



Solaris 10 Installation Guide: Basic Installations

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

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Contents

Preface	5
1 Planning for a Solaris Installation From CD or DVD Media (Tasks)	9
System Requirements and Recommendations	9
Solaris Installation Program GUI or Text Installer Requirements	10
Disk Space Recommendations for Software Groups	12
Checklist for Installation	14
Where to Find Additional Installation Information	21
2 Installing With the Solaris Installation Program (Tasks)	23
SPARC: Performing an Installation or Upgrade With the Solaris Installation Program	23
▼ SPARC: To Install or Upgrade With the Solaris Installation Program	24
x86: Performing an Installation or Upgrade With the Solaris Installation Program	31
▼ x86: To Install or Upgrade With the Solaris Installation Program	31
▼ x86: To Install or Upgrade With the Solaris Installation Program With GRUB	42
Index	55

Preface

This book describes how to use CD or DVD media to install the Solaris™ Operating System (Solaris OS) on a nonnetworked system.

This book does not include instructions about how to set up system hardware or other peripherals.

Note – This Solaris release supports systems that use the SPARC® and x86 families of processor architectures: UltraSPARC®, SPARC64, AMD64, Pentium, and Xeon EM64T. The supported systems appear in the *Solaris 10 Hardware Compatibility List* at <http://www.sun.com/bigadmin/hcl>. This document cites any implementation differences between the platform types.

In this document these x86 related terms mean the following:

- “x86” refers to the larger family of 64-bit and 32-bit x86 compatible products.
- “x64” points out specific 64-bit information about AMD64 or EM64T systems.
- “32-bit x86” points out specific 32-bit information about x86 based systems.

For supported systems, see the *Solaris 10 Hardware Compatibility List*.

Who Should Use This Book

This book is intended for system administrators who are responsible for installing the Solaris OS. This book provides basic Solaris installation information for system administrators who perform infrequent Solaris installations or upgrades.

If you need advanced Solaris installation information, see “[Related Books](#)” on page 6 to find the book that describes the information.

Related Books

Table P-1 lists related information that you need when you install the Solaris software.

TABLE P-1 Related Information

Information	Description
<i>Solaris 10 Installation Guide: Network-Based Installations</i>	This book describes how to perform a remote Solaris installation over a local area network or a wide area network.
<i>Solaris 10 Installation Guide: Solaris Live Upgrade and Upgrade Planning</i>	This book describes how to use CD or DVD media to upgrade a system to the Solaris OS. This book also describes how to use the Solaris Live Upgrade feature to create and maintain boot environments, and how to upgrade systems to these boot environments.
<i>Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations</i>	This book describes how to create the files and directories necessary to perform an unattended custom JumpStart installation. This book also describes how to create RAID-1 volumes during a JumpStart installation.
<i>Solaris 10 Installation Guide: Solaris Flash Archives (Creation and Installation)</i>	This book describes how to create a Solaris Flash archive and deploy the archive over the network to quickly install the Solaris OS. This book also describes how to maintain these archives, and how to quickly update clone systems by using differential Flash archives.
<i>System Administration Guide: Devices and File Systems</i>	This book describes how to back up system files.
<i>Solaris 10 Release Notes</i>	This book describes any bugs, known problems, software that is being discontinued, and patches that are related to the Solaris release.
SPARC: <i>Solaris 10 Sun Hardware Platform Guide</i> on http://docs.sun.com	This book contains information about supported hardware.
<i>Solaris 10 Package List</i>	This book lists and describes the packages in the Solaris 10 OS.
x86: Solaris Hardware Compatibility List	This list contains supported hardware information and device configuration details.

Documentation, Support, and Training

The Sun web site provides information about the following additional resources:

- Documentation (<http://www.sun.com/documentation/>)
 - Support (<http://www.sun.com/support/>)
 - Training (<http://www.sun.com/training/>)
-

Typographic Conventions

The following table describes the typographic conventions that are used in this book.

TABLE P-2 Typographic Conventions

Typeface	Meaning	Example
AaBbCc123	The names of commands, files, and directories, and onscreen computer output	Edit your <code>.login</code> file. Use <code>ls -a</code> to list all files. <code>machine_name% you have mail.</code>
AaBbCc123	What you type, contrasted with onscreen computer output	<code>machine_name% su</code> Password:
<i>aabbcc123</i>	Placeholder: replace with a real name or value	The command to remove a file is <code>rm filename</code> .
<i>AaBbCc123</i>	Book titles, new terms, and terms to be emphasized	Read Chapter 6 in the <i>User's Guide</i> . <i>A cache</i> is a copy that is stored locally. Do <i>not</i> save the file. Note: Some emphasized items appear bold online.

