or /cdrom/cdrom0/s2 on SPARC systems, /cdrom/cdrom0 on x86 systems |
|  | The Solaris CD is not managed by Volume Management | Where you mounted the Solaris CD  |
| A copy of the Solaris CD on the Install Server’s hard disk (by using setup_install_server) |  | Where you specified setup_install_server to copy the Solaris CD                     |

- 6. Specify the type of services you want to add and click on Add.**
- 7. Click on OK on the Convert window.**

**8. Select Save Changes from the File menu to convert the standalone system to an OS Server.**

The converted standalone systems are displayed as OS servers in the Host Manager main window.

*Example of Completed Convert Window*

**Host Manager: Convert**

Host Name: minnie

System Type: Solaris OS Server

Timezone Region: United States

Timezone: Mountain

Remote Install:  Enable Remote Install

Install Server: rogue Set Path...

OS Release:

Boot Server: none

Profile Server: none

OS Services:

- + sparc sun4c Solaris 2.5
- + sparc sun4d Solaris 2.5
- + sparc sun4m Solaris 2.5

Add... Delete

OK Reset Cancel Help

**▼ How to Add SunOS 4.x OS Services to an OS Server**

---

**Note** – SunSoft plans to remove support for the SunOS 4.x release in a later version of the Solstice AdminSuite software.

---

The high-level steps in this procedure are:

- Determine the OS server to which you want to add SunOS 4.x OS services for diskless and dataless clients
- Verify that the SunOS 4.x heterogeneous install software is installed
- Install the required SunOS 4.x release software (`install4x` command)

**1. Log in as root on the OS server to which you want to add SunOS 4.x OS services for diskless and dataless clients.**

**2. Verify that the SunOS 4.x heterogeneous install software is installed.**

```
# pkginfo SUNWhinst
```

If the package information is displayed, proceed to Step 7. If not, go to the next step.

**3. Insert the Solaris 2.x CD into your CD-ROM drive.**

This step assumes that your system is running Volume Management.

---

**Note** – Use the Solaris 2.x CD that matches the Solaris 2.x release that is installed on the OS server. For example, use the Solaris 2.4 11/94 CD if the OS server is running the Solaris 2.4 11/94 release.

---

To access the SunOS 4.x CD from another system running either the Solaris 2.x release or the SunOS 4.x release, see “Setting Up the CD-ROM Drive for `install4x`” in the *Solaris 1.x to 2.x Transition Guide*.

**4. Change directory to the location of the software.**

```
# cd /cdrom/cdrom0/s0/Solaris_2.x
```

---

**5. Install the SunOS 4.x heterogeneous install software.**

```
# pkgadd -d `pwd` SUNWhinst
```

**6. Eject the Solaris 2.x CD.**

```
# cd  
# eject cd
```

**7. Insert the SunOS 4.x release CD into your CD-ROM drive.**

This step assumes that your system is running Volume Management, and the CD-ROM drive is directly attached to the server. Volume Management automatically mounts the CD directory on `/cdrom/volume1/s0`.

**8. Start the SunOS 4.x release software installation program.**

```
# /usr/sbin/install4x -m /cdrom/volume1/s0 -e /export
```

The main menu is displayed.

```
*** 4.1* Install Main Menu ***

Choose an Architecture (then select modules to load):

                                Modules
                                Loaded  Selected
[a] sun4.sun4c.sunos.4.1.2      0         0
[b] sun4.sun4.sunos.4.1.2      0         0
[c] sun4.sun4m.sunos.4.1.2     0         0

or begin the loading process for all selected modules:

[L] Load selected modules

or abort without loading any modules:

[Q] Quit without loading

Type any bracketed letter to select that function.
Type ? for help.
```

```
+-----+
| Disk Usage: |
|      0K Selected |
| 53634K Free  |
+-----+
```



- 9. On the main menu, specify the architecture you want to support by typing the associated character that is shown in brackets.**  
The Module Selection menu is displayed.

```
Select sun4.sun4c.sunos.4.1.2 modules:
+[a] R proto root.....240K | [o] User_Diag.....6352K
+[b] R usr.....26240K | [p] Manual.....7456K
+[c] R Kvm.....4832K | +[q] D TLI.....48K
+[d] R Install.....936K | [r] D RFS.....912K
[e] D Networking.....1040K | [s] D Debugging.....2928K
[f] D System_V.....4008K | [t] SunView_Programmers.....1840K
[g] D Sys.....5288K | [u] Shlib_Custom.....1376K
[h] C SunView_Users.....2664K | [v] Graphics.....1784K
[i] SunView_Demo.....512K | +[w] uucp.....608K
+[j] Text.....712K | +[x] Games.....3136K
[k] Demo.....4264K | [y] Versatec.....5960K
[l] C OpenWindows_Users.....25936K | [z] Security.....312K
[m] C OpenWindows_Demo.....4288K | [A] OpenWindows_Programmers.10200K
[n] C OpenWindows_Fonts.....7840K |

Module      + = already loaded      R = Required      C= Common
Legend:     ** = selected for loading  D = Desirable    Others are optional

Select [a-A] or a Quick-Pick Option:
[1] All Required Modules      [4] All Optional Modules | Disk Usage: |
[2] All Desirable Modules    [5] All Modules         |          0K Selected |
[3] All Common Modules       |          53634K Free  |
or [D] (done) to return to the main screen  +-----+

```

- 10. Select modules to load by typing the associated character that is shown in brackets.**

The Module Selection screen readily enables you to pick groups of modules to be loaded. When you enter a 1, it marks all required modules for loading. When you enter a 2, it marks all recommended modules. When you enter a 3, it marks all commonly loaded modules. When you enter a 4, it marks all optional modules. When you enter a 5, it marks all modules shown on the Module Selection screen.

**11. Return to the main menu by typing D.**  
The main menu is displayed.

```
*** 4.1* Install Main Menu ***

Choose an Architecture (then select modules to load):

                                Modules
                                Loaded  Selected
[a] sun4.sun4c.sunos.4.1.2      0         4
[b] sun4.sun4.sunos.4.1.2      0         3
[c] sun4.sun4m.sunos.4.1.2     0         1

or begin the loading process for all selected modules:

[L] Load selected modules

or abort without loading any modules:

[Q] Quit without loading

Type any bracketed letter to select that function.

Type ? for help.
```

|               |  |
|---------------|--|
| +-----+-----+ |  |
| Disk Usage:   |  |
| 0K Selected   |  |
| 53634K Free   |  |
| +-----+-----+ |  |

**12. Type L to install the software.**  
The modules you previously selected are installed.

```
Installing module 'proto root' [size: 248K]
      in directory /export/exec/proto.root.sunos.4.1.2 ...

Updating server databases ...

Press any key to continue:
```

**13. After the modules are installed, press any key to return to the main menu.**  
The loaded modules are displayed in the main menu.

**14. If you want to add support for other architectures, repeat Step 9 through Step 12. Otherwise, type Q to exit.**

---

### *Where to Go From Here*

If you want to add SunOS 4.x support for a diskless client, see “How to Add Support for a Diskless Client” on page 82. If you want to add SunOS 4.x support for a dataless client, see “How to Add Support for a Dataless Client” on page 85.

▼ **How to Add Solaris 2.x OS Services to an OS Server**

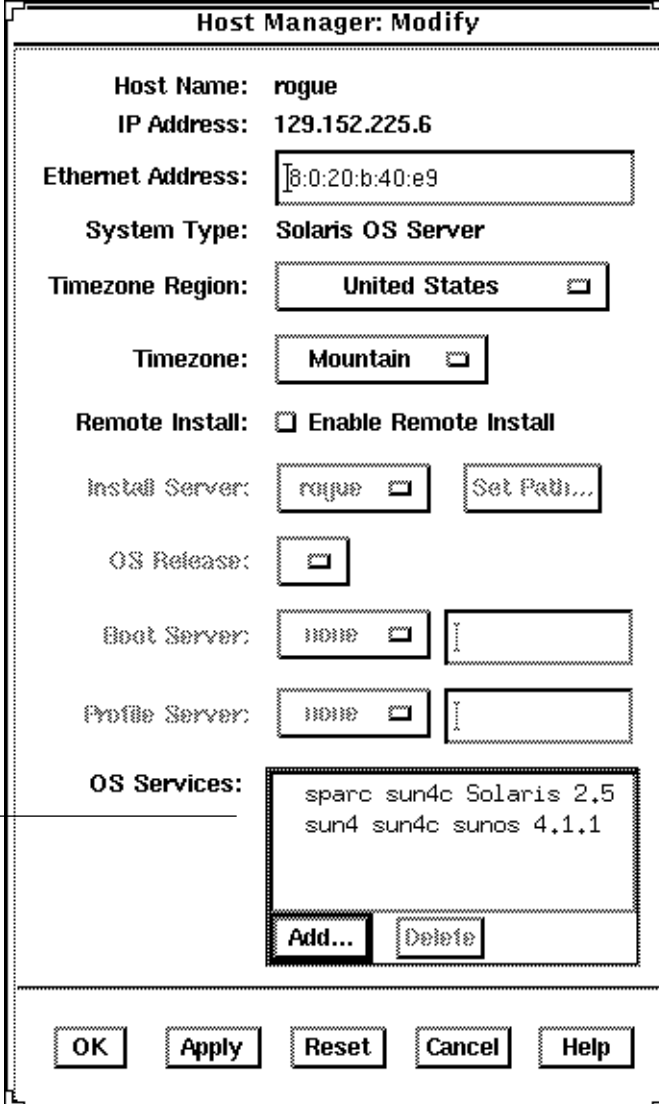
- 1. Start Host Manager from the Solstice Launcher and select the name service, if not done already.**  
See “How to Start Host Manager” on page 66 for more information.
- 2. Select an OS server to modify from the Host Manager main window.**
- 3. Select Modify from the Edit menu on the Host Manager window.**  
The Modify window is displayed.
- 4. Click on the Add button in the OS Services window to add services.**
- 5. Click on Set Media Path to identify the path to the Solaris CD image from which to add the client services.**  
The Install Server defaults to the current host. Select Other from the Install Server menu to specify another host as the install server.

| <b>If You Are Using ...</b>  | <b>And ...</b>                                     | <b>Then Enter the Path ...</b>  |
|--|--|---|
| The Solaris CD as the Solaris CD image   | The Solaris CD is managed by Volume Management     | /cdrom/cdrom0/s0 or /cdrom/cdrom0/s2 on SPARC systems, /cdrom/cdrom0 on x86 systems |
|  | The Solaris CD is not managed by Volume Management | Where you mounted the Solaris CD  |
| A copy of the Solaris CD on the Install Server’s hard disk (by using setup_install_server) |  | Where you specified setup_install_server to copy the Solaris CD                     |

- 6. Specify the type of services you want to add and click on Add.**
- 7. Click on OK on the Add window.**
- 8. Select Save Changes from the File menu to add services.**

*Example of Completed Add OS Services Window*

List of OS services  
for each platform,  
platform group, and  
OS Release



The image shows a dialog box titled "Host Manager: Modify". It contains several fields and controls:

- Host Name:** rogue
- IP Address:** 129.152.225.6
- Ethernet Address:** [8:0:20:b:40:e9]
- System Type:** Solaris OS Server
- Timezone Region:** United States (dropdown menu)
- Timezone:** Mountain (dropdown menu)
- Remote Install:**  Enable Remote Install
- Install Server:** rogue (dropdown menu) and Set Path... button
- OS Release:** (dropdown menu)
- Boot Server:** none (dropdown menu) and (text field)
- Profile Server:** none (dropdown menu) and (text field)
- OS Services:** A list box containing:
  - sparc sun4c Solaris 2.5
  - sun4 sun4c sunos 4.1.1Below the list box are "Add..." and "Delete" buttons.

At the bottom of the dialog box are five buttons: OK, Apply, Reset, Cancel, and Help.

**▼ How to Add Support for a Diskless Client**

The high-level steps in this procedure are:

- Add system information about the diskless client
- Select OS services for the diskless client
- Boot the diskless client

---

**Note** – This procedure assumes the system providing the services (the file server) has already been configured as an OS server with the `/export` and `/export/swap` file systems already created.

---

**1. Start Host Manager from the Solstice Launcher and select the name service, if not done already.**

See “How to Start Host Manager” on page 66 for more information.

**2. Select Add from the Edit menu on the Host Manager main window.**

The Add window is displayed.

**3. Fill in the system information, selecting Solaris Diskless as the system type.**

The system information includes all the fields from the host name through the timezone. If you need information to complete a field, click on the Help button to see field definitions for this window.

**4. Select a File Server.**

The File Server defaults to the current host. Select Other from the Install Server menu to specify another host as the install server.

**5. Select the client’s architecture type and the OS release from the OS Release menu.**

The architecture type must match the diskless client’s architecture and the OS release should match the Solaris release you want diskless client to run.

**6. Identify the system’s root path, swap path, and swap size.**

**7. Click on OK on the Add window.**

**8. Select Save Changes from the File menu to add support for the diskless client.**

The diskless client is displayed in the Host Manager main window. It takes several minutes to add the diskless client support, particularly to create the system’s root and swap areas.

- 
- 9. (If necessary) Start the appropriate client daemons on the file server after the system information has been added successfully.**

```
# /etc/init.d/nfs.server start
```

- 10. Boot the diskless client.**

```
ok boot net
```

- 11. Provide the following system configuration information for the diskless client during the initial boot process, if prompted.**

- Geographic region
- Time zone
- Date and time

- 12. Create a root password when prompted.**

*Example of Completed Add Window for a Diskless Client*

The image shows a dialog box titled "Host Manager: Add" with the following fields and values:

- Host Name: orion
- IP Address: 129.152.221.66
- Ethernet Address: 8:0:20:d:63:b2
- System Type: Solaris Diskless
- Timezone Region: United States
- Timezone: Mountain
- File Server: pluto
- OS Release: sparc sun4c Solaris 2.4
- Root Path: /export/root
- Swap Path: /export/swap
- Swap Size: 24 megabytes
- Terminal Type: sun

At the bottom of the dialog box are five buttons: OK, Apply, Reset, Cancel, and Help.



## ▼ How to Add Support for a Dataless Client

The high-level steps in this procedure are:

- Add system information about the dataless client
- Select OS services for the dataless client
- (Optional) Set up remote install capabilities for the dataless client
- (Optional) Boot and install the dataless client

---

**Note** – This procedure assumes the system providing the services (the file server) has already been configured as an OS server.

---

**1. Start Host Manager from the Solstice Launcher and select the name service, if not done already.**

See “How to Start Host Manager” on page 66 for more information.

**2. Select Add from the Edit menu on the Host Manager main window.**

The Add window is displayed.

**3. Fill in the system information, selecting Solaris Dataless as the system type.**

The system information includes all the fields from the host name through the time zone. If you need information to complete a field, click on the Help button to see field definitions for this window.

**4. Select a File Server.**

The File Server defaults to the current host. Select Other from the Install Server menu to specify another host as the install server.

**5. Select the system’s architecture type and OS release from OS Release menu.**

The architecture type must match the dataless client’s architecture and the OS release should match the Solaris release you want the dataless client to run.

**6. If you want to set up remote install capabilities for the system, continue to Step 7. If not, skip to Step 11.**

**7. Click on Enable Remote Install.**

**8. Select an Install Server.**

The Install Server defaults to the current host. Select Other from the Install Server menu to specify another host as the install server.

**9. Click on Set Media Path to identify the path to the Solaris CD image on the install server.**

**Note** – The path to the Solaris CD image must be the same release that you specified in the OS Release menu.

| <b>If You Are Using ...</b>  | <b>And ...</b>                                     | <b>Then Enter the Path ...</b>  |
|--|--|---|
| The Solaris CD as the Solaris CD image   | The Solaris CD is managed by Volume Management     | /cdrom/cdrom0/s0 or /cdrom/cdrom0/s2 on SPARC systems, /cdrom/cdrom0 on x86 systems |
|  | The Solaris CD is not managed by Volume Management | Where you mounted the Solaris CD  |
| A copy of the Solaris CD on the Install Server's hard disk (by using setup_install_server) |  | Where you specified setup_install_server to copy the Solaris CD                     |

**10. If necessary, specify a boot server or profile server.**

To specify another server other than the default, select Other from the menu. Select a Profile Server from the Profile Server pull-down menu. You must also specify a path to the boot software on the boot server or the custom JumpStart directory on the profile server.