Shell Prompts in Command Examples

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

TABLE P-3 Shell Prompts

Shell	Prompt
C shell	machine_name%
C shell for superuser	machine_name#
Bourne shell and Korn shell	\$
Bourne shell and Korn shell for superuser	#

Platform Conventions

The following keyboard and mouse conventions are applicable to SPARC and x86 based systems:

- The key referred to as Return is labeled Enter on some keyboards.
- From left to right on a three-button mouse, the default settings for CDE are SELECT, ADJUST, and MENU. For example, the text says, "Click SELECT" instead of "Click the left mouse button." Otherwise, these keys are referred to as mouse button 1, mouse button 2, and mouse button 3.
- From left to right on a two-button mouse, the default settings are SELECT and MENU. The ADJUST function is obtained by simultaneously pressing SELECT and the Shift key on the keyboard (Shift-SELECT).

Planning for a Solaris Installation From CD or DVD Media (Tasks)

This chapter provides you with system requirements and planning information to help you install the Solaris OS. This chapter describes the following topics.

- “System Requirements and Recommendations” on page 9
- “Checklist for Installation” on page 14
- “Where to Find Additional Installation Information” on page 21

Note – This book uses the term *slice*, but some Solaris documentation and programs might refer to a slice as a partition. To avoid confusion, this book distinguishes between `fdisk` partitions (which are supported only in Solaris for x86 based systems) and the divisions within the Solaris `fdisk` partition, which might be called slices or partitions.

System Requirements and Recommendations

The following tables list basic system requirements to install the Solaris OS.

TABLE 1-1 SPARC: Memory, Swap, and Processor Recommendations

SPARC Based System	Size
Memory to install or upgrade	256 MB is the recommended size. 128 MB is the minimum size. Note – Some optional installation features are enabled only when sufficient memory is present. For example, if you install from a DVD with insufficient memory, you install through the Solaris installation program’s text installer, not through the GUI. For more information about these memory requirements, see Table 1-3 .
Swap area	512 MB is the default size. Note – You might need to customize the swap space. Swap space is based on the size of the system’s hard disk.
Processor requirements	200-MHz or faster processor is required.

TABLE 1-2 x86: Memory, Swap, and Processor Recommendations

x86 Based System	Size
Memory to install or upgrade	<ul style="list-style-type: none">■ Starting with the Solaris 10 1/06 release, 512 MB is the recommended size. 256 MB is the minimum size.■ For the Solaris 10 3/05 release, 256 MB is the recommended size. 128 MB is the minimum size. Note – Some optional installation features are enabled only when sufficient memory is present. For example, if you install from a DVD with insufficient memory, you install through the Solaris installation program’s text installer, not through the GUI. For more information about these memory requirements, see Table 1-3 .
Swap area	512 MB is the default size. Note – You might need to customize the swap space. Swap space is based on the size of the system’s hard disk.
Processor requirements	120-MHz or faster processor is recommended. Hardware floating-point support is required.

Solaris Installation Program GUI or Text Installer Requirements

The Solaris installation program on the Solaris 10 Operating System DVD or Solaris 10 Software - 1 CD can be run with a graphical user interface (GUI) or as an interactive text installer in a desktop or console session. For x86 based systems, the Solaris Device Configuration Assistant is included in the Solaris installation program.

- GUI – The Solaris installation GUI provides windows, pull-down menus, buttons, scrollbars, and iconic images to enable you to interact with the installation program. The GUI requires a local or remote DVD-ROM or CD-ROM drive or network connection, video adapter, keyboard, monitor, and enough memory. For more information about these memory requirements, see [Table 1–3](#) and [Table 1–4](#).
- Text installer – The Solaris interactive text installer enables you to type information in a terminal or console window to interact with the installation program. You can run the text installer in a desktop session with a windowing environment, or in a console session. The text installer requires a local or remote DVD-ROM or CD-ROM drive or network connection, keyboard, and monitor. You can run the Solaris installation text installer with the `tip` command. For more information, see the man page, `tip(1)`.

You can choose to install the software with a GUI or with or without a windowing environment. If there is sufficient memory, the GUI is displayed by default. Other environments are displayed by default if memory is insufficient for the GUI. You can override defaults with the `nowin` or `text` boot options. But, you are limited by the amount of memory in your system or by installing remotely. Also if the Solaris installation program does not detect a video adapter, it automatically displays in a console-based environment. [Table 1–3](#) and [Table 1–4](#) describe these environments and list memory requirements for displaying them.

TABLE 1–3 SPARC: Memory Requirements for Display Options

SPARC: Memory	Type of Installation	Description
128–383 MB	Text-based	Contains no graphics, but provides a window and the ability to open other windows. If you install by using the <code>text</code> boot option and the system has enough memory, you are installing in a windowing environment. If you are installing remotely through a <code>tip</code> line or using the <code>nowin</code> boot option, you are limited to the console-based installation.
384 MB or greater	GUI-based	Provides windows, pull-down menus, buttons, scrollbars, and iconic images.