**11. Click on OK on the Add window.**

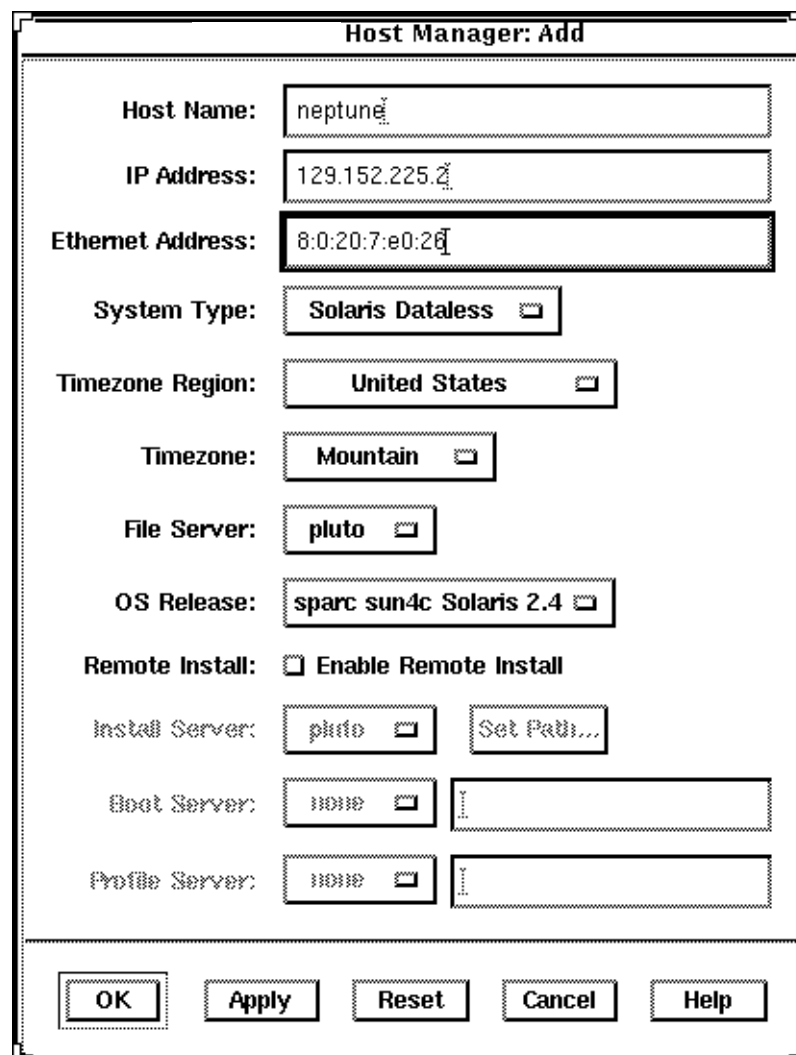
**12. Select Save Changes from the File menu to add support for the dataless client.**

The dataless client is displayed in the Host Manager main window.

**13. (Optional) Boot and install the dataless client.**

For more information about booting and installing, see *SPARC: Installing Solaris Software* for SPARC systems or *x86: Installing Solaris Software* for x86 systems.

*Example of Completed Add Window for a Dataless Client*



The image shows a dialog box titled "Host Manager: Add" with the following fields and values:

- Host Name: neptune
- IP Address: 129.152.225.2
- Ethernet Address: 8:0:20:7:e0:26
- System Type: Solaris Dataless
- Timezone Region: United States
- Timezone: Mountain
- File Server: pluto
- OS Release: sparc sun4c Solaris 2.4
- Remote Install:  Enable Remote Install
- Install Server: pluto (with a "Set Path..." button)
- Boot Server: none
- Profile Server: none

At the bottom of the dialog box are five buttons: OK, Apply, Reset, Cancel, and Help.

## Maintaining Server and Client Support

Table 6-5 Task Map: Maintaining Server and Client Support

| Activity                           | Description   | For Instructions, Go To                      |
|------------------------------------|---|--|
| <b>Modify Support for a System</b> | Modify support for a system by choosing Modify from the Host Manager's Edit menu. | ▼ How to Modify Support for a System page 89 |
| <b>Delete Support for a System</b> | Delete support for a system by choosing Delete from the Host Manager's Edit menu. | ▼ How to Delete Support for a System page 89 |

---

### ▼ How to Modify Support for a System

- 1. Start Host Manager from the Solstice Launcher and select the name service, if not done already.**  
See “How to Start Host Manager” on page 66 for more information.
- 2. Select a system entry to modify from the Host Manager main window.**
- 3. Choose Modify from the Edit menu.**  
The Modify window contains the selected system entry.
- 4. Modify support for the system.**  
If you need information to change a field, click on the Help button to see field definitions for this window.
- 5. Click on OK on the Modify window.**
- 6. Select Save Changes from the File menu to modify support for the system.**

### ▼ How to Delete Support for a System

- 1. Start Host Manager from the Solstice Launcher and select the name service, if not done already.**  
See “How to Start Host Manager” on page 66 for more information.
- 2. Select a system entry to delete from the Host Manager main window.**
- 3. Select Delete from the Edit menu.**  
A window is displayed asking you to confirm the deletion.
- 4. Click on OK.**
- 5. Select Save Changes from the File menu to delete support for the system.**  
The system entry is deleted from the Host Manager main window.



# *Managing Network Service Files with Database Manager*

---



This chapter describes how to manage network services by using Database Manager, a graphical user interface within the Solstice AdminSuite software used to manage network-related system files.

This is a list of the step-by-step instructions in this chapter.

|  |                |
|--|----------------|
| <i>How to Start Database Manager</i>     | <i>page 93</i> |
| <i>How to Add a System File Entry</i>    | <i>page 95</i> |
| <i>How to Modify a System File Entry</i> | <i>page 96</i> |
| <i>How to Delete a System File Entry</i> | <i>page 97</i> |

See Chapter 14, “Database Manager Reference,” for additional information on Database Manager’s menus and menu commands.

## Overview of Database Manager

Database Manager is primarily used to manage the network-related system files since other tools are used to manage user, client system, serial ports, and printer-related files.

Using Database Manager to add an entry to a system file usually managed by another tool can save time. For example, Host Manager requires you to enter the Ethernet address when adding a standalone system even though you may want to use this system for remote copy and login only. However, the Ethernet address is not required when you use Database Manager to update the `hosts` file.



---

**Caution** – It is important that you do not bypass critical information when providing services to users and client systems. Use caution when using Database Manager to update system files normally managed by other tools.

---



---

## *Managing Network Services Files*

The following section describes how to use Database Manager to manage network services files.

### ▼ How to Start Database Manager

**1. Verify that the steps described in Chapter 1, “Introduction” are met.**

**2. Type `solstice` & from a Command or Shell tool prompt and press Return.**

The Solstice Launcher is displayed.

**3. Click the Database Manager icon.**

The Load Database window is displayed.

**4. Select the name service used in your network.**

**5. Check that the domain or host name is correct.**

If not, type the domain or host name you need to access.

**6. Select the file you want to display.**

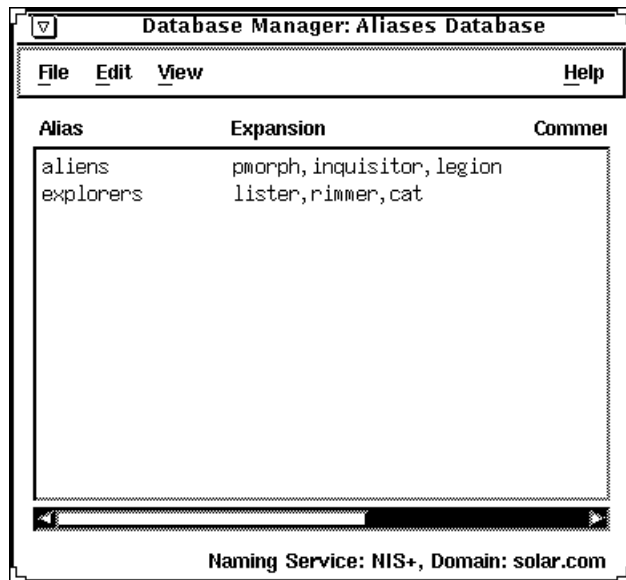
Select the `aliases` file, for example.

**7. Click on OK.**

The Database Manager main window is displayed with the file contents displayed.

*Example*

This example shows that the `aliases` file has been selected and displayed.



## ▼ How to Add a System File Entry

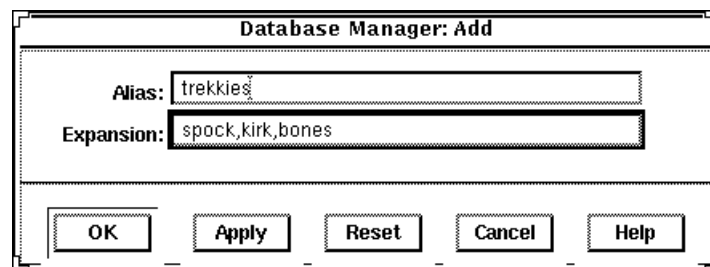
1. **Start Database Manager from the Solstice Launcher, select the name service, and the system file to be displayed, if not done already.**  
See the procedure on page 93 for information about starting Database Manager.
2. **Select Add from the Edit menu in the Database Manager main window.**  
The Add window is displayed.
3. **Fill out the Add window.**  
If you need information to complete a field, click on the Help button to see field definitions for the system file.
4. **Click on OK.**

### *Verification*

Verify that the entry has been added by locating the new entry in the Database Manager's main window.

### *Example*

The following is an example a completed Add window where a mail alias has been added to the `aliases` file.



The screenshot shows a dialog box titled "Database Manager: Add". It contains two text input fields. The first field is labeled "Alias:" and contains the text "trekkies". The second field is labeled "Expansion:" and contains the text "spock,kirk,bones". At the bottom of the dialog box, there are five buttons: "OK", "Apply", "Reset", "Cancel", and "Help".

▼ How to Modify a System File Entry



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**Caution** – Notify users before you modify their work environment.

---

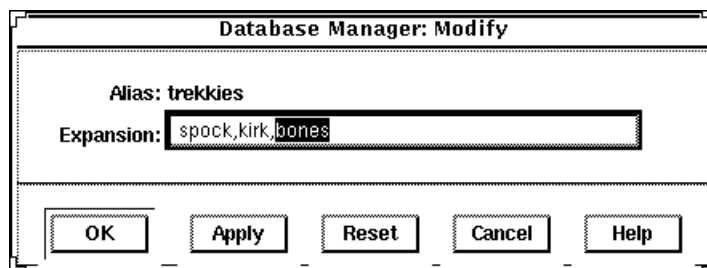
- 1. Start Database Manager from the Solstice Launcher and select the name service, if not done already.**  
See the procedure on page 93 for information about starting Database Manager.
- 2. Select a system file to modify in the Database Manager main window.**
- 3. Select Modify from the Edit menu.**  
The Modify window is displayed.
- 4. Fill out the Modify window.**  
If you need information to modify a field, click on the Help button to see field definitions for the system file.
- 5. Click on OK when finished.**

*Verification*

Verify that the entry has been modified by locating the entry in the Database Manager’s main window.

*Example*

The following is an example of the Modify window and a selected system file entry.



## ▼ How to Delete a System File Entry

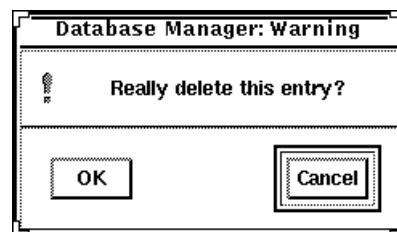
- 1. Start Database Manager from the Solstice Launcher and select the name service, if not done already.**  
See the procedure on page 93 for information about starting Database Manager.
- 2. Select an alias entry to delete in the Database Manager main window.**
- 3. Select Delete from the Edit menu.**  
A window is displayed asking you to confirm the deletion.
- 4. Click on OK if you really want to delete the system file entry.**

### *Verification*

Verify that the system file has been updated in the Database Manager's main window.

### *Example*

The following is an example of a Database Manager Delete verification window.





# *Managing Terminals and Modems with Serial Port Manager*



Modems and terminals provide both local and remote access to system and network resources. Maintaining this access with Serial Port Manager, a graphical user interface within the Solstice AdminSuite software, is an important responsibility of a system administrator.

This is a list of the step-by-step instructions in this chapter.

|   |                 |
|---|-----------------|
| <i>How to Start Serial Port Manager</i>             | <i>page 103</i> |
| <i>How to Add a Terminal</i>                        | <i>page 104</i> |
| <i>How to Add a Modem</i>                           | <i>page 105</i> |
| <i>How to Initialize a Port Without Configuring</i> | <i>page 107</i> |
| <i>How to Disable a Port</i>                        | <i>page 107</i> |
| <i>How to Delete a Port Service</i>                 | <i>page 108</i> |

See Chapter 15, “Serial Port Manager Reference,” for additional information on Serial Port Manager’s menus and menu commands.

## Overview

Serial Port Manager is a Solstice AdminSuite application used for adding and maintaining port services for terminals and modems.

The Serial Port Manager configures the serial port software to work with terminals and modems by calling the `pmadm` command and supplying the appropriate information. It features:

- Displays of serial port information
- Templates for common terminal and modem configurations
- Multiple port setup, modification, or deletion

### *Terminal and Modem Template Default Values*

Table 8-1 shows the default values that the Terminal – Hardwired template provides.

*Table 8-1* Terminal – Hardwired Default Values

| Detail        | Item                     | Default Value        |
|---------------|--------------------------|----------------------|
| <b>Basic</b>  | Port                     | —                    |
|               | Service                  | Enabled              |
|               | Baud Rate                | 9600                 |
|               | Terminal Type            | tvi925               |
| <b>More</b>   | Option: Initialize Only  | no                   |
|               | Option: Bidirectional    | no                   |
|               | Option: Software Carrier | yes                  |
|               | Login Prompt             | login:               |
|               | Comment                  | Terminal – Hardwired |
|               | Service Tag              | —                    |
| <b>Expert</b> | Port Monitor Tag         | zsmon                |
|               | Create utmp Entry        | yes                  |
|               | Connect on Carrier       | no                   |
|               | Service                  | /usr/bin/login       |
|               | Streams Modules          | ldterm, ttcompat     |



*Table 8-1 Terminal – Hardwired Default Values (Continued)*

| Detail | Item           | Default Value |
|--------|----------------|---------------|
|        | Timeout (secs) | Never         |

The modem templates provides the following default values.

*Table 8-2 Modem Default Values*

| Detail        | Item                     | Modem – Dial In Only | Modem – Dial Out Only | Modem – Bidirectional |
|---------------|--------------------------|----------------------|-----------------------|-----------------------|
| <b>Basic</b>  | Port                     | —                    | —                     | —                     |
|               | Service                  | Enabled              | Enabled               | Enabled               |
|               | Baud Rate                | 9600                 | 9600                  | 9600                  |
|               | Terminal type            | —                    | —                     | —                     |
| <b>More</b>   | Option: Initialize Only  | yes                  | no                    | no                    |
|               | Option: Bidirectional    | no                   | no                    | yes                   |
|               | Option: Software Carrier | no                   | no                    | no                    |
|               | Login Prompt             | login:               | login:                | login:                |
|               | Comment                  | Modem – Dial-In Only | Modem – Dial-Out Only | Modem – Bidirectional |
|               | Service Tag              | —                    | —                     | —                     |
|               | Port Monitor Tag         | zsmon                | zsmon                 | zsmon                 |
| <b>Expert</b> | Create utmp entry        | yes                  | yes                   | yes                   |
|               | Connect on Carrier       | no                   | no                    | no                    |
|               | Service                  | /usr/bin/login       | /usr/bin/login        | /usr/sbin/login       |
|               | Streams Modules          | ldterm, ttcompat     | ldterm, ttcompat      | ldterm, ttcompat      |
|               | Timeout (secs)           | Never                | Never                 | Never                 |

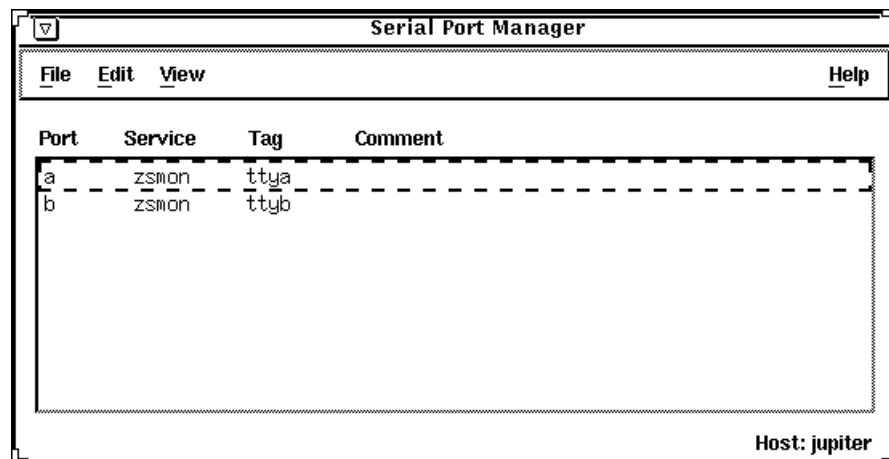
The Initialize Only – No Connection template provides the following default values.