TABLE 1-4 x86: Memory Requirements for Display Options

x86: Memory	Type of Installation	Description
<ul style="list-style-type: none"> ■ Starting with the Solaris 10 1/06 release: 256–511 MB ■ For the Solaris 10 3/05 release: 128–383 MB 	Text-based	<p>Contains no graphics, but provides a window and the ability to open other windows.</p> <p>If you install by using the <code>text</code> boot option and the system has enough memory, you are installing in a windowing environment. If you are installing remotely through a <code>tip</code> line or using the <code>nowin</code> boot option, you are limited to the console-based installation.</p>
<ul style="list-style-type: none"> ■ Starting with the Solaris 10 1/06 release: 512 MB ■ For the Solaris 10 3/05 release: 384 MB 	GUI-based	Provides windows, pull-down menus, buttons, scrollbars, and iconic images.

You can also specify the installer you want to use during the installation by entering a selection or special command at a prompt. For instructions, see the procedures in [Chapter 2](#).

Disk Space Recommendations for Software Groups

The Solaris software groups are collections of Solaris packages. Each software group includes support for different functions and hardware drivers.

- For an initial installation, you select the software group to install, based on the functions that you want to perform on the system.
- For an upgrade, you must upgrade to a software group that is installed on the system. For example, if you previously installed the End User Solaris Software Group on your system, you cannot use the upgrade option to upgrade to the Developer Solaris Software Group. However, during the upgrade you can add software to the system that is not part of the currently installed software group.

When you are installing the Solaris software, you can choose to add or remove packages from the Solaris software group that you selected. When you are selecting which packages to add or remove, you need to know about software dependencies and how the Solaris software is packaged.

The following figure shows the grouping of software packages. Reduced Network Support contains the minimal number of packages and Entire Solaris Software Group Plus OEM Support contains all the packages.

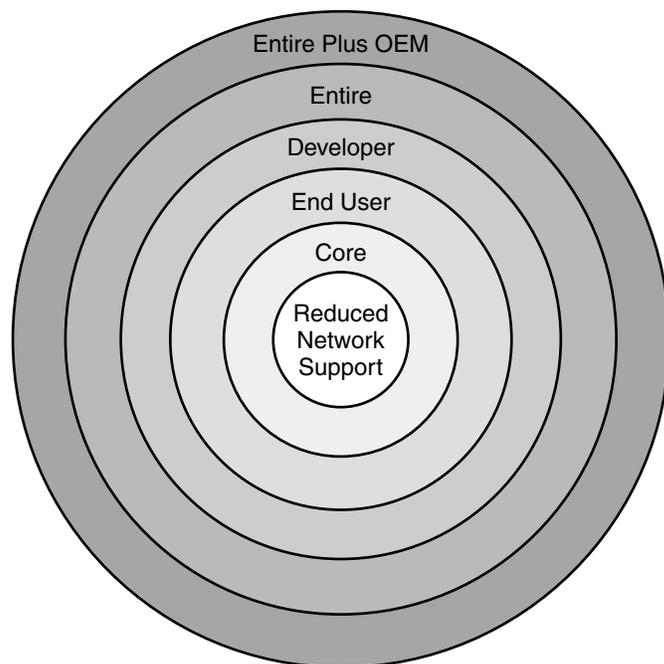


FIGURE 1-1 Solaris Software Groups

[Table 1-5](#) lists the Solaris software groups and the recommended amount of disk space that you need to install each group.

Note – The disk space recommendations in [Table 1-5](#) include space for the following items.

- Swap space
- Patches
- Additional software packages

You might find that the software groups require less disk space than the amount that is listed in this table.

For additional information about how to plan your disk space, see “Allocating Disk and Swap Space” in *Solaris 10 Installation Guide: Network-Based Installations*.

TABLE 1-5 Disk Space Recommendations for Software Groups

Software Group	Description	Recommended Disk Space
Entire Solaris Software Group Plus OEM Support	Contains the packages for the Entire Solaris Software Group plus additional hardware drivers, including drivers for hardware that is not on the system at the time of installation.	6.8 Gbytes
Entire Solaris Software Group	Contains the packages for the Developer Solaris Software Group and additional software that is needed for servers.	6.7 Gbytes
Developer Solaris Software Group	Contains the packages for the End User Solaris Software Group plus additional support for software development. The additional software development support includes libraries, include files, man pages, and programming tools. Compilers are not included.	6.6 Gbytes
End User Solaris Software Group	Contains the packages that provide the minimum code that is required to boot and run a networked Solaris system and the Common Desktop Environment.	5.3 Gbytes
Core System Support Software Group	Contains the packages that provide the minimum code that is required to boot and run a networked Solaris system.	2.0 Gbytes
Reduced Network Support Software Group	Contains the packages that provide the minimum code that is required to boot and run a Solaris system with limited network service support. The Reduced Network Support Software Group provides a multiuser text-based console and system administration utilities. This software group also enables the system to recognize network interfaces, but does not activate network services.	2.0 Gbytes

Checklist for Installation

Use the following checklist to gather the information that you need to install the Solaris OS. You do not need to gather all of the information that is requested on the checklist. You only need to collect the information that applies to your system.

Use this checklist if you are performing an initial installation. If you are upgrading your system, see “Checklist for Upgrading” in *Solaris 10 Installation Guide: Solaris Live Upgrade and Upgrade Planning*.