*Table 8-3 Initialize Only – No Connection Default Values*

| <b>Detail</b> | <b>Item</b>              | <b>Default Value</b>            |
|---------------|--------------------------|---------------------------------|
| Basic         | Port                     | —                               |
|               | Service                  | Enabled                         |
|               | Baud Rate                | 9600                            |
|               | Terminal Type            | —                               |
| More          | Option: Initialize Only  | yes                             |
|               | Option: Bidirectional    | no                              |
|               | Option: Software Carrier | no                              |
|               | Login Prompt             | login:                          |
|               | Comment                  | Initialize Only – No Connection |
|               | Service Tag              | —                               |
|               | Port Monitor Tag         | zsmon                           |
| Expert        | Create utmp entry        | yes                             |
|               | Connect on Carrier       | no                              |
|               | Service                  | /usr/bin/login                  |
|               | Streams Modules          | ldterm, ttcompat                |
|               | Timeout (secs)           | Never                           |

## ▼ How to Start Serial Port Manager

1. Verify that the prerequisite steps described in Chapter 1, “Introduction” are met.
2. Type `solstice` & from a Command or Shell Tool prompt and press Return.
3. Click the Serial Port Manager icon.  
The Serial Port Manager main window is displayed.



4. (Optional) Choose Host from the View menu.
  - a. Select the host you wish to access using Serial Port Manager.  
You can also type in the name of the host in the selection field.
  - b. Click on OK to access the host using Serial Port Manager.

▼ **How to Add a Terminal**

- 1. Start Serial Port Manager from the Solstice Launcher, if not done already.**  
See the procedure on page 103 for information about starting Serial Port Manager.
- 2. Select the port or ports that will be used with a terminal in the Serial Port Manager main window.**
- 3. Choose Modify from the Edit menu.**  
The Modify window is displayed in the Basic Detail mode. (For additional details, click on More or Expert.)
- 4. Choose Terminal - Hardwired from the Template menu.**
- 5. Change values of template entries if desired.**
- 6. Click on OK to configure the port.**

## ▼ How to Add a Modem

- 1. Start Serial Port Manager from the Solstice Launcher, if not done already.**  
See the procedure on page 103 for information about starting Serial Port Manager.
- 2. Select the port or ports that will be used with a modem from the Serial Port Manager main window.**
- 3. Choose Modify from the Edit menu.**  
The Modify window appears in the Basic Detail mode. (For additional details, select either the More or Expert Detail modes.)
- 4. Choose the modem configuration from the Template menu that meets or most closely matches your modem service.**  
The modem template choices are described here.

*Table 8-4* Modem Templates

| <b>Modem Configuration</b> | <b>Description</b>                                    |
|----------------------------|---|
| Modem – Dial In Only       | Users may dial in to the modem but cannot dial out.   |
| Modem – Dial Out Only      | Users may dial out from the modem but cannot dial in. |
| Modem – Bidirectional      | Users may either dial in or out from the modem.       |

See the modem configuration template table on page 101 for the default values of each template. If a UUCP service will be used to dial in to your modem on a Solaris 2.x system, see “How to Configure a Modem for Use With UUCP” on page 106 for the rest of the procedure.

- 5. Change values of template entries if desired.**
- 6. Click on OK to configure the port.**

## ▼ How to Configure a Modem for Use With UUCP

UUCP sends information using seven bits and even parity. Solaris software modem configurations use eight bits and no parity for internationalization purposes. To set up your modem service to work with UUCP, follow these instructions.

- 1. Start Serial Port Manager from the Solstice Launcher, if not done already.**  
See the procedure on page 103 for information about starting Serial Port Manager.
- 2. From the Serial Port Manager main window, select the port or ports that will be used with a modem.**
- 3. Choose Modify Service from the Edit menu.**  
The Modify Service window appears in the Basic Detail mode. (For additional details, select either the More or Expert Detail modes.)
- 4. Choose the modem configuration from the Template menu that meets or most closely matches your modem service.**
- 5. Select Other from the Baud Rate menu.**
- 6. Enter a baud rate value from the `/etc/ttydefs` file that provides seven bit, even parity service and click on OK.**  
  
In this example, the 9600E baud rate was selected. This provides a service with a 9600 baud rate, seven bits, and even parity.
- 7. Change values of other template entries if desired.**
- 8. Click on OK to configure the port.**

---

### ▼ How to Initialize a Port Without Configuring

1. **Start Serial Port Manager from the Solstice Launcher , if not done already.**  
See the procedure on page 103 for information about starting Serial Port Manager.
2. **Choose Modify from the Edit menu.**  
The Modify window appears in the Basic Detail mode. See Table 8-3 on page 102 for default values of the Basic, More, or Export Detail modes.
3. **Choose Initialize Only – No Connection from the Template menu.**
4. **Click on OK to initialize the port.**

### ▼ How to Disable a Port

1. **Start Serial Port Manager from the Solstice Launcher, if not done already.**  
See “How to Start Serial Port Manager” on page 103 for information about starting Serial Port Manager.
2. **Select the port or ports that you want to disable from the Serial Port Manager main window.**
3. **Choose Modify from the Edit menu.**
4. **Select the Service Enable item in the Modify window to disable the port.**  
The other items in the Modify window will turn gray when the port service is disabled.
5. **Click on OK to disable the port.**

▼ **How to Delete a Port Service**

- 1. Start Serial Port Manager from the Solstice Launcher, if not done already.**  
See the procedure on page 103 for information about starting Serial Port Manager.
- 2. Select the port or ports with a service you want to delete from the Serial Port Manager main window.**
- 3. Choose Delete from the Edit menu. A window is displayed asking you to confirm that the service should be deleted.**
- 4. Click on OK when you are ready to delete the service.**



# Setting Up SunSoft Print Client Software With Printer Manager

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This chapter provides the procedures for setting up and managing the SunSoft print client software by using the Printer Manager application, a graphical user interface within the Solstice AdminSuite software.

This is a list of the step-by-step instructions in this chapter.

|   |                 |
|---|-----------------|
| <i>How to Start Printer Manager</i>                                     | <i>page 111</i> |
| <i>How to Install a Printer</i>   | <i>page 113</i> |
| <i>How to Add Access to a Printer</i>                                   | <i>page 116</i> |
| <i>How to Modify Printer Information</i>                                | <i>page 119</i> |
| <i>How to Delete Access to a Printer</i>                                | <i>page 122</i> |
| <i>How to Delete a Printer From a Print Server (If No Name Service)</i> | <i>page 123</i> |
| <i>How to Find a Printer Entry</i>                                      | <i>page 124</i> |

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**Note** – The Printer Manager tasks are only part of what you need to know to effectively set up and manage the SunSoft print client software. The *Solstice AdminSuite 2.1 Print Administration Guide* provides an overview that helps you understand the SunSoft print process. It also contains task information about converting the configuration information for existing printers and copying the information to SunSoft print clients.

---

For high-level information on print administration, see Chapter 16, “Printer Manager Reference.” For step-by-step instructions on administering printing, see the *System Administration Guide, Volume II*.

You can set up printing by using LP print service commands instead of Printer Manager. For detailed examples, see the *System Administration Guide, Volume II*.

## Setting Up and Managing SunSoft Print Client Software

Table 9-1 gives you an overview of the tasks for using Printer Manager to set up and manage printing services with the SunSoft print client software.

Table 9-1 Task Map: Setting Up and Managing SunSoft Print Client Software

| Activity  | Description   | For Instructions, Go To                             |
|---|---|---|
| <p><b>Install a Printer on a Print Server</b></p>       | <p><b>Install a Printer</b><br/>Install a printer on the system to which it is attached. This procedure tells the system about the printer so the system can act as a print server. If you use a name service, this task also makes the printer available to all SunSoft print clients.</p> | <p>▼ How to Install a Printer page 113</p>          |
| <p><b>Give Print Clients Access to a Printer</b></p>    | <p><b>Add Access to a Printer</b><br/>Give SunSoft print clients access to a printer that is installed on a print server.</p>   | <p>▼ How to Add Access to a Printer page 116</p>    |
| <p><b>Modify Existing Information for a Printer</b></p> | <p><b>Modify Printer Information</b><br/>Modify the current configuration information for a printer.</p>  | <p>▼ How to Modify Printer Information page 119</p> |

*Table 9-1* Task Map: Setting Up and Managing SunSoft Print Client Software  
(Continued)

|   |   |  |          |
|---|---|--|----------|
| <b>Delete Access to a Printer</b>                 | <p><b>Delete Access to a Printer</b><br/>Delete access to a printer from the NIS or NIS+ master file or from each specified print client's <code>/etc/printers.conf</code> file if you do not use a name service.</p> | ▼ How to Delete Access to a Printer                                | page 122 |
|   | <p><b>Delete a Printer From a Print Server</b><br/>Delete a printer from the print server's <code>/etc/printers.conf</code> file. This step applies only if you are not using a name service.</p>                     | ▼ How to Delete a Printer From a Print Server (If No Name Service) | page 123 |
| <b>Find a Printer Entry in the Scrolling List</b> | <p><b>Find a Printer Entry</b><br/>Find the entry for a printer in the scrolling list of printers in the Printer Manager main window.</p>   | ▼ How to Find a Printer Entry                                      | page 124 |

## Starting Printer Manager

You use Printer Manager to complete all the tasks necessary to set up and maintain the SunSoft print client software, so the first thing to do is start the Printer Manager application with Solstice AdminSuite.

### ▼ How to Start Printer Manager

**1. Verify that the following prerequisites are met. To use the Solstice AdminSuite software, you must have:**

- A bit-mapped display monitor. The Solstice AdminSuite software can be used only on a system with a console that is a bit-mapped screen such as a standard display monitor that comes with a Sun workstation.  
If you want to perform administration tasks on a system with an ASCII terminal as the console, use Solaris commands instead.
- OpenWindows software. Start this software with the following command:

```
$ /usr/openwin/bin/openwin
```

- Membership in the `sysadmin` group (Group 14).

- The required access privileges for managing the NIS or NIS+ database. If your name service is NIS+, you must be a member of the NIS+ admin group.
- Federated Naming Service (FNS) software.
- If your name service is NIS+, you must initialize the NIS+ namespace to use FNS by entering the following command:

```
$ fcreate -t org org//
```

This command creates the organization context and default subcontexts for an existing NIS+ domain. It also creates NIS+ tables and directories in the NIS+ hierarchy.

**2. Log in as yourself.**

You should use the Solstice AdminSuite software as a regular user who has membership in the sysadmin group rather than as root.

**3. Start the Solstice Launcher.**

```
$ solstice &
```

The Solstice Launcher window is displayed.

**4. Click on the Printer Manager icon to start the application.**



**Printer Manager**

The Load window is displayed as an overlay on the Printer Manager main window.

**5. Select the name service used in your network.**

Choices are: NIS+, NIS, or None.

**6. Check that the domain or host name is correct.**

If not, type the name of the domain or host name you need to access.

**7. Click on OK.**

The Printer Manager main window is displayed by itself after you click on OK.

## *Installing a Printer*

When you use Printer Manager to install a printer on a system, you define the characteristics of the printer and identify the users who are permitted to access it. The system on which you install the printer becomes the *print server*.

Installing a printer means something different depending on whether you use a name service.

| <b>If You ...</b>        | <b>Then Printer Manager ...</b>   |
|--------------------------|---|
| Use a name service       | Adds the printer in the NIS or NIS+ master file, and the printer is available to all SunSoft print clients.       |
| Don't use a name service | Adds the printer in the print server's configuration files only, and print clients do not know about the printer. |

### ▼ How to Install a Printer

**1. Connect the printer to a system and turn on the power to the printer.**

Consult the printer vendor's installation documentation for information about the hardware switches and cabling requirements.

**2. Start Printer Manager.**

When you log in:

- If your name service is NIS or NIS+, you can log in on any system on the network because you'll be able to specify the system on which you are installing the printer.
- If you are not using a name service, you can log in on any system on the network and change the host name in the Load window to the name of the system to which you attached the printer.

For detailed information about starting Printer Manager, see the procedure on page 111.

**3. Select Install Printer from the Edit menu.**

The Install Printer window is displayed.

**4. Fill in the window.**

If you need information to complete a field, click on the Help button to see field definitions for this window.

**5. Click on OK.**

If you are using NIS or NIS+, the printer is entered in the name service master file and all SunSoft print clients have access to it. The printer is also entered in the print server's `/etc/printers.conf` file and `/etc/lp` directory.

If you are not using a name service, the printer is entered in the print server's `/etc/printers.conf` file and `/etc/lp` directory.

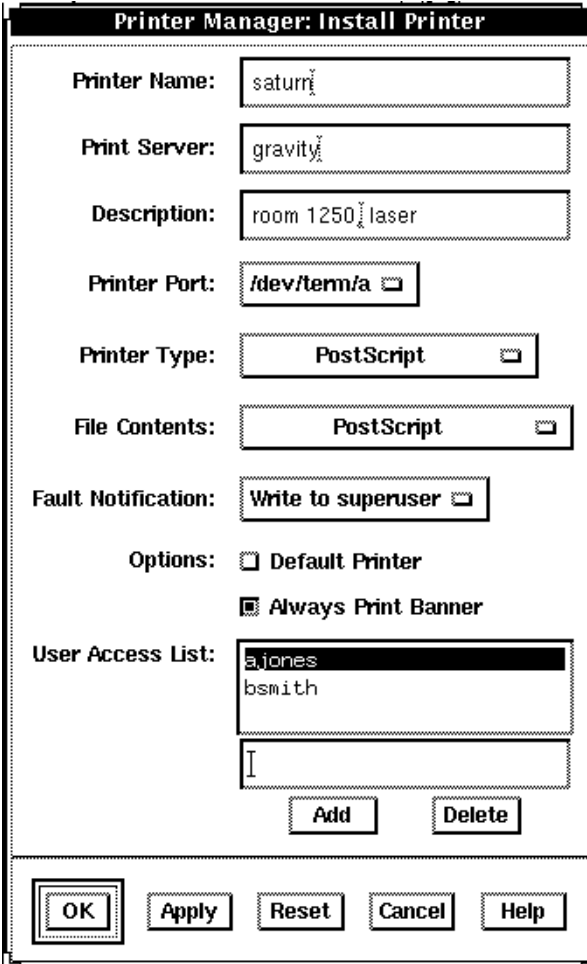
***Verification***

Verify that the printer has been installed by checking for the new printer entry in the Printer Manager main window.

### *Example of a Completed Install Printer Window*

This example shows the Install Printer window when Printer Manager was loaded with a name service. If you use a name service, you can specify any system on the network as the print server in this window.

If you are not using a name service, the Print Server field displays the host name you specified in the Load window, and you cannot change the name of the print server in this window.



**Printer Manager: Install Printer**

Printer Name: saturn

Print Server: gravity

Description: room 1250 laser

Printer Port: /dev/term/a

Printer Type: PostScript

File Contents: PostScript

Fault Notification: Write to superuser

Options:  Default Printer  
 Always Print Banner

User Access List: ajones  
bsmith

Add Delete

OK Apply Reset Cancel Help

---

## Adding Access to a Printer

When you give a system access to a printer that is attached to a print server, that system becomes a *print client*. You may not need to add access for SunSoft print clients depending on whether you installed the printer through Printer Manager and whether you use a name service.

---

| <b>If You Installed the Printer Through ...</b>   | <b>Then ...</b>  |
|---|--|
| Printer Manager and you have a name service       | The printer is already available to all SunSoft print clients. You don't need to add access to the printer.  |
| Printer Manager and you don't have a name service | You need to add access to the printer for SunSoft print clients.   |
| UNIX commands and you have a name service         | Unless you converted information for this printer from a SunOS 5.x or 4.x system and loaded NIS or NIS+, the printer is not listed in the name service. You need to add access to the printer so it will be entered in the name service and made available to all SunSoft print clients. |
| UNIX commands and you don't have a name service   | Unless you converted information for this printer from a SunOS 5.x or 4.x system and copied the master <code>/etc/printers.conf</code> file to print clients, you need to add access for SunSoft print clients. (If a print client had access previously, that access has been erased.)  |

---

### ▼ How to Add Access to a Printer

#### 1. Start Printer Manager.

You can add access to a printer from any system on the network.

- If you use a name service, you don't need to specify print clients. You add access to the printer for all SunSoft print clients on the network.
- If you don't use a name service, you will be able to specify the print clients to be given printer access.

For detailed information about starting Printer Manager, see the procedure on page 111.



---

**2. Select Add Access to Printer from the Edit menu.**

The Add Access to Printer window is displayed.

**3. Fill in the window.**

If you need information to complete a field, click on the Help button to see field definitions for this window.

**4. Click on OK.**

If your name service is NIS or NIS+, the printer is entered in the name service master file and all SunSoft print clients have access to it.

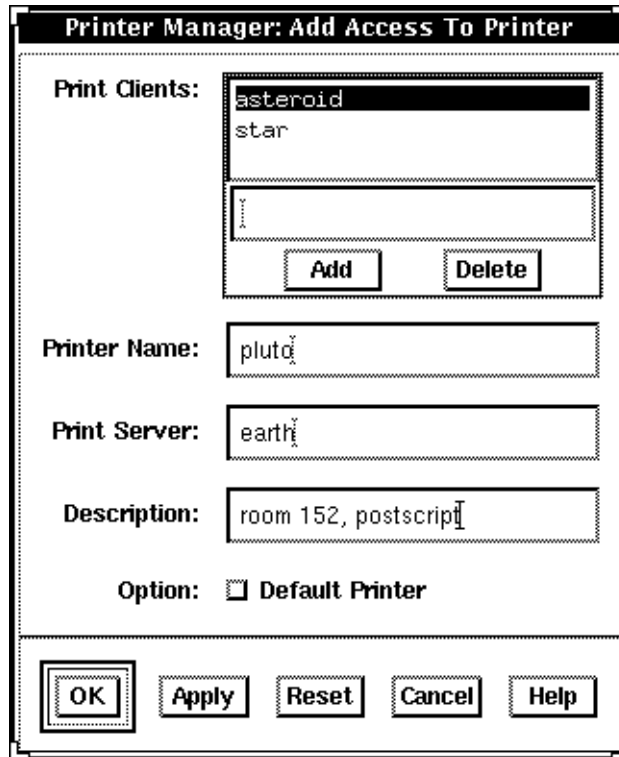
If your name service is None, the printer is entered in the `/etc/printers.conf` file of each print client you specified.

***Verification***

Verify that the access has been added by submitting a print request from the print client and checking the printer for output.

### *Example of a Completed Add Access to Printer Window*

In this example, the network does not use a name service, so the window contains the Print Clients field. This field enables you to specify the print clients to be given access to the specified printer. If the name service is NIS or NIS+, the window does not contain the Print Clients field.



---

## *Modifying Printer Information*

After you've installed a printer through Printer Manager, you can modify some of the information originally entered. You can also set two additional options that control the printer's ability to accept and process print requests.

The Modify window of Printer Manager has two versions. On the short version, you can change only the printer description and whether the printer is set up as the default printer. You'll see the short window if:

- You don't use a name service and the printer is not local to the print server.
- You are not a member of the sysadmin group (Group 14), regardless of your name service selection.
- The print server does not have the Solstice AdminSuite software.

Otherwise, you'll get the long version of the window, where you can change more information and set the options for accepting and processing print requests.

---

**Note** – You can't change certain printer information even on the long version of the window. If you need to change the printer name, print server, or printer type, you'll have to delete the printer and reinstall it. For these procedures, see "Deleting Access to a Printer" on page 122 and "Installing a Printer" on page 113.

---

### ▼ How to Modify Printer Information

#### **1. Start Printer Manager.**

You can log in on any system on the network. For detailed information about starting Printer Manager, see the procedure on page 111.

#### **2. Select the printer that you want to modify from the scrolling list in the Printer Manager main window.**

#### **3. Select Modify from the Edit menu or double-click on the printer in the scrolling list.**

The short version or the long version of the Modify window is displayed.

**4. Fill in the window.**

If you need information to complete a field, click on the Help button to see field definitions for this window.

**5. Click on OK.**

*Verification*

Verify that the printer information has been changed by reloading Printer Manager and checking for your changes, as follows:

**1. Select Load from the File menu.**

The Load window is displayed.

**2. Leave the settings as they are, and click on OK.**

The Printer Manager main window is displayed.

**3. Select the printer you just modified from the scrolling list in the Printer Manager main window.**

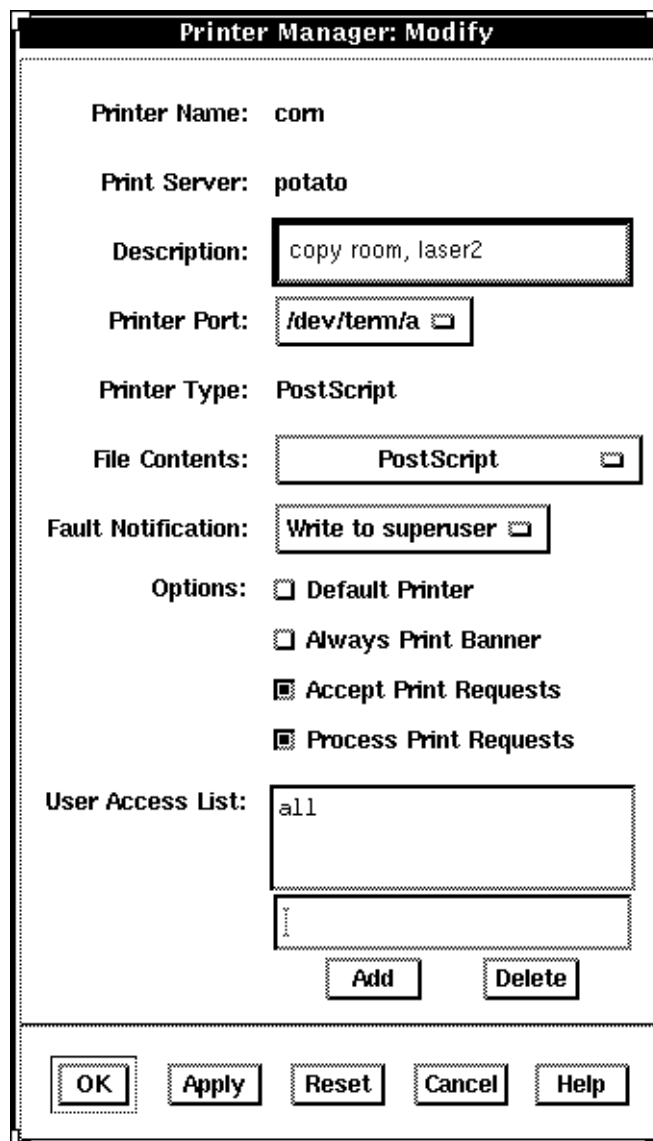
**4. Select Modify from the Edit menu.**

The Modify window is displayed.

**5. Check to see if your changes to the printer information are displayed.**

### Example of a Completed Modify Window

This example shows the long version of the Modify window. The short version contains only four fields—it displays the printer name and print server, and enables you to change the printer description and default printer selection.



**Printer Manager: Modify**

**Printer Name:** com

**Print Server:** potato

**Description:** copy room, laser2

**Printer Port:** /dev/tem/a

**Printer Type:** PostScript

**File Contents:** PostScript

**Fault Notification:** Write to superuser

**Options:**

- Default Printer
- Always Print Banner
- Accept Print Requests
- Process Print Requests

**User Access List:** all

Add Delete

OK Apply Reset Cancel Help

## *Deleting Access to a Printer*

The only way to change the name, print server, or printer type originally assigned to a printer is to delete the printer and reinstall it using new information.

If you need to move, replace, or reinstall a printer with new information, you should first make sure that all the print requests in the printer's queue are printed or moved to another printer. You must also delete print clients' access to the printer and delete the printer from the print server before you physically detach the printer from the print server.

If your name service is NIS or NIS+, you delete access to a printer and delete the printer from the print server at the same time.

If you are not using a name service, you must first delete access to a printer for each print client and then delete the printer from the print server as a separate task.

### ▼ How to Delete Access to a Printer

#### **1. Start Printer Manager.**

You can log in on any system on the network to delete access to a printer.

- If your name service is NIS or NIS+, you won't need to specify print clients. You delete access to the printer for all SunSoft print clients on the network and delete the printer from the print server at the same time.
- If you are not using a name service, you can log in on any system on the network and change the host name to the name of the print client for which you want to delete printer access.

For detailed information about starting Printer Manager, see the procedure on page 111.

#### **2. Select the printer for which you want to delete access from the scrolling list in the Printer Manager main window.**

#### **3. Select Delete from the Edit menu.**

The Warning window is displayed. It contains a prompt asking you to verify that you really want to delete the printer.

#### 4. Click on OK.

If your name service is NIS or NIS+, the printer is deleted from the name service master file and access is removed for all print clients. The printer is also deleted from the print server's `/etc/printers.conf` file and `/etc/lp` directory.

If you are not using a name service, the printer is deleted only from this print client's `/etc/printers.conf` file. You must repeat steps 1 through 4 to delete access to the printer for other SunSoft print clients.

#### *Verification*

If your name service is NIS or NIS+, verify that the printer has been deleted from the name service by making sure that the printer is not listed in the Printer Manager main window.

If you are not using a name service, verify that the print client's access has been deleted by making sure that the printer is not listed in the Printer Manager main window.

### ▼ How to Delete a Printer From a Print Server (If No Name Service)

#### 1. Start Printer Manager.

You can log in on any system on the network to delete a printer from a print server. Select None as the name service and change the host name to the name of the print server.

For detailed information about starting Printer Manager, see the procedure on page 111.

#### 2. Select the printer to be deleted from the scrolling list in the Printer Manager main window.

#### 3. Select Delete from the Edit menu.

The Warning window is displayed. It contains a prompt asking you to verify that you really want to delete the printer.

#### 4. Click on OK.

The printer is deleted from the print server's `/etc/printers.conf` file and `/etc/lp` directory.

#### *Verification*

Verify that the printer has been deleted from the print server by making sure that the printer is not listed in the Printer Manager main window.

## *Finding a Printer Entry*

If your site has many printers, you'll have a long list of printer entries in the Printer Manager main window. The Find window helps you search for a specific printer quickly and accurately.

### ▼ How to Find a Printer Entry

#### 1. Start Printer Manager.

You can log in on any system on the network. For detailed information about starting Printer Manager, see "How to Start Printer Manager" on page 111.

#### 2. Select Find from the View menu.

The Find window is displayed.

#### 3. Type the complete printer name if you know it. Otherwise, type a partial printer name and use asterisks as wildcard characters.

For example, you might type `sat*` if you're not sure whether the printer name is `satellite` or `saturn`.

#### 4. Click on OK.

If you typed a complete printer name, the entry for that printer is highlighted.

If you typed a partial printer name with a wildcard, the first printer entry that matches your search string is highlighted. Using the above example where you typed `sat*`, the `satellite` entry would be highlighted.

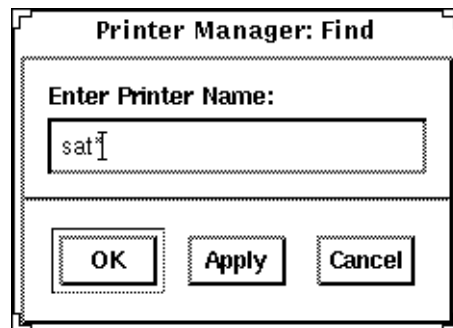


5. (Optional) If you typed a partial printer name with a wildcard, click the **Apply** button to find the next printer entry that matches your search string.

### *Verification*

Verify that you have found the correct printer by checking the information in the highlighted entry in the Printer Manager main window.

### *Example of a Completed Find Window*



### *Where to Go From Here*

After you have set up the systems at your site to use the SunSoft print client software, users may also want to set up their `~/.printers` home directory to contain custom printer aliases.

For step-by-step instructions on these tasks, see the *Solstice AdminSuite 2.1 Print Administration Guide* in the *Solstice AdminSuite AnswerBook*.



## *Part 3 — Solstice AdminSuite 2.1 Reference*

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This part provides reference information on the Solstice Launcher and the individual Solstice AdminSuite applications. This part contains these chapters.

**10**

### **General Solstice AdminSuite Tool Reference**

Provides reference information on items that appear in all Solstice AdminSuite applications.

**11**

### **Group Manager Reference**

Provides reference information on the Group Manager application.

**12**

### **User Manager Reference**

Provides reference information on the User Account Manager application.

**13**

### **Host Manager Reference**

Provides reference information on the Host Manager application.

**14**

### **Database Manager Reference**

Provides reference information on the Database Manager application.

**15**

### **Serial Port Manager Reference**

Provides reference information on the Serial Port Manager application.

**16**

### **Printer Manager Reference**

Provides reference information on the Printer Manager application.



# *General Solstice AdminSuite Tool Reference*

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**10** 

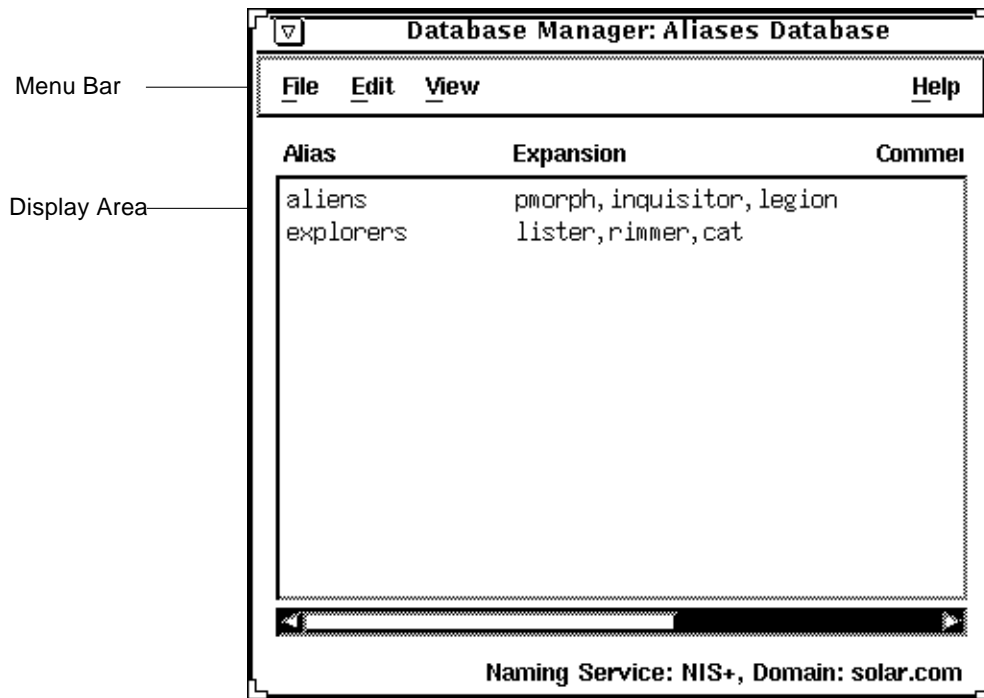
This chapter contains reference information for items found in all tools within the Solstice AdminSuite software.

This is a list of the reference information in this chapter.

|                             |                 |
|-----------------------------|-----------------|
| <i>Main Windows</i>         | <i>page 130</i> |
| <i>Filtering Entries</i>    | <i>page 131</i> |
| <i>Typing in Text Boxes</i> | <i>page 132</i> |
| <i>Buttons</i>              | <i>page 132</i> |

## Main Windows

Each application has a main (or base) window that looks similar to the Database Manager main window.



The main window contains two areas: a menu bar and a display area. The menu bar usually contains four menus: File, Edit, View, and Help.