TABLE 1-6 Installation Checklist

Information for Installation		Description or Example	Answer — Defaults are noted with an asterisk (*)
Network connection		Is the system connected to a network?	Networked/ Non-networked
DHCP		Can the system use Dynamic Host Configuration Protocol (DHCP) to configure its network interfaces? DHCP provides the network parameters that are necessary for installation.	Yes/No*
If you are not using DHCP, note the network address.	IP Address	If you are not using DHCP, supply the IP address for the system. Example: 172.31.255.255 To find this information on a running system, type the following command. # ypmatch host-name hosts	
	Subnet	If you are not using DHCP, is the system part of a subnet? If yes, what is the netmask of the subnet? Example: 255.255.255.0 To find this information on a running system, type the following command. # more /etc/netmasks	
	IPv6	Do you want to enable IPv6 on this machine? IPv6 is a part of the TCP/IP Internet protocol that facilitates IP addressing by adding better security and increasing Internet addresses.	Yes/No*
Host Name		Host name that you choose for the system. To find this information on a running system, type the following command. # uname -n	

TABLE 1-6 Installation Checklist (Continued)

Information for Installation		Description or Example	Answer — Defaults are noted with an asterisk (*)
Kerberos		<p>Do you want to configure Kerberos security on this machine?</p> <p>If yes, gather this information:</p> <p style="text-align: right;">Default Realm:</p> <p>Administration Server:</p> <p>First KDC:</p> <p>(Optional) Additional KDCs:</p> <p>The Kerberos service is a client-server architecture that provides secure transactions over networks.</p>	Yes/No*
If the system uses a name service, provide the following information.	Name Service	<p>Which name service should this system use?</p> <p>To find this information on a running system, type the following command.</p> <p># cat /etc/nsswitch.conf</p> <p>A naming service stores information in a central place, which enables users, machines, and applications to communicate across the network. Examples of information that is stored are host names and addresses or user names and passwords.</p>	NIS+/NIS/DNS/LDAP/None
	Domain Name	<p>Provide the name of the domain in which the system resides.</p> <p>To find this information on a running system, type the following command.</p> <p># domainname</p>	
	NIS+ and NIS	<p>Do you want to specify a name server or let the installation program find one?</p> <p>If you want to specify a name server, provide the following information.</p> <p style="text-align: right;">Server's host name:</p> <ul style="list-style-type: none"> ■ For NIS clients, type the following command to display the server's host name. <p># ypwhich</p> <ul style="list-style-type: none"> ■ For NIS+ clients, type the following command to display the server's host name. <p># nisping</p> <p style="text-align: right;">Server's IP Address:</p>	Specify One/Find One*

TABLE 1-6 Installation Checklist (Continued)

Information for Installation	Description or Example	Answer — Defaults are noted with an asterisk (*)
	<ul style="list-style-type: none"> ■ For NIS clients, type the following command to display the server's IP address. # ypmatch <i>nameserver-name</i> hosts ■ For NIS+ clients, type the following command to display the server's IP address. # nismatch <i>nameserver-name</i> hosts.org_dir <p>Network Information Service (NIS) makes network administration more manageable by providing centralized control over a variety of network information, such as machine names and addresses.</p>	
DNS	<p>Provide IP addresses for the DNS server. You must enter at least one IP address, but you can enter up to three addresses.</p> <p style="text-align: right;">Server's IP Address:</p> <p>To display the server's IP address, type the following command.</p> <pre># getent ipnodes dns</pre> <p>You can enter a list of domains to search when a DNS query is made.</p> <p style="text-align: right;">Search Domain:</p> <p>Search Domain:</p> <p>Search Domain:</p> <p>The domain name system (DNS) is the name service that the Internet provides for TCP/IP networks. DNS provides host names to the IP address service. DNS simplifies communication by using machine names instead of numerical IP addresses. DNS also serves as a database for mail administration.</p>	
LDAP	<p>Provide the following information about your LDAP profile.</p> <p style="text-align: right;">Profile Name:</p> <p style="text-align: right;">Profile Server:</p> <p>If you specify a proxy credential level in your LDAP profile, gather this information.</p> <p style="text-align: right;">Proxy-bind distinguished name:</p>	

TABLE 1-6 Installation Checklist (Continued)

Information for Installation	Description or Example	Answer — Defaults are noted with an asterisk (*)
	<p style="text-align: right;">Proxy-bind password:</p> <p>Lightweight Directory Access Protocol (LDAP) defines a relatively simple protocol for updating and searching directories that are running over TCP/IP.</p>	
Default Route	<p>Do you want to specify a default route IP address or let the Solaris installation program find one?</p> <p>The default route provides a bridge that forwards traffic between two physical networks. An IP address is a unique number that identifies each host on a network.</p> <p>You have the following choices:</p> <ul style="list-style-type: none"> ■ You can specify the IP address. An <code>/etc/defaultrouter</code> file is created with the specified IP address. When the system is rebooted, the specified IP address becomes the default route. ■ You can let the Solaris installation program detect an IP address. However, the system must be on a subnet that has a router that advertises itself by using the ICMP router discovery protocol. If you are using the command-line interface, the software detects an IP address when the system is booted. ■ You can choose None if you do not have a router or do not want the software to detect an IP address at this time. The software automatically tries to detect an IP address on reboot. 	Detect one*/Specify one/None
Time Zone	How do you want to specify your default time zone?	Geographic region* Offset from GMT Time zone file
Root Password	Provide the root password for the system.	
Locales	For which geographic regions do you want to install support?	
SPARC: Power Management (only available on SPARC systems that support Power Management)	<p>Do you want to use Power Management?</p> <p>Note – If your system has Energy Star version 3 or later, you are not prompted for this information.</p>	Yes*/No
Automatic reboot or CD/DVD ejection	<p>Reboot automatically after software installation?</p> <p>Eject CD/DVD automatically after software installation?</p>	<p>Yes*/No</p> <p>Yes*/No</p>

TABLE 1-6 Installation Checklist (Continued)

Information for Installation	Description or Example	Answer — Defaults are noted with an asterisk (*)
Default or Custom Install	<p>Do you want to perform a default installation, or customize the installation?</p> <ul style="list-style-type: none"> ■ Select Default installation to format the entire hard disk and install a preselected set of software. ■ Select Custom installation to modify the hard disk layout and select the software that you want to install. <p>Note – The text installer does not prompt you to select a Default or Custom Installation. To perform a default installation, accept the default values that are provided in the text installer. To perform a custom installation, edit the values in the text installer screens.</p>	Default installation*/Custom installation
Software Group	Which Solaris Software Group do you want to install?	Entire Plus OEM Entire* Developer End User Core Reduced Networking
Custom Package Selection	<p>Do you want to add or remove software packages from the Solaris Software Group that you install?</p> <p>Note – When you select which packages to add or remove, you need to know about software dependencies and how Solaris software is packaged.</p>	
Select Disks	<p>On which disks do you want to install the Solaris software?</p> <p>Example: c0t0d0</p>	
x86: fdisk partitioning	<p>Do you want to create, delete, or modify a Solaris fdisk partition?</p> <p>Each disk that is selected for file system layout must have a Solaris fdisk partition.</p> <p>If your system currently has a service partition, the Solaris installation program preserves the service partition by default. If you do not want to preserve the service partition, you must customize the fdisk partitions. For more information about preserving a service partition, see “Default Boot-Disk Partition Layout Preserves the Service Partition” in <i>Solaris 10 Installation Guide: Network-Based Installations</i>.</p>	

TABLE 1-6 Installation Checklist (Continued)

Information for Installation	Description or Example	Answer — Defaults are noted with an asterisk (*)
	Select Disks for <code>fdisk</code> Partition Customization? Customize <code>fdisk</code> partitions?	Yes/No* Yes/No*
Preserve Data	Do you want to preserve any data that exists on the disks where you are installing the Solaris software?	Yes/No*
Auto-layout File Systems	Do you want the installation program to automatically lay out file systems on your disks? If yes, which file systems should be used for auto-layout? Example: <code>/, /opt, /var</code> If no, you must provide file system configuration information. Note – The Solaris installation GUI lays out file systems automatically by default.	Yes*/No
Mount Remote File Systems	Does this system need to access software on another file system? If yes, provide the following information about the remote file system. <div style="text-align: right;"> Server: IP Address: Remote File System: Local Mount Point: </div>	Yes/No*
If you are installing through a <code>tip</code> line, follow these instructions.	Ensure that your window display is at least 80 columns wide and 24 rows long. For more information, see <code>tip(1)</code> . To determine the current dimensions of your <code>tip</code> window, use the <code>stty</code> command. For more information, see the man page, <code>stty(1)</code> .	
Check your Ethernet connection.	If the system is part of a network, verify that an Ethernet connector or similar network adapter is connected to your system.	

TABLE 1-6 Installation Checklist (Continued)

Information for Installation	Description or Example	Answer — Defaults are noted with an asterisk (*)
Review the planning chapter and other relevant documentation.	<ul style="list-style-type: none"> ■ Review the entire planning chapter or specific sections in Chapter 3, “Solaris Installation and Upgrade (Planning),” in <i>Solaris 10 Installation Guide: Network-Based Installations</i>. ■ Review the <i>Solaris 10 Release Notes</i> on http://docs.sun.com and vendor release notes to ensure that the software you use is supported in the new Solaris release. ■ Review the <i>Solaris 10 Sun Hardware Platform Guide</i> to ensure that your hardware is supported. ■ Review the documentation that accompanied your system to ensure that your system and devices are supported by the Solaris release. 	

Where to Find Additional Installation Information

For additional information about requirements and recommendations for installing the Solaris OS, see the following documents.