## Filtering Entries

Each of the administration applications (except Host Manager, Serial Port Manager, and Printer Manager) provides a means of filtering entries if you do not want to see all of the entries in a system file. You can specify a filter by clicking on the Filter menu. For example:

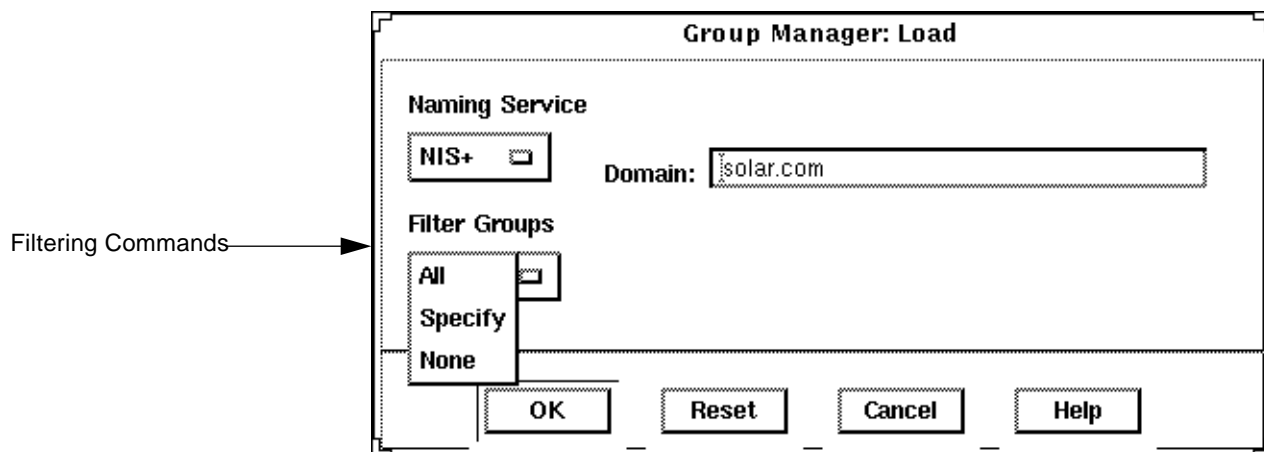


Table 10-1 describes the different filtering commands.

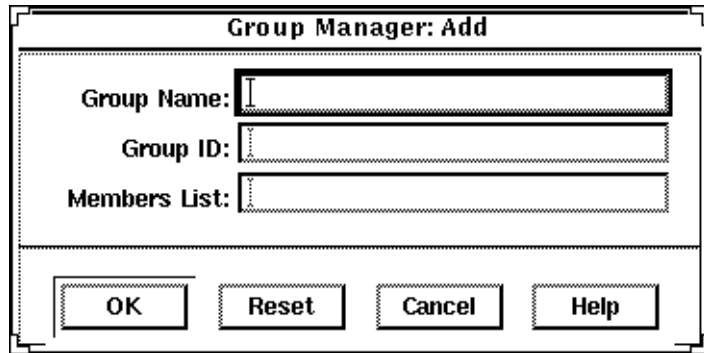
Table 10-1 Filtering Commands

| Use This Command ... | To ...  |
|----------------------|---|
| All                  | Display all file entries. This is the default setting.  |
| Specify              | Specify a text string that displayed file entries must match. Specifying wildcards is acceptable. This option is helpful if you want to focus on a small number of entries. |
| None                 | Turn off file entry display. This is helpful if you only want to add new entries and have no interest in viewing existing entries.  |

After you have selected a name service and a method for filtering entries that are displayed, click on OK. The tool's main window is displayed.

## Typing in Text Boxes

The Add window from Group Manager illustrates the text boxes used for typing text in a tool window.



**Caution** - Do *not* press Return when finished typing in a text box. Pressing Return is the same as clicking on OK and may result in an incomplete entry. Use the mouse pointer or the Tab key to select a new text box.

## Buttons

The Add window shown also illustrates some of the buttons used in the application windows. Table 10-2 describes when to use each button.

Table 10-2 Solstice AdminSuite Buttons

| This Button ... | Is Used To ...   |
|-----------------|--|
| OK              | Complete a task so that it can be processed. The window is closed after the task is completed. |
| Apply           | Complete a task but leave the window open. (Not available on all windows.)                     |
| Reset           | Erase any text entered in a field and revert to original contents.                             |
| Cancel          | Cancel the task and close the window.  |
| Help            | Access the help system.  |



## *Group Manager Reference*

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**11** 

This chapter provides reference information for Group Manager, a graphical interface used to manage groups.



**Group Manager**

This is a list of the reference information in this chapter.

|  |                 |
|--|-----------------|
| <i>Using Group Manager</i>             | <i>page 134</i> |
| <i>Files Modified by Group Manager</i> | <i>page 137</i> |

## *Using Group Manager*

### *When to Use Group Manager*

Group Manager can be used to display, add, modify, and delete groups in the NIS or NIS+ name service environment or on a local or remote system (/etc files).

### *Requirements for Using Group Manager*

The requirements for using Group Manager are:

- A bit-mapped display monitor
- Ability to use the OpenWindows environment
- Required access privileges as described in Chapter 1, "Introduction"

### *Where to Find Specific Task Information*

Table 11-1 contains references for Group Manager tasks.

*Table 11-1* Group Manager Task References

| <b>Task</b>                       | <b>Location</b> |
|-----------------------------------|-----------------|
| <i>How to Start Group Manager</i> | <i>page 39</i>  |
| <i>How to Add a Group</i>         | <i>page 41</i>  |
| <i>How to Modify a Group</i>      | <i>page 49</i>  |
| <i>How to Delete a Group</i>      | <i>page 50</i>  |

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## *Window, Menu, and Command Descriptions*

The following section describes Group Manager's windows, menus, and commands.

### *Group Manager Main Window*

The Group Manager main window is displayed after you click on the Group Manager icon on the Solstice Launcher. The main window contains the File, Edit, View and Help menus. The existing group entries are displayed.

### *Group Manager File Menu*

The File Menu enables you to load group entries and exit Group Manager.

#### *Load Window*

When you start Group Manager or select Load from the File menu, the Load window is displayed. This window is used to select:

- The appropriate name service for your environment. See Chapter 2, "Using Solstice AdminSuite in a Name Service Environment," for information on selecting a name service.
- The amount of group information to be displayed in the Group Manager main window.

After you have selected a name service and a method for filtering the group entries that are displayed, click on OK. The group information is loaded and the Group Manager main window is displayed.

#### *Exit Command*

The Exit command enables you to exit Group Manager.

## *Group Manager Edit Menu*

The Edit Menu enables you to add, modify, and delete groups.

### *Add Window*

The Add window enables you to create a new group. Enter the new group name, the new group ID, and a list of group members in the text boxes displayed.

### *Modify Window*

The Modify window enables you to change the group's name or the users in the group. You cannot change the group ID.

### *Delete Window*

The Delete window enables you to delete a group.

## *Group Manager View Menu*

The View menu enables you to find and sort group entries.

### *Find Window*

The Find window enables you to search for a group entry. This feature is useful when searching for a particular group in a large list of group entries, which is usually the case in a large NIS or NIS+ environment.

You can search by group name, and you can use wildcards to match text strings. The specified group entry is highlighted in the main window, if found.

### *Sort By Command*

The Sort By command enables you to sort the list of groups by group name, group ID, or members list. The default display is sorted by group name.

### *Rebuild List Command*

The Rebuild List command enables you to reload all current group entries in the selected name service.

### *Group Manager Help Menu*

The Help menu enables you to access the online help that describes Group Manager functions and requirements. See “Using Admin Help” on page 6 for more information.

## *Files Modified by Group Manager*

Table 11-2 lists the files Group Manager modifies depending on what name service you selected.

*Table 11-2* Files Modified by Group Manager

| <b>If the Name Service You Selected Is ...</b> | <b>Then Group Manager Modifies The ...</b> |
|--|--|
| NIS or NIS+                                    | Name service's group file                  |
| None   | /etc/group file                            |



## *User Manager Reference*

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12 

This chapter provides reference information for User Manager, a graphical interface used to manage user accounts.



**User Manager**

This is a list of the reference information in this chapter.

|   |                 |
|---|-----------------|
| <i>Using User Manager</i>                     | <i>page 140</i> |
| <i>Window, Menu, and Command Descriptions</i> | <i>page 141</i> |
| <i>Files Modified by User Manager</i>         | <i>page 144</i> |

## Using User Manager

### When to Use User Manager

User Manager can be used to perform the following tasks:

- Add, modify, and delete user account entries in the NIS or NIS+ name service environment or on a local or remote system (/etc files)
- Copy user account information to facilitate the creation of user accounts with similar characteristics
- Modify user account information such as adding password aging features

### Requirements for Using User Manager

The requirements for using User Manager are:

- A bit-mapped display monitor
- Ability to use the OpenWindows environment
- Required access privileges as described in Chapter 1, "Introduction."

### Where to Find Specific Task Information

Table 12-1 contains references for User Manager tasks.

Table 12-1 User Account Task References

| <b>Task</b>                                 | <b>Location</b> |
|---|-----------------|
| <i>How to Start User Manager</i>            | <i>page 42</i>  |
| <i>How to Set Up User Account Defaults</i>  | <i>page 44</i>  |
| <i>How to Add a New User Account</i>        | <i>page 45</i>  |
| <i>How to Copy an Existing User Account</i> | <i>page 47</i>  |
| <i>How to Modify a User Account</i>         | <i>page 51</i>  |
| <i>How to Delete a User Account</i>         | <i>page 53</i>  |



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## *Window, Menu, and Command Descriptions*

### *User Manager Main Window*

The User Manager main window is displayed after you click the User Manager icon on the Solstice Launcher and select a name service. The main window contains the File, Edit, View and Help menus. The existing user account entries are also displayed.

### *User Manager File Menu*

The File menu enables you to load user account entries and exit User Manager.

#### *Load Window*

When you start User Manager or choose Load from the File menu, the Load window is displayed. This window is used to select:

- The appropriate name service for your environment. See Chapter 2, “Using Solstice AdminSuite in a Name Service Environment” for information on selecting a name service.
- The amount of user information to be displayed in the User Manager main window.

After you have selected a name service and a method for filtering the user entries that are displayed, click on OK. The user account information is loaded and the User Manager main window is displayed.

#### *Exit Command*

The Exit command enables you to exit User Manager.

### *User Manager Edit Menu*

The Edit Menu enables you to add, copy, modify, and delete user accounts. It also provides a command to set defaults for adding user accounts.

### *Add Window*

The Add window enables you to add a user account. The password aging features in the Account Security section on the Add window will not appear if you are adding the user to the NIS password database.

### *Modify Window*

The Modify window enables you to modify selected user account information such as the account security features. The Modify window cannot be used to change the user ID. Instead, select Delete from the Edit menu to delete the user account, and then re-add the user account with the new user ID.

### *Copy Window*

The Copy window enables you to create a user account by copying selected information from an existing user account. This feature is useful when you need to create several similar user accounts.

The display information is copied from the existing user account. These values may require editing for the new account. The user name, user ID, and password are not copied because they should be unique.

### *Set Defaults Window*

The Set Defaults window enables you to modify the default values in the Add window. This can increase the consistency and efficiency of adding new user accounts.

### *Delete Window*

The Delete window enables you to delete an existing user account. Clicking on the Delete home directory and Delete mailbox buttons removes the user's home directory and mailbox contents. User Manager does not remove files belonging to the user that are stored in other locations.

---

## *User Manager View Menu*

The View Menu enables you to find and sort user account entries.

### *Find Window*

The Find window enables you to search for a user account entry. This feature is useful when searching for a particular user account in a large list of user account entries, which is usually the case in a large NIS or NIS+ environment.

You can search by user name, user ID, or comment, but not by combinations of the items. You can use wildcards to match text strings. The specified user account entry is highlighted in the main window, if found.

### *Sort By Command*

The Sort By command enables you to sort the user account entries by user name, user ID, or comment. The default display is sorted by user name.

### *Rebuild List Command*

The Rebuild List command enables you to reload all current user account entries in the selected name service.

## *User Manager Help Menu*

The Help menu enables you to access the online help that describes User Manager functions and requirements. See “Using Admin Help” on page 6 for more information.

## *Files Modified by User Manager*

Table 12-2 describes the system files that are modified by User Manager.

*Table 12-2* Files Modified by User Manager

| <b>System File</b> | <b>Description</b>  |
|--------------------|---|
| auto_home          | An indirect automounter map containing entries that enable client systems to mount their home directories automatically |
| group              | A file containing UNIX group entries recognized on the local system or in a name service                                |
| passwd             | A file containing user account entries such as user name, user ID, group ID, and home directory                         |
| shadow             | A file containing user password entries in encrypted form and password aging information                                |
| /var/mail/\$USER   | A file used to store the user's e-mail  |
| /etc/aliases       | A file used to store mail addresses for the user  |
| cred.org_dir       | A NIS+ table used to store the user's DES and LOCAL credentials   |

## *Host Manager Reference*

---

13 

This chapter provides reference information for Host Manager, a graphical interface used to manage server and client support.



**Host Manager**

This is a list of the reference information in this chapter.

|   |                 |
|---|-----------------|
| <i>Using Host Manager</i>                     | <i>page 146</i> |
| <i>Window, Menu, and Command Descriptions</i> | <i>page 147</i> |
| <i>Files Modified by Host Manager</i>         | <i>page 151</i> |

## Using Host Manager

### When to Use Host Manager

Host Manager can be used to perform the following tasks:

- Add, modify, and delete support for hosts in the NIS or NIS+ name service environment or on a local or remote system
- Provide support for standalone, diskless, dataless, and OS Server system types
- Add client services for diskless and dataless systems
- Add remote installation support for standalone, dataless, and OS Server system types
- Update unknown system types and convert generic system types to standalone systems or OS servers

### Requirements for Using Host Manager

The requirements for using Host Manager are:

- A bit-mapped display monitor
- Ability to use the OpenWindows environment
- Required access privileges as described in Chapter 1, “Introduction”

### Where to Find Specific Task Information

Table 13-1 contains references for Host Manager tasks.

Table 13-1 Host Manager Task References

| <b>Task</b>  | <b>Location</b> |
|--|-----------------|
| <i>How to Start Host Manager</i>                               | <i>page 66</i>  |
| <i>How to Add Support for a Standalone System or OS Server</i> | <i>page 69</i>  |
| <i>How to Add Support for a Diskless Client</i>                | <i>page 82</i>  |
| <i>How to Add Support for a Dataless Client</i>                | <i>page 85</i>  |

*Table 13-1 Host Manager Task References (Continued)*

| <b>Task</b>   | <b>Location</b> |
|---|-----------------|
| <i>How to Add Solaris 2.x OS Services to an OS Server</i> | <i>page 80</i>  |
| <i>How to Convert a Standalone System to an OS Server</i> | <i>page 72</i>  |
| <i>How to Delete Support for a System</i>                 | <i>page 89</i>  |

## *Window, Menu, and Command Descriptions*

### *Host Manager Main Window*

The Host Manager main window is displayed after you click the Host Manager icon on the Solstice Launcher and select a name service. The main window contains the File, Edit, View and Help menus. The existing host entries are also displayed.

### *Host Manager File Menu*

The File Menu enables you to load host entries and exit Host Manager. It also enables you to save changes and update system types.

### *Load Window*

When you start Host Manager or select Load command from the File menu, the Load window is displayed. This window is used to select the appropriate name service for your environment. See Chapter 2, "Using Solstice AdminSuite in a Name Service Environment," for information on selecting a name service.

After you have selected a name service, click on OK. The host information is loaded and the Host Manager main window is displayed.

### *Save Changes Command*

The Save Changes command applies the pending host information changes shown at the bottom of the main window.

### *Update System Types Command*

The Update System Types command converts unknown system types to known system types.

---

**Note** – This needs to be done on existing systems that have not been added by the Solstice AdminSuite Host Manager.

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### *Exit Command*

The Exit command enables you to exit Host Manager.

## *Host Manager Edit Menu*

The Edit Menu enables you to add, copy, modify, and delete support for a host.

### *Add Window*

The Add window enables you to add support for a host. You will see different fields depending on which system type (standalone, diskless, dataless, OS Server) you select.

The following windows will display if you select Other from one of the server menus in the Add window.

- Specify File Server Window
- Specify Install Server Window
- Specify Profile Server Window

These windows enable you to specify a different server.

### *Modify Window*

The Modify window enables you to change support for an existing host.

### *Convert Command*

The Convert command enables you to convert generic systems to standalone systems or OS servers.



### *Revert Command*

The Revert command cancels the pending changes for one or more selected host entries and reverts them to their last saved values.

### *Select All Command*

The Select All command selects all the host entries in the main window for batch updates.

### *Set Defaults Window*

The Set Defaults window enables you to modify the default values in the Add window. This can increase the consistency and efficiency of adding support for new hosts.

### *Delete Window*

The Delete window enables you to delete a host entry. A window is displayed asking you to confirm the deletion.

## *Host Manager View Menu*

The View Menu enables you to display only the hosts entries you want to see in the main window. It also enables you to find, filter, sort, and customize host entries.

### *Show Command*

The Show command enables you to display only the host entries that you have changed, only the host entries based on the current filter you have set, or all host entries. Host Manager displays all host entries by default.

### *Find Window*

The Find window enables you to search for a host entry. This feature is useful when searching for a particular host in a large list of host entries, which is usually the case in a large NIS or NIS+ environment.

You can search by host name, and you can use wildcards to match text strings. The first entry that matches the text string is highlighted in the main window, if found.