- For information about new installation features, see Chapter 1, “What’s New in Solaris Installation,” in *Solaris 10 Installation Guide: Network-Based Installations*.
- For disk space guidelines and recommendations, see “Allocating Disk and Swap Space” in *Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations*.
- For additional requirements and recommendations for upgrading to the Solaris OS, see “Upgrade” in *Solaris 10 Installation Guide: Solaris Live Upgrade and Upgrade Planning*.
- For information about working with x86 partitions during your installation, see “Partitioning Recommendations” in *Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations*.
- For a road map of the overall installation process, see “Task Map: Installing or Upgrading the Solaris Software” in *Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations*.
- For information about all the new features in the Solaris OS, see *Solaris 10 What’s New*.

These documents are available at <http://docs.sun.com>.

Installing With the Solaris Installation Program (Tasks)

This chapter explains how to use the Solaris installation program on the Solaris 10 Operating System DVD or Solaris 10 Software - 1 CD to install or upgrade Solaris software.

This chapter contains the following topics:

- “SPARC: Performing an Installation or Upgrade With the Solaris Installation Program” on page 23
- “x86: Performing an Installation or Upgrade With the Solaris Installation Program” on page 31

For information about new installation features, see Chapter 1, “What’s New in Solaris Installation,” in *Solaris 10 Installation Guide: Network-Based Installations*. For information about all the new features in the Solaris OS, see *Solaris 10 What’s New*.

SPARC: Performing an Installation or Upgrade With the Solaris Installation Program

You can either install or upgrade the Solaris OS by using the Solaris installation program. This section lists the tasks you need to perform to install the Solaris OS, and provides detailed instructions about how to install the Solaris OS from DVD or CD media.

▼ SPARC: To Install or Upgrade With the Solaris Installation Program

This procedure describes how to install a standalone SPARC based system from CD or DVD media.

Note – If you want to install the Solaris OS on a machine or domain that does not have a directly attached DVD-ROM or CD-ROM drive, you can use a DVD-ROM or CD-ROM drive that is attached to another machine. For detailed instructions, refer to Appendix B, “Installing or Upgrading Remotely (Tasks),” in *Solaris 10 Installation Guide: Network-Based Installations*.

Before You Begin

Perform the following tasks before you begin your installation.

- Ensure that you have the following media.
 - For a DVD installation, the Solaris 10 Operating System for SPARC Platforms DVD
 - For a CD installation:
 - Solaris 10 Software CDs.
 - Solaris 10 Languages for SPARC Platforms CD – The installation program prompts you for this CD if necessary to support languages for specific geographic regions.

Note – If you want to upgrade a system that has non-global zones installed, you cannot use the Solaris 10 Software CDs. You must use the Solaris 10 Operating System DVD or a DVD-based network installation image.

- Verify that your system meets the minimum requirements.

Your system should meet the following requirements.

- Memory – 128 Mbytes or greater
- Disk space – 6.8 Gbytes or greater
- Processor speed – 200 MHz or greater

For detailed information about system requirements, see [“System Requirements and Recommendations” on page 9](#).

- Gather the information you need to install the Solaris OS.
 - For a nonnetworked system, gather the following information.
 - Host name of the system that you are installing
 - Language and locales that you intend to use on the system
 - For a networked system, gather the following information.

- Host name of the system that you are installing
- Language and locales that you intend to use on the system
- Host IP address
- Subnet mask
- Type of name service (for example, DNS, NIS, or NIS+)
- Domain name
- Host name of the name server
- Host IP address of the name server
- Root password

For information that you need to gather to install your system, see [“Checklist for Installation” on page 14](#). If you are upgrading your system, see [“Checklist for Upgrading”](#) in *Solaris 10 Installation Guide: Solaris Live Upgrade and Upgrade Planning*.

- (Optional) Back up your system.
If you want to preserve any existing data or applications, back up the system. For detailed instructions about how to back up your system, see Chapter 24, “Backing Up and Restoring File Systems (Overview),” in *System Administration Guide: Devices and File Systems*.

Steps 1. **Insert the Solaris 10 Operating System for SPARC Platforms DVD or Solaris 10 Software for SPARC Platforms - 1 CD.**

2. **Boot the system.**

- **If the system is new, out-of-the-box, turn on the system.**
- **If you want to install a system that is currently running, shut down the system.**

The `ok` prompt is displayed.

3. **Start the Solaris installation program.**

- **To boot from the local DVD or CD and start the Solaris installation GUI, type the following command.**

```
ok boot cdrom
```

- **To boot from the local DVD or CD and start the text installer in a desktop session, type the following command.**

```
ok boot cdrom - text
```

`text` Specifies to run the text installer in a desktop session. Use this option to override the default GUI installer.

- **To boot from the local DVD or CD and start the text installer in a console session, type the following command.**

```
ok boot cdrom - nowin
```

`nowin` Specifies to run the text installer in a console session. Use this option to override the default GUI installer.

For detailed information about the Solaris installation GUI and text installer, see “Solaris Installation Program GUI or Text Installer Requirements” on page 10.

The installation begins. The installation program prompts you to select a language to use during the installation.

4. Select the language you want to use during the installation, and press Enter.

After a few seconds, the Solaris Installation Program Welcome screen appears.