### *Set Filter Window*

The Set Filter window enables you to filter host entries based on host name, type, IP address, etc. This means that only the host entries that match the filter are displayed in the main display area.

You can use the Show command to turn off the filter and display all host entries.

### *Sort By Command*

The Sort By command enables you to sort host entries by name, type, or IP address.

### *Customize Window*

The Customize window enables you to choose the type of host information you want to display for the host entries in the main window. For example, you can choose to display or not to display IP addresses for the host entries.

### *Errors Command*

The Errors command enables you to view any error messages that were displayed during a Save Changes operation.

## *Host Manager Help Menu*

The Help menu enables you to access the online help that describes Host Manager functions and requirements. See “Using Admin Help” on page 6 for more information.

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## *Files Modified by Host Manager*

This table describes the system files modified by Host Manager.

| <b>System File</b>  | <b>Description</b>  |
|---|---|
| <code>bootparams</code>                                   | A file listing the file server that provides the client's root and swap areas                                     |
| <code>/etc/dfs/dfstab</code>                              | A file containing a series of <code>share</code> commands that make file resources available to the client system |
| <code>ethers</code>                                       | A file containing the client's Ethernet address   |
| <code>hosts</code>  | A file containing the client's host name and associated IP address  |
| <code>timezone</code>                                     | A file containing the client's time zone  |
| <code>/export/root/<br/><i>hostname</i>/etc/vfstab</code> | A file containing the client's file system entries to mount at boot time  |
| <code>/tftpboot</code>                                    | A directory containing SPARC diskless client booting information  |
| <code>/rplboot</code>                                     | A directory containing x86 diskless client booting information  |
| <code>/etc/inetd.conf</code>                              | A system file that starts the <code>tftp</code> and <code>rpl</code> diskless boot daemons                        |



## *Database Manager Reference*

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14 

This chapter provides reference information for Database Manager, a graphical interface used to manage network-related system files.



**Database Manager**

This is a list of the reference information in this chapter.

|   |                 |
|---|-----------------|
| <i>Using Database Manager</i>                 | <i>page 154</i> |
| <i>Window, Menu, and Command Descriptions</i> | <i>page 155</i> |
| <i>Files Modified by Database Manager</i>     | <i>page 157</i> |

## Using Database Manager

### When to Use Database Manager

Database Manager can be used to perform the following tasks:

- Manage network-related system files in the NIS or NIS+ name service environment or on a local or remote system (*/etc* files)
- Provide search capabilities and syntax checking on network-related system files

---

**Note** – Even though Database Manager allows you to manage all network-related system files, you should manage some of the system files only by their primary Solstice AdminSuite applications. However, you can still use Database Manager to view the system files. Table 14-3 on page 158 lists the system files that you should manage with Database Manager and the other Solstice AdminSuite applications.

---

### Requirements for Using Database Manager

The requirements for using Database Manager are:

- A bit-mapped display monitor
- Ability to use the OpenWindows environment
- Required access privileges as described in Chapter 1, “Introduction”

### Where to Find Information on Specific Tasks

Table 14-1 contains references for Database Manager tasks.

*Table 14-1* Database Manager Task References

| <b>Task</b>                              | <b>Location</b> |
|--|-----------------|
| <i>How to Start Database Manager</i>     | <i>page 93</i>  |
| <i>How to Add a System File Entry</i>    | <i>page 95</i>  |
| <i>How to Modify a System File Entry</i> | <i>page 96</i>  |
| <i>How to Delete a System File Entry</i> | <i>page 97</i>  |

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## *Window, Menu, and Command Descriptions*

The following section describes Database Manager's windows, menus, and commands.

### *Database Manager Main Window*

The Database Manager main window is displayed after you click the Database Manager icon on the Solstice Launcher and select a name service and system file. The main window contains four menus: File, Edit, View, and Help. The selected system file contents are displayed.

### *Database Manager File Menu*

The File Menu enables you to load system file entries and exit Database Manager.

#### *Load Window*

When you start Database Manager or select Load from the File menu, the load window is displayed. This window is used to select the appropriate name service for your environment. See Chapter 2, "Using Solstice AdminSuite in a Name Service Environment," for information on selecting a name service.

After you have selected a name service, select the system file and click on OK. The selected system file is loaded and the Database Manager main window is displayed.

#### *Exit Command*

The Exit command enables you to exit Database Manager.

### *Database Manager Edit Menu*

The Edit Menu enables you to add, copy, modify, and delete system file entries.

### *Add Window*

The Add window enables you to add an entry to a system file. For example, you can create a new alias in the `aliases` file.



---

**Caution** – Using the Modify or Delete commands may inadvertently affect a user account or client system. Use User Account Manager if you are modifying or removing user account information. If you are modifying information about a diskless or dataless client, use Host Manager to remove and then re-add the client information.

---

### *Modify Window*

The Modify window enables you to modify an entry in a system file. For example, you can modify an alias in the `aliases` file by adding or removing user names from the members list in the Expansion text box. You cannot modify the alias name.

If part of an entry is not modifiable using Database Manager, remove the entry and re-add it.

### *Delete Window*

The delete window enables you to delete an entry from a file. A window is displayed asking you to confirm the deletion.

## *Database Manager View Menu*

The View menu contains commands to find and sort system file entries.

### *Filter Command*

The Filter command enables you to filter entries in a system file if you select the Specify option. This means that only the system entries that match the filter text string are displayed in the main display area.

The All option enables you to remove the filter to redisplay all entries. All is the default setting.



### *Find Window*

The Find window enables you to find a specific entry in a large system file. You can use wildcards to match text strings. The first entry that matches the text string is highlighted in the main window, if found.

### *Sort By Command*

The Sort By command enables you to sort the system file by its different fields or categories of information. For example, the `networks` file can be sorted by:

- Net Name
- Net Number
- Comment

## *Database Manager Help Menu*

The Help menu enables you to access the online help that describes Database Manager functions and requirements. See “Using Admin Help” on page 6 for more information.

## *Files Modified by Database Manager*

The network-related system files that can be modified with Database Manager are described in Table 14-2.

*Table 14-2* Files Modified by Database Manager

| <b>System File</b>  | <b>Description</b>   |
|---|--|
| <code>aliases</code>  | Aliases in ASCII format for the local host. Or, if it is a NIS+ or NIS file, aliases available for use across the network. |
| <code>auto.home</code> (NIS) or <code>auto_home</code> (NIS+) | Entries for client systems to mount their home directories automatically; an indirect automounter map.                     |
| <code>bootparams</code>                                       | Entries client systems need to boot from the network.  |
| <code>ethers</code>   | Ethernet addresses of network client systems.  |
| <code>hosts</code>  | Entries for systems on the network and their associated IP addresses.  |
| <code>locale</code>   | The default locales used by network clients.   |

*Table 14-2 Files Modified by Database Manager (Continued)*

| <b>System File</b> | <b>Description</b>   |
|--------------------|--|
| netgroup           | Entries for netgroups, a group of systems granted identical access to network resources for security and organizational reasons. |
| netmasks           | Network mask values used to implement IP subnetting.   |
| networks           | Information about available networks.  |
| protocols          | Information about Internet protocols used in your network.   |
| rpc                | Entries for available RPC services (by name) and their associated program numbers and aliases.                                   |
| services           | Information about network services and their “well-known” port numbers.  |
| timezone           | Entries for systems and their geographic region and time zone used at installation.  |

Some of the system files should be managed by their primary Solstice AdminSuite applications, which are summarized in Table 14-3.

*Table 14-3 System Files and Their Primary Management Tools*

| <b>System File</b>  | <b>Should be Managed By ...</b> |
|---|---------------------------------|
| aliases, locale, netgroup, netmasks, networks, protocols, rpc, and services | Database Manager                |
| auto_home, passwd, group  | User Account Manager            |
| group   | Group Manager                   |
| bootparams, ethers, hosts, and timezone                                     | Host Manager                    |

## *Serial Port Manager Reference*

15 

This chapter provides reference information for the Serial Port Manager.



**Serial Port Manager**

Use this table to find information about specific Serial Port Manager features.

|   |                 |
|---|-----------------|
| <i>Using Serial Port Manager</i>              | <i>page 160</i> |
| <i>Window, Menu, and Command Descriptions</i> | <i>page 161</i> |
| <i>Files Modified by Serial Port Manager</i>  | <i>page 163</i> |

## *Using Serial Port Manager*

### *When to Use Serial Port Manager*

Use Serial Port Manager to configure serial port software for use with terminals or modems. You can use Serial Port Manager to configure one or more ports on a local or remote system.

With Serial Port Manager, you can

- Add a service
- Modify a service
- Initialize a port without configuring the service
- Disable a service
- Delete a service

### *Requirements for Using Serial Port Manager*

The requirements for using Serial Port Manager are:

- A bit-mapped display monitor
- Ability to use the OpenWindows environment
- Required access privileges as described in Chapter 1, “Introduction”

### *Alternative to Using Serial Port Manager*

When you configure a serial port for use with a modem or terminal, you have a choice between two tools:

- *Service Access Facility* – a collection of background processes and administrative commands used from the command line to configure and administer port services and monitors.
- *Serial Port Manager* – a Solstice AdminSuite application that provides a graphical user interface and the functionality of the Service Access Facility’s `pmadm` command, a port monitor administration command.

## *Where to Find Specific Task Information*

This table contains references for Serial Port Manager tasks.

*Table 15-1* Serial Port Manager Task References

| <b>Task</b>   | <b>Location</b> |
|---|-----------------|
| <i>How to Start Serial Port Manager</i>             | <i>page 103</i> |
| <i>How to Add a Terminal</i>                        | <i>page 104</i> |
| <i>How to Add a Modem</i>                           | <i>page 105</i> |
| <i>How to Initialize a Port Without Configuring</i> | <i>page 107</i> |
| <i>How to Disable a Port</i>                        | <i>page 107</i> |
| <i>How to Delete a Port Service</i>                 | <i>page 108</i> |

## *Window, Menu, and Command Descriptions*

### *Serial Port Manager Main Window*

The Serial Port Manager main window lists the existing services that have been configured on your system. It also contains four menus: File, Edit, View, and Help.

### *Serial Port Manager File Menu*

The File menu enables you to exit Serial Port Manager.

### *Serial Port Manager Edit Menu*

The Edit menu enables you to configure and delete serial port services.

### *Modify Window*

The Modify window enables you to modify an existing service or configure a new service. If you need information to complete a field, click on the Help button to see field definitions for this window. If you need information about the menus, click on the Help button to see menu descriptions.

***Template Menu***

The template menu provides a list of templates that help you quickly initialize a port or set up port services for terminals and modems. Choose the template that most closely matches the port configuration you want. You can then change the values in the Modify window to meet your needs.

***Baud Rate Menu***

The baud rate menu provides a list of common baud rates. These entries are also listed in the `/etc/ttydefs` file. To specify a baud rate not listed, choose Other and enter a value from the `/etc/ttydefs` file.

***Port Monitor Tag Menu***

The port monitor tag menu lists the default tag—`zsmon`—and Other. To specify a tag other than `zsmon`, choose Other.

***Timeout Menu***

The timeout menu provides a list of common timeout parameters. If no input data is received within the timeout parameter, the port will be closed.

***Delete Window***

The delete window enables you to delete a service. A window is displayed asking you to confirm the deletion.

***Serial Port Manager View Menu******Hosts Window***

The Hosts window enables you to configure the port service on a remote system if you have administration privileges for that system. See Chapter 2, “Using Solstice AdminSuite in a Name Service Environment,” for more information on Solstice AdminSuite security.

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## *Serial Port Manager Help Menu*

The Help menu enables you to access the online help that describes Serial Port Manager functions and requirements. See “Using Admin Help” on page 6 for more information.

## *Files Modified by Serial Port Manager*

This table describes the files that are modified by Serial Port Manager.

*Table 15-2* Files Modified by Serial Port Manager

| <b>System File</b>                 | <b>Description</b>   |
|------------------------------------|--|
| <code>/etc/saf/_sactab</code>      | The Service Access Facility’s administrative file that contains configuration data for the port monitors it controls       |
| <code>/etc/saf/pmtag/_pmtab</code> | The port monitor’s administrative file that contains port monitor-specific configuration data for the services it provides |
| <code>/var/saf/pmtag/log</code>    | The port monitor’s log file logging service states: successful initialization, failure, enabled, or disabled               |





## *Printer Manager Reference*

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**16** 

This chapter provides reference information for Printer Manager, a graphical user interface used to set up and maintain the SunSoft print client software.



**Printer Manager**

This is a list of the reference information in this chapter.

|   |                 |
|---|-----------------|
| <i>Using Printer Manager</i>                  | <i>page 166</i> |
| <i>Window, Menu, and Command Descriptions</i> | <i>page 167</i> |
| <i>Files Modified by Printer Manager</i>      | <i>page 170</i> |

## *Using Printer Manager*

### *When to Use Printer Manager*

Printer Manager can be used to perform the following tasks:

- Install or remove a printer on a system
- Add or delete access to a printer
- Modify printer configuration information
- Find printer entries in a list of all printers on the network

### *Requirements for Using Printer Manager*

The requirements for using Printer Manager are:

- A bit-mapped display monitor
- Ability to use the OpenWindows environment
- Required access privileges as described in Chapter 1, “Introduction”

### *Where to Find Specific Task Information*

The task information for using Printer Manager is contained in Chapter 9, “Setting Up SunSoft Print Client Software With Printer Manager.” This chapter contains step-by-step instructions for performing the tasks referenced in Table 16-1..

*Table 16-1* Printer Manager Task References

| <b>Task</b>   | <b>Location</b> |
|---|-----------------|
| <i>How to Start Printer Manager</i>                                     | <i>page 111</i> |
| <i>How to Install a Printer</i>   | <i>page 113</i> |
| <i>How to Add Access to a Printer</i>                                   | <i>page 116</i> |
| <i>How to Modify Printer Information</i>                                | <i>page 119</i> |
| <i>How to Delete Access to a Printer</i>                                | <i>page 122</i> |
| <i>How to Delete a Printer From a Print Server (If No Name Service)</i> | <i>page 123</i> |
| <i>How to Find a Printer Entry</i>                                      | <i>page 124</i> |

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## *Window, Menu, and Command Descriptions*

The following section describes Printer Manager's windows, menus, and commands.

### *Printer Manager Main Window*

The Printer Manager main window is displayed after you click on the Printer Manager icon in the Solstice Launcher and complete the Load window. The main window contains the File, Edit, View, and Help menus. A scrolling list of the printers on your network is also displayed.

### *Printer Manager File Menu*

The File Menu enables you to load system file entries and exit Printer Manager.

#### *Load Window*

When you start Printer Manager or select Load from the File menu, the Load window is displayed. This window is used to select:

- The appropriate name service for your environment. See Chapter 2, "Using Solstice AdminSuite in a Name Service Environment" for information on selecting a name service.
- The domain in which to manage printers. If you select None for the name service, you must specify a system's host name instead of a domain name.

After you have selected a name service and a domain or host name, click on OK. The name service and domain or host information is loaded and the Printer Manager main window is displayed.

#### *Exit Command*

The Exit command enables you to exit Printer Manager.

## *Printer Manager Edit Menu*

The Edit menu enables you to add access to a printer, install a printer, modify printer information, delete access to a printer, and find printer entries in the scrolling list.

### *Add Access to Printer Window*

The Add Access to Printer window enables you to give print clients access to a remote printer.

### *Install Printer Window*

The Install Printer window enables you to install a printer on a system.

### *Modify Window*

The Modify window enables you to modify the existing information for a printer. Depending on the printer entry you select, you are able to modify a printer that you have:

- Installed on a system by using Printer Manager (long window)
- Added access to (short window)

### *Delete Window*

The Delete window is a pop-up window to confirm that you want to delete access to the selected printer.

---

### *Printer Manager View Menu*

The View menu enables you to find printer entries.

#### *Find Window*

The Find window enables you to easily locate a specific printer in the Printer Manager main window. This is useful if the main window contains numerous printer entries.

### *Printer Manager Help Menu*

The Help menu enables you to access the online help that describes Printer Manager functions and requirements. See “Using Admin Help” on page 6 for more information.

## *Files Modified by Printer Manager*

Table 16-2 describes the SunSoft and Solaris system files that are modified by Printer Manager.

*Table 16-2* Files Modified by Printer Manager

| <b>System File</b>                             | <b>Description</b>   |
|--|--|
| <code>/etc/printers.conf</code>                | A file containing printer configuration information for SunSoft print client operation                               |
| <code>printers.conf.byname</code>              | An NIS map that contains printer configuration information for SunSoft print client operation                        |
| <code>fns.ctx_dir</code>                       | An NIS+ map that contains printer configuration information for SunSoft print client operation and other information |
| <code>/etc/lp/printers/<i>printer</i>/*</code> | A Solaris file containing LP printer configuration information   |
| <code>/etc/lp/interfaces/<i>printer</i></code> | A Solaris shell script used to communicate with a local printer  |
| <code>/etc/lp/default</code>                   | A Solaris file containing the name of the LP system default printer  |
| <code>/etc/lp/filter.table</code>              | A Solaris lookup table containing the configured LP filters  |
| <code>/etc/lp/Systems</code>                   | A Solaris file containing a list of remote systems for Solaris LP  |
| <code>/etc/saf/sactab</code>                   | A Solaris file containing service access facility configuration  |
| <code>/etc/saf/tcp_pmtab</code>                | A Solaris file containing port monitor configuration   |

## Glossary

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### **sadmind**

A distributed system administration daemon that carries out security tasks when administrative tasks are performed across the network.

### **aliases file**

A file containing mail aliases, which are names that represent distribution lists of users.

### **auto\_home (or auto.home) file**

An indirect automounter map that contains entries enabling client systems to mount their home directories automatically. It is primarily accessed using User Manager.

### **baud rate**

The switching speed of a line, which is the number of changes in the electrical state of the line per second. At low speeds, baud rate is equivalent to bits transmitted per second. At higher speeds, the bits transmitted per second is greater than the baud rate because one baud can be made to represent more than one bit.

### **Berkeley Software Distribution (BSD)**

One of two major “flavors” of the UNIX operating system, the other being *System V*. SunOS operating system releases before SunOS 5.0 (Solaris 2.0) are BSD.



---

|                         |  |
|-------------------------|--|
| <b>bootparams file</b>  | A file containing entries that are used to enable client systems to boot from the network.   |
| <b>content type</b>     | Specified when you add support for a local printer. Identifies the particular formats of files that can be printed. Supported content types are: PS (PostScript), ASCII, simple, or any.   |
| <b>Database Manager</b> | One of Solstice AdminSuite's applications used to manage network-related system files such as <code>aliases</code> and <code>netmasks</code> .   |
| <b>dataless client</b>  | A system with a monitor and keyboard, CPU and memory, Ethernet hardware, and small local disk for the swap area and the root ( <code>/</code> ) file system. This system gets its other file resources from a server on the network. |
| <b>default</b>          | An assumed value, or an action taken automatically unless you specify otherwise.   |
| <b>device</b>           | A hardware component, such as a printer or disk drive, acting as a unit to perform a specific function.  |
| <b>diskless client</b>  | A system with a monitor and keyboard, CPU and memory, and Ethernet hardware. This system gets its file resources and swap space from a server on a network.  |
| <b>Ethernet address</b> | A system's hardware address. The Ethernet address can be displayed using the <code>banner</code> command from the PROM level.  |
| <b>ethers file</b>      | A file containing Ethernet addresses of network client systems.  |
| <b>file server</b>      | A system that shares file resources and disk storage space for network clients.  |
| <b>file system</b>      | A hierarchy of files and directories in the Solaris operating environment.   |





---

|                             |  |
|-----------------------------|--|
| <b>group</b>                | A collection of users who share files and other system resources. Each user belongs to a primary group (listed in the user's <code>passwd</code> entry), and optionally, one or more secondary groups.   |
| <b>group file</b>           | A file containing entries for UNIX groups. The <code>group</code> file is accessed from Group Manager.   |
| <b>group ID (GID)</b>       | A group identification number used by the system to identify a user's primary group. Group ID numbers for users usually range from 100 to 60000.   |
| <b>Group Manager</b>        | One of Solstice AdminSuite's applications used to manage group information in the <code>group</code> file.   |
| <b>hardwired</b>            | Refers to a device such as a terminal that is physically connected to the local system.  |
| <b>Host Manager</b>         | One of Solstice AdminSuite's applications used to manage network client services.  |
| <b>host name</b>            | A unique name that identifies a system.  |
| <b>initialization files</b> | Special files run automatically when you log in. When an account is created and you specified a skeleton path, User Manager copies generic versions of the initialization files into the user's home directory. You can then edit the copies as needed to customize each user's environment. |
| <b>IP address</b>           | A system's unique network address.   |
| <b>launcher</b>             | See Solstice AdminSuite Launcher.  |
| <b>local printer</b>        | A printer physically connected to the local system.  |
| <b>locale file</b>          | A file containing the default locales used by network clients.   |

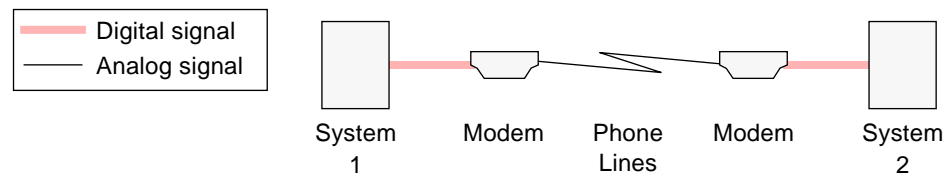


## media server

A system that shares a CD-ROM device for remote installation of software.

## modem

A data communication device that translates, or *modulates*, digital information into an analog signal that can be transmitted via phone lines.



## name service

Method by which system information is maintained in the network. There are three selections in Solstice AdminSuite: NIS, NIS+, and None.

- **NIS** – Name service shipped with the SunOS 4.1.x operating system (Solaris 1). Designated systems, called NIS servers, contain maps that store information about the network, its clients, and its users.
- **NIS+** – Name service shipped with the Solaris software. Making use of true databases (instead of two-column maps that simply associate one variable with another), NIS+ stores more information than NIS.
- **None** – Method for administrators of networks that do not use a network name service; administrators usually select one system on the network on which to maintain a master copy of the `/etc` configuration files.

## name service domain

A group of systems and the information served to those systems.

## netgroup file

A file containing entries for *netgroups*, a group of systems granted identical access to network resources for security and organizational reasons.

## netmasks file

A file containing network mask values used to implement IP subnetting.

## network client

A system that uses remote resources from a server.



networks **file**

A file containing information about available networks.

nsswitch.conf

A file that contains an entry for each system file and a corresponding name service source to search for the system file information. The name service sources are designated as keywords— `nis`, `nisplus`, or `files`. If more than one name service source is listed, they are searched in the order given.

**OpenWindows**

A windowing system based on the OPEN LOOK graphical user interface.

**parallel port**

A port that transfers one or more bytes simultaneously over multiple lines. See also **serial port**.

passwd **file**

A file that contains user account information such as user name, user ID, group ID, and home directory. User Manager accesses this file.

**password status**

Characteristics associated with a user's password. User Manager's Add User window has a password status menu that enables you to control user password characteristics. The choices are:

- **Normal password** – Sets a password for the user.
- **Cleared until first login** – Prompts user for a password on first login.
- **Account is locked** – Disables account. Account can be unlocked by assigning a new password. This type of account allows a user to own files but not log in.
- **No password—setuid only** – Disables the ability to directly log in to the account. This allows programs such as `lp` or `uucp` to run under an account, without allowing a user to log in.

**permissions**

A set of attributes that determines which users have access to read, write, and execute a file or directory's contents.

**port**

A channel through which a device communicates with the operating system.



---

**port monitor**

A program that continuously “watches out” for requests to log in, or requests to access printers or files.

When a port monitor detects a request, it sets the parameters required to establish communication between the operating system and the device requesting service. Then the port monitor transfers control to other processes that provide the services needed.

**primary group**

A user’s default group, which determines the group ownership on a file the user creates, or is allowed to access, if already created. Membership in this group is defined by the group identifier listed in the user’s entry in the `passwd` file.

**print client**

A system that uses a print server for printing files.

**print server**

A system that has a printer physically connected to it and the appropriate software configured to print both local and remote print requests.

**Printer Manager**

One of the Solstice AdminSuite’s applications used to manage local and remote printer setup.

**printer name**

A unique name, with a maximum of 14 characters, for a printer.

**printer type**

The `terminfo` database entry that contains the control sequences that initialize the printer.

**PROM**

A programmable read-only memory chip with a program called the monitor that runs a quick self-test procedure and checks such things as the hardware and memory on the system. If no errors are found, the system begins the automatic boot process.

**PROM prompt**

The prompt displayed when the system halts; either `>` or `ok`.

**protocols file**

A file containing information about Internet protocols used in your network.



---

|                            |  |
|----------------------------|--|
| <b>remote printer</b>      | A printer connected to a remote system such as a print server.   |
| <b>root</b>                | A user who has access to all parts of the system. This is usually the system administrator. Also known as <i>superuser</i> .   |
| <b>rpc file</b>            | A file containing entries for available Remote Procedure Call (RPC) services (by name) and their associated program numbers and aliases.   |
| <b>secondary group</b>     | Membership in this group is defined by the group identifier listed in the <code>group</code> file with a list of users as members.   |
| <b>serial port</b>         | A <i>port</i> which transmits a byte of information bit-by-bit over a single line using a standard communications protocol such as RS-423. See also <b>parallel port</b> .                               |
| <b>Serial Port Manager</b> | One of the Solstice AdminSuite's applications used to manage serial devices.   |
| <b>services file</b>       | A file containing information about network services and their "well-known" port numbers.  |
| <b>shadow file</b>         | A file containing encrypted user passwords and password aging information. Accessed using User Manager.  |
| <b>shell</b>               | A command-line interpreter program that accepts and executes commands that you type. There are several varieties of shell programs, and three are included in the Solaris software: Bourne, Korn, and C. |
| <b>skeleton path</b>       | A prototype directory containing start up files. See also <b>initialization files</b> .  |
| <b>Solstice AdminSuite</b> | A graphical user interface used to perform administrative tasks such as managing users, groups, hosts, printers, and serial devices.   |
| <b>Solstice Launcher</b>   | The base window of the interface, used to start the other application tools.   |



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**standalone system**

A standalone system has a monitor and keyboard, CPU and memory, approximately 200 megabytes of disk space, and usually a backup device. It may or may not be connected to a network.

**superuser**

A user who has access to all parts of the system. This is usually the system administrator. Also known as *root*.

**sysadmin group**

The UNIX group whose members belong to the sysadmin group (Group 14). Members of the sysadmin group can use Solstice AdminSuite's applications locally or remotely.

**system default (printer)**

The printer your print requests will be sent to if you do not specify a printer.

**system files**

Files that contain important system administration information such as user accounts, passwords, and groups. These files are contained on the local system in the */etc* directory, or in the NIS or NIS+ database on a name server.

**System V**

One of two major "flavors" of the UNIX operating system, the other being BSD. The SunOS 5.0 operating system (Solaris 2.0) and subsequent releases are System V.

**terminal**

An input/output device that usually has a keyboard for input and a video screen or printer for output. Terminal, however, is often used as a shorthand for *alphanumeric terminal*, which is a serial port device capable of displaying only letters, numbers, and other characters such as those produced by a typewriter.

**timezone file**

A file containing entries for systems and their geographic region and time zone.

**user account**

A record of essential user information stored on the system. You must have a user account to access a system.



---

|                      |  |
|----------------------|--|
| <b>user ID (UID)</b> | A number used by the operating system to identify a user. User ID numbers for users usually range from 100 to 60000.                               |
| <b>user name</b>     | The name, assigned to an individual user, that controls access to a system.  |
| <b>User Manager</b>  | One of the Solstice AdminSuite's applications used to manage user account information.   |
| <b>utmp entry</b>    | A entry made in the <code>/var/adm/utmp</code> file when a user logs in and out of the system.   |
| <b>workspace</b>     | The background screen area on which windows and icons are displayed.   |
| <b>ypbind</b>        | An NIS daemon process that runs on all client systems and allows the client to communicate with an NIS server.                                     |
| <b>zsmon</b>         | Sun's naming convention for the port monitor that monitors a system's two serial ports. It is derived from the Zilog serial communications driver. |





# Index

---

## A

### access

- setting up for NIS, 20
- to printers
  - adding, 116
  - deleting, 122

Add Access to Printer window, 117, 168

Add Application window, 32

Add option (Edit menu)

- Group Manager, 41
- Host Manager, 69
- User Manager, 45 to 46

Add window

- Database Manager, 95, 156
- Group Manager, 136
- Host Manager, 69, 70, 71, 84, 87, 148
- User Manager, 45, 46, 142

adding

- access to a printer, 116
- applications
  - in global register, 27, 30
  - in local register, 26
  - in Solstice Launcher window, 32
- client support, 64
- groups, 41
- modems, 105
- server support, 64

Solaris 2.x OS services to OS servers, 80

standalone system information, 80

SunOS 4.x services to OS servers, 74

support

- for dataless clients, 85
- for diskless clients, 82
- for OS servers, 69
- for standalone systems, 69

system file entry, 95

terminals, 104

user accounts, 45 to 46

users in sysadmin group

- in NIS environment, 12
- in NIS+ environment, 11
- without a name service, 13

Admin Help, 6

buttons, 7

AdminSuite, *See* Solstice AdminSuite

aliases file, 157

Application Path Selection window, 35

Application Properties window, 34

application properties, customizing, 32

application tools

- filtering entries, 131
- general reference, 129 to 132

applications

---

- customizing, locally registered, 34 to 36
- of Solstice AdminSuite, 3
- registering in Solstice Launcher, 25 to 31
- removing
  - from global registry, 29, 31
  - from local registry, 27
- architecture type
  - for dataless clients, 85
  - for diskless clients, 82
  - for standalone systems, 70
  - selecting when adding Solaris 4.x OS services, 77
- ASCII terminal, 3
- authenticating user ID, 15
- authentication security, 15
  - levels of, 16
- authorizing permissions, 15
- auto\_home file, 144
- AutoClient systems
  - adding and maintaining, 63

**B**

- baud rate for modems, 106
- Baud Rate menu (Serial Port Manager), 162
- bidirectional modem template, 101
- bit-mapped display monitor, 3
- boot servers
  - defined, 62
  - for dataless clients, 86
  - for OS servers, 70
  - for standalone systems, 70
- boot software, 58
- booting
  - dataless clients, 86
  - diskless clients, 83
- bootparams file, 151, 157
- buttons (Solstice AdminSuite), 132

## C

- CD image, *See* Solaris CD image
- changing, *See* modifying, 49
- clients
  - See also* diskless clients, dataless clients
  - defined, 56
  - support for, 55 to 89
    - maintaining, 88 to 89
- commands
  - filtering, 131
  - install4.x, 76
  - pmadm, 160
  - soladdapp, 25, 27, 29, 30, 31
- configuration information for diskless clients, 83
- configuring
  - modems, 106
  - ports, 104, 105, 106
- conventions, typographic, xvi
- Convert command (Host Manager), 148
- Convert to OS Server option (Host Manager Edit menu), 72
- Convert window (Host Manager), 72
- converting standalone systems, 72
- Copy option (User Manager Edit menu), 47
- Copy window (User Manager), 142
- copying user accounts, 47
- credentials for security levels, 16
- Customize window (Host Manager), 150
- customizing
  - locally registered applications, 34 to 36
  - Solstice Launcher, 32 to 33

## D

- daemons
  - client, 83
  - sadmind, 15
- Database Manager
  - about using, 154

- 
- Add window, 95, 156
  - advanced uses, 92
  - Delete window, 156
  - Edit menu, 155
  - Exit command, 155
  - files modified by, 157
  - Filter command, 156
  - Find window, 157
  - Help menu, 157
  - Load window, 155
  - main window, 93, 155
  - Modify window, 96, 156
  - requirements for using, 154
  - Sort By command, 157
  - starting, 95
  - View menu, 156
  - dataless clients, 59
    - adding services for, 74
    - adding support for, 85
    - booting, 86
    - compared to other systems, 57
    - discontinuation of support for, 59
    - operating system services for, 58, 61
  - default printer, setting
    - with Printer Manager, 114 to 115
  - defaults
    - for adding system support, 68
    - for user accounts, 44
    - modem, 101
    - terminal, 100
  - Delete option (Edit menu)
    - Group Manager, 50
    - User Manager, 53
  - Delete window
    - Database Manager, 156
    - Group Manager, 136
    - Host Manager, 149
    - Printer Manager, 168
    - Serial Port Manager, 162
    - User Manager, 142
  - deleting
    - access to printers, 122
    - groups, 50
    - port services, 108
    - printers from print servers
      - for NIS or NIS+, 122
      - if no name service, 123
      - support for a system, 89
      - system file entry, 97
      - user accounts, 53
      - user home directories, 53
      - user mailboxes, 53
  - dial-in only modem template, 101
  - dial-out only modem template, 101
  - disabling ports, 107
  - diskless clients, 58
    - adding support for, 74, 82
    - booting, 83
    - compared to other systems, 57
    - operating system services for, 58, 61
- E**
- `/etc/lp` directory
    - when printer is added in, 114
    - when printer is deleted from, 123, 124
  - `/etc/printers.conf` file
    - of print client, 123
    - of print server, 114, 123
    - when printer is added in, 114
    - when printer is deleted from, 123, 124
  - Edit menu
    - Database Manager, 155
      - Add option, 95
      - Delete option, 97
      - Modify option, 96
    - Group Manager, 136
      - Add option, 41
      - Delete option, 50
      - Modify option, 49
    - Host Manager, 148
      - Add option, 69, 82, 85
      - Modify option, 49, 80, 89
      - Set Defaults option, 68
    - Printer Manager, 168
      - Add Access to Printer option, 117
      - Delete option, 122, 123
      - Install Printer option, 114
      - Modify option, 119