- If you are running the Solaris GUI installation program, the screen that is shown in Figure 2-1 is displayed.
- If you are running the Solaris text installer in a desktop session, the screen that is shown in Figure 2-2 is displayed.

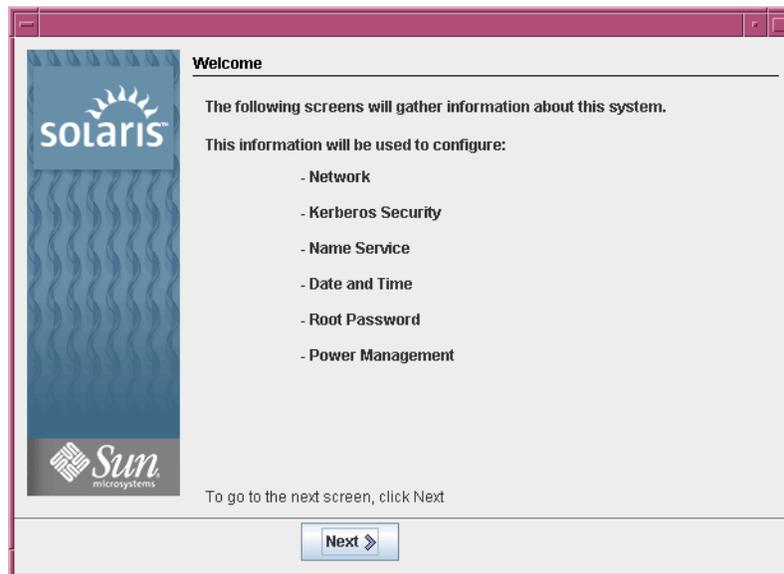


FIGURE 2-1 Solaris GUI Installation Program Welcome Screen

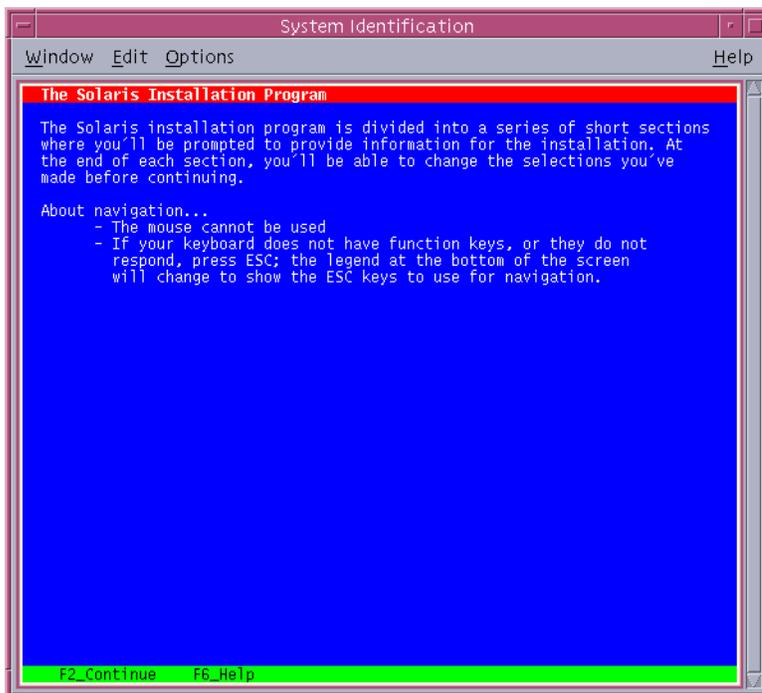


FIGURE 2-2 Solaris Text Installer Welcome Screen

5. **Click Next to begin the installation. If you are prompted, answer the system configuration questions.**
 - If you preconfigured all of the system information, the installation program does not prompt you to enter any configuration information. See Chapter 6, “Preconfiguring System Configuration Information (Tasks),” in *Solaris 10 Installation Guide: Network-Based Installations* for more information.
 - If you did not preconfigure all the system information, the installation program prompts you for this information on several screens. Use the “[Checklist for Installation](#)” on page 14 to help you answer the configuration questions.

After you answer the configuration questions, the Welcome to Solaris dialog box appears.



FIGURE 2-3 Welcome to Solaris Screen

The Installer Questions screen appears.

6. **Decide if you want to reboot the system automatically and if you want to automatically eject the disc. Click Next.**

The Specify Media screen appears.

7. **Specify the media you are using to install. Click Next.**

The License panel appears.

8. **Accept the license agreement to continue the installation. Click Next.**

The Solaris installation program then determines if the system can be upgraded. To upgrade, the system must have an existing Solaris root (/) file system. The Solaris installation program detects the necessary conditions and then upgrades the system.

The Select Upgrade or Initial Install screen appears.

9. **Decide if you want to perform an initial installation or an upgrade. Click Next.**

If you are upgrading a system that has non-global zones installed, follow these steps.

- a. **When you are prompted to select initial installation or upgrade, choose Upgrade. Click Next.**

- b. **If your system has multiple root (/) partitions, select the partition that you want to upgrade on the Select Version to Upgrade panel.**

The Solaris installation program displays a message that indicates that you cannot customize your upgrade. The Solaris installation program analyzes your system to determine if the system can be upgraded. The Ready to Upgrade panel is displayed.