---

- Serial Port Manager, 161
  - Delete option, 108
  - Modify option, 104, 105, 107
  - Modify Service option, 106
- User Manager, 141
  - Add option, 45 to 46
  - Copy option, 47
  - Delete option, 53
  - Modify option, 51
  - Set Defaults option, 44
- Errors command (Host Manager), 150
- /etc files
  - as source of name service information, 18
  - modified by Group Manager, 137
  - modified by Printer Manager, 170
- /etc/group file, 13
- /etc/saf/*pmtag*/*\_pmtab* file, 163
- /etc/saf/*\_sactab* file, 163
- ethers file, 157
- /export file systems, 58
- /export/root/*hostname*/etc/vfstab file, 151

## F

- Federated Naming Service, used with NIS+, 112
- File menu
  - Group Manager, 135
  - Host Manager, 147
    - Save Changes option, 82
    - Update System Types option, 68
  - Printer Manager, 167
  - Serial Port Manager, 161
  - User Manager, 141
- File Selection window, 35
- file servers
  - for dataless clients, 85
  - for diskless clients, 82
- Filter command (Database Manager), 156
- Filter menu, 131
- filtering commands, 131

- Find option (Printer Manager View menu), 124

## Find window

- Database Manager, 157
- Group Manager, 136
- Host Manager, 149
- Printer Manager, 124, 169
- User Manager, 143

- finding a printer entry, 124

## G

- global registry, 25
- global security policy, 19
- group 14
  - membership required in, 4
  - permissions granted to, 16
- group file, 144
- group ID, 41
- Group Manager
  - about using, 134
  - Add window, 41, 136
  - adding users in sysadmin group, 12
  - defined, 37
  - Delete option (Edit menu), 50
  - Delete window, 136
  - Edit menu, 136
  - Exit command, 135
  - File menu, 135
  - files modified by, 137
  - Find window, 136
  - Help menu, 137
  - Load window, 135
  - main window, 39, 40, 135
  - Modify option (Edit menu), 49
  - Modify window, 49, 136
  - prerequisites for using, 39
  - Rebuild List command, 137
  - requirements for using, 134
  - Sort By command, 136
  - starting, 39 to 40
  - tasks
    - for maintaining user accounts, 48
    - for setting up user accounts, 38

- 
- View menu, 136
  - groups
    - adding, 41
    - changing name of, 49
    - deleting, 50
    - modifying, 49
    - naming, 41
  - H**
  - Help menu
    - Database Manager, 157
    - Group Manager, 137
    - Host Manager, 150
    - Printer Manager, 169
    - Serial Port Manager, 163
    - User Manager, 143
  - Help utility, 6
  - Hide list, moving applications to or from, 32
  - Host Manager, 55 to 89
    - Add window, 70, 71, 84, 87, 148
    - Convert command, 148
    - Convert window, 72
    - Customize window, 150
    - Delete option (Edit menu), 89
    - Delete window, 149
    - Edit menu, 148
    - Errors command, 150
    - Exit command, 148
    - File menu, 147
    - files modified by, 151
    - Find window, 149
    - Help menu, 150
    - limitations of, 63
    - Load window, 147
    - main window, 66, 67, 147
    - Modify window, 81, 89, 148
    - Revert command, 149
    - Save Changes command, 147
    - Select All command, 149
    - Set Add Defaults window, 68
    - Set Defaults option (Edit menu), 68
    - Set Defaults window, 149
    - Set Filter window, 150
    - Show command, 149
    - Sort By command, 150
    - starting, 66
    - tasks
      - available in, 59 to 60
      - for adding server/client support, 64
      - for maintaining server/client support, 88
    - Update System Types command, 148
    - Update System Types menu, 68
    - Update System Types option (File menu), 68
    - View menu, 149
  - hosts file, 151, 157
  - Hosts window
    - Serial Port Manager, 162
  - I**
  - icons
    - path name, 35
    - tool, 32
  - Initialize Only - No Connection template, 102
  - initializing ports, 107
  - Install main menu, 76
  - Install Printer window, 114, 168
  - install servers
    - defined, 62
    - for adding Solaris 2.x OS services, 80
    - for dataless clients, 85
    - selecting, 69
  - install14x command, 76 to 78
  - installation services, 56
  - installing printer, 113
  - J**
  - JumpStart installation, 58, 62
  - K**
  - keyword files, 18

---

## L

- local security policy, 19
- locale file, 157
- locally registered applications,
  - customizing, 34 to 36

## M

- mailboxes (user), deleting contents of, 53
- main window, 130
  - Database Manager, 155
  - Group Manager, 135
  - Host Manager, 147
  - Printer Manager, 167
  - Serial Port Manager, 161
  - User Manager, 141
- maintaining
  - client support, 88 to 89
  - server support, 88 to 89
- managing
  - client support, 55 to 89
  - modems, 99 to 108
  - network service files, 91 to 97
  - server support, 55 to 89
  - terminals, 99 to 108
  - user accounts, 37 to 53
- Members List
  - creating for a group, 41
  - for sysadmin group, 12
- menu bars, 130
- modems
  - adding, 105
  - configuring, 106
  - managing, 99 to 108
  - template, 100, 101
- Modify option (Edit menu)
  - Database Manager, 96
  - Group Manager, 49
  - Host Manager, 49, 80, 89
  - Serial Port Manager, 104, 105
  - User Manager, 51
- modify permissions for NIS+ tables, 11
- Modify Service option (Serial Port Manager Edit menu), 106

- Modify Service window (Serial Port Manager), 106

### Modify window

- Database Manager, 96, 156
- Group Manager, 49, 136
- Host Manager, 81, 89, 148
- Printer Manager, 119, 168
- Serial Port Manager, 104, 105, 107, 161
- User Manager, 51, 52, 142

### modifying

- group name, 49
- groups, 49
- locally registered application, 34
- printer configuration
  - information, 119
- support for systems, 89
- system file entry, 96
- user accounts, 51

- Module Selection menu, 77

- monitor, requirements for, 3

## N

### name service

- See also* NIS, NIS+
  - information used by `sadmind` daemon, 18
  - selecting, 10
  - using Solstice AdminSuite with, 9 to 13

- netgroup file, 158

- netmasks file, 158

- network service files, managing, 91 to 97

- network services, 56

- networks file, 158

### NIS

- access privileges required for, 4, 112
- adding users in sysadmin group, 12
- keyword, 18
- map information, requirements for using, 12
- maps, remaking, 13

- 
- not available for Serial Port Manager, 11
  - setting up access for, 20
  - using with Solstice AdminSuite, 10
  - when printer is added in, 113, 114, 117
  - when printer is deleted from, 123
- NIS+
- access privileges required for, 4, 112
  - adding users in sysadmin group, 11
  - admin group, membership in, 112
  - keyword, 18
  - not available for Serial Port Manager, 11
  - permissions, setting up, 20
  - security for, 18
  - tables, requirements for using, 11
  - using with Solstice AdminSuite, 10
  - when printer is added in, 113, 114, 117
  - when printer is deleted from, 123
- None
- adding users in sysadmin group, 13
  - printer added in client's `/etc` files, 117
  - printer added in server's `/etc` files, 113, 114
  - printer deleted from client's `/etc` files, 123
  - printer deleted from server's `/etc` files, 124
- O**
- OpenWindows, 3, 5
  - operating system services, 56, 61
  - `/opt` directory, 58
  - OS servers
    - adding
      - SunOS 4.x OS services to, 74
      - adding support for, 69
      - converting standalone systems to, 72
  - OS Services window, 72
- P**
- parity for modems, 106
  - `passwd` file, 144
  - permissions
    - authorization of, 15
    - for NIS+ management, 20
    - for NIS+ tables, 11
  - `pmadm` command, 160
  - Port Monitor Tag menu (Serial Port Monitor), 162
  - port services, deleting, 108
  - ports
    - configuring, 104, 105, 106
    - disabling, 107
    - initializing, 107
  - print clients, access to printers, 116
  - print servers
    - managing, 110 to 125
    - setting up, 113
  - printer
    - adding access to, 116
    - deleting access to, 122
    - installing, 113
    - modifying configuration for, 119
  - printer configuration information,
    - modifying, 119
  - printer entry, finding, 124
  - Printer Manager
    - about using, 166
    - Add Access to Printer window, 117, 168
    - Delete window, 168
    - Edit menu, 168
    - Exit command, 167
    - File menu, 167
    - files modified by, 170
    - Find window, 124, 169
    - Help menu, 169
    - Install Printer window, 114, 168
    - Load window, 112, 167
    - main window, 112, 167
    - Modify window, 119, 168
    - requirements for using, 166
    - starting, 111
    - View menu, 169
  - profile servers

---

- defined, 62
- for dataless clients, 86
- for OS servers, 70
- for standalone systems, 70

prompts in command examples, xvii

protocols file, 158

## R

Rebuild List command

- Group Manager, 137
- User Manager, 143

registering applications in Solstice Launcher, 25 to 31

registry

- global, 25
  - adding applications in, 30
  - removing applications from, 31
- local
  - adding applications in, 27 to 28
  - removing applications from, 29
- private
  - adding applications in, 26
  - removing applications from, 27

remaking NIS maps, 13

remote booting, 56

remote installation, 62

- not available for SunOS 4.x, 63

removing applications

- from global registry, 29, 31
- from local registry, 27

requirements

- for using AdminSuite, 3
- for using Group Manager, 134
- for using NIS map information, 12
- for using NIS+ table information, 11

Revert command (Host Manager), 149

.rhosts file, entry required for NIS, 12

root file system

- for dataless clients, 59
- for diskless clients, 58
- for servers, 58
- for standalone systems, 58

root password, creating for diskless clients, 83

root path

- specifying for diskless clients, 82

root privilege, 4

- security for, 16
- using sysadmin group privileges instead, 112

root .rhosts file, 12

rpc file, 158

## S

sadmind daemon, 15

- name service information used by, 18

Save Changes command

- Host Manager, 147

searching for

- group information, 136
- host entries, 149
- system file information, 157
- user account information, 143

security, 15 to 20

- levels of, 16 to 18
  - changing, 17 to 18
- policy, 19 to 20

Select All command (Host Manager), 149

selecting a name service, 10

Serial Port Manager

- about using, 160
- alternative to using, 160
- Baud Rate menu, 162
- Delete window, 162
- description of, 100
- Edit menu, 161
- File menu, 161
- files modified by, 163
- Help menu, 163
- Hosts window, 162
- main window, 103, 161
- Modify Service window, 106
- Modify window, 104, 105, 107, 161
- Port Monitor Tag menu, 162
- requirements for using, 160



- starting, 103
- Template menu, 104, 162
- Timeout menu, 162
- View menu, 162
- servers, 55 to 89
  - boot, 62
  - compared to other systems, 57
  - defined, 56
  - file systems of, 58
  - install, 62
  - profile, 62
  - software to support other systems, 58
  - support for, 55 to 89
    - maintaining, 88 to 89
- Service Access Facility, 160
- services file, 158
- Set Add Defaults window
  - Host Manager, 68
  - User Manager, 44
- Set Defaults option (Edit menu)
  - Host Manager, 68
  - User Manager, 44
- Set Defaults window
  - Host Manager, 149
  - User Manager, 142
- Set Filter window (Host Manager), 150
- shadow file, 144
- Show command
  - Host Manager, 149
- Show list, moving applications to or from, 32
- soladdapp command, 25
  - globally registering applications with, 27, 30
  - removing globally registered applications with, 29, 31
- Solaris 2.x OS services, adding to OS servers, 80
- Solaris CD image, 58
  - setting path
    - for dataless clients, 86
    - for OS servers, 70
    - for standalone systems, 70
  - when adding Solaris 2.x OS services, 80
  - when converting standalone to OS server, 72
- Solaris OS server, 61
- Solstice AdminSuite
  - application tools, 129 to 132
  - applications, 3
  - benefits of using, 2
  - buttons, 132
  - description of, 1
  - Help utility, 6
  - knowledge required to use, xv
  - launcher, 5
  - main windows, 130
  - menu bars, 130
  - NIS environment, 12 to 13
  - NIS+ environment, 11 to 12
  - prerequisites for running, 3
  - security, 15 to 20
    - levels of, 16 to 18
    - policy, 19 to 20
  - starting, 5
  - tasks available in, 2
  - text boxes, 132
  - using with name service, 9 to 13
  - using without name service, 13
- Solstice Launcher, 5, 23 to 36
  - customizing, 32 to 33
  - menus, 24
  - registering applications in, 25 to 31
  - starting, 24
- Sort By command
  - Database Manager, 157
  - Group Manager, 136
  - Host Manager, 150
  - User Manager, 143
- standalone systems
  - adding support for, 69
  - compared to other systems, 57
  - converting to OS servers, 72
  - networked, 58
- starting
  - Database Manager, 95
  - Group Manager, 39 to 40

---

- Host Manager, 66
- Printer Manager, 111
- Serial Port Manager, 103
- Solstice AdminSuite, 5
- Solstice Launcher, 24
- User Manager, 42

SunOS 4.x OS services, 63

- adding, 74

support for systems

- adding
  - for dataless clients, 85
  - for diskless clients, 82
  - for OS servers, 69
  - for standalone systems, 69
- defined, 56
- deleting, 89
- modifying, 89
- setting defaults, 68

swap path for diskless clients, 82

swap size for diskless clients, 82

swap space, 58

- for dataless clients, 59

sysadmin group

- adding users
  - in name service, 18
  - in NIS environment, 12
  - in NIS+ environment, 11
  - without a name service, 13
- membership required in, 4, 11, 12
- permissions granted to, 16

system file entry

- adding, 95
- deleting, 97
- modifying, 96

system information

- adding, 69
- specifying for diskless clients, 82

system types, 57, 60

- updating, 68

## T

Template menu (Serial Port Manager), 104, 162

templates

- modems, 101
- terminal, 100

Terminal-Hardwired template, 100

terminals

- adding, 104
- managing, 99 to 108
- template, 100

text boxes, 132

- /tftpboot directory, 151

Timeout menu (Serial Port Manager), 162

timezone file, 151, 158

tool icons, customizing, 32

typographic conventions, xvi

## U

UID, *See* user ID

Update System Types command

- Host Manager, 148

Update System Types option (Host Manager File menu), 60, 68

updating system types, 68

user accounts, 37 to 53

- adding, 45 to 46
- copying, 47
- deleting, 53
- maintaining, 48 to 53
- managing, 37 to 53
- modifying, 51
- setting defaults for, 44

user home directories, deleting, 53

user ID

- authentication of, 15
- security authorization by, 16

user mailboxes, deleting, 53

User Manager

- about using, 140
- Add option (Edit menu), 45 to 46
- Add window, 45, 46, 142
- Copy option (Edit menu), 47
- Copy window, 142
- defined, 37
- Delete option (Edit menu), 53

---

- Delete window, 142
- Edit menu, 141
  - Delete option, 53
  - Modify option, 51
- Exit command, 141
- File menu, 141
- files modified by, 144
- Find window, 143
- Help menu, 143
- Load window, 141
- main window, 42, 43, 141
- Modify window, 51, 52, 142
- prerequisites for using, 42
- Rebuilt List command, 143
- requirements for using, 140
- Set Add Defaults window, 44
- Set Defaults option (Edit menu), 44
- Set Defaults window, 142
- Sort By command, 143
- starting, 42
- View menu, 143

/usr file system, 58

## V

/var/saf/pmtag/\_pmtab/log file, 163

### View menu

- Database Manager, 156
- Group Manager, 136
- Host Manager, 149
- Printer Manager, 169
  - Find option, 124
- Serial Port Manager, 162
- User Manager, 143

Volume Management, 74, 75

- and CD image software, 80

## Y

ypbind, running with `-broadcast` option, 12



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