If your system has only one root partition, the Solaris installation program does not prompt you to select a partition to upgrade. The partition is automatically selected.

- c. **If you want to continue the upgrade, click Install Now on the Ready to Upgrade panel.**

The Solaris installation program begins to upgrade your system. After the upgrade is completed, you might need to correct some local modifications that were not preserved. For more information, go to [Step a](#) in [Step 12](#).

If you do not want to continue the upgrade, click Back to perform an initial installation.

10. Select the type of installation you want to perform. Click Next.

- **Select Default Install to install the Entire Solaris Software Group.**
- **Select Custom Install if you want to perform the following tasks.**
 - Install a specific software group
 - Install additional software
 - Install specific software packages
 - Install a specific locale
 - Customize the disk layout

For more information about software groups, see [“Disk Space Recommendations for Software Groups”](#) on page 12.

Note – The text installer does not prompt you to select a Default or Custom Installation. To perform a default installation, accept the default values that are provided in the text installer. To perform a custom installation, edit the values in the text installer screens.

11. If you are prompted, answer any additional configuration questions.

When you have provided the information that is required to install the system, the Ready to Install screen is displayed.

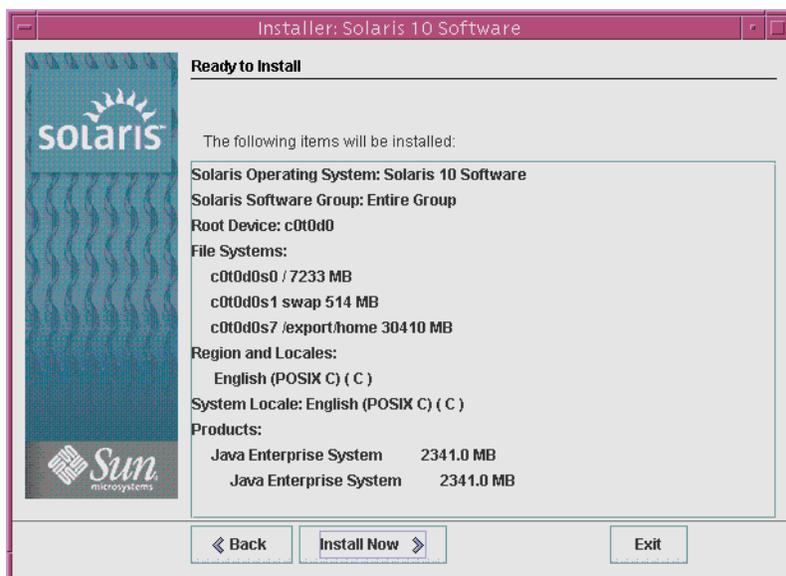


FIGURE 2-4 Solaris Installation Ready to Install Screen

12. Click **Install Now** to install the Solaris software. Follow the instructions on the screen to install the Solaris software.

When the Solaris installation program finishes installing the Solaris software, the system reboots automatically or prompts you to reboot manually.

If you are installing additional products, you are prompted to insert the DVD or CD for those products. For installation procedures, refer to the appropriate installation documentation.

After the installation is finished, installation logs are saved in a file. You can find the installation logs in the `/var/sadm/system/logs` and `/var/sadm/install/logs` directories.

- If you are performing an initial installation, the installation is complete. Go to [Step 13](#).
- If you are upgrading the Solaris software, you might need to correct some local modifications that were not preserved. Continue to [Step a](#).
 - a. Review the contents of the `/a/var/sadm/system/data/upgrade_cleanup` file to determine whether you need to correct local modifications that the Solaris installation program could not preserve.
 - b. Correct any local modifications that were not preserved.

13. If you did not select automatic reboot during the installation, reboot the system.

```
# reboot
```

Troubleshooting If you encountered any problems during the installation or upgrade, see Appendix A, “Troubleshooting (Tasks),” in *Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations*.

x86: Performing an Installation or Upgrade With the Solaris Installation Program

You can either install or upgrade the Solaris OS by using the Solaris installation program. This section lists the task you need to perform to install the Solaris OS, and provides detailed instructions about how to install the Solaris OS from DVD or CD media.

Choose one of the following procedures.

- **For the Solaris 10 3/05 release**, see “[x86: To Install or Upgrade With the Solaris Installation Program](#)” on page 31 for instructions about how to install the Solaris OS.
- **Starting with the Solaris 10 1/06 release**, see “[x86: To Install or Upgrade With the Solaris Installation Program With GRUB](#)” on page 42 for instructions about how to install the Solaris OS.

▼ x86: To Install or Upgrade With the Solaris Installation Program

For the Solaris 10 3/05 release, follow this procedure to install a standalone x86 based system from CD or DVD media.

Starting with the Solaris 10 1/06 release, the Solaris installation programs for x86 based systems use the GRUB boot loader. For instructions about how to install the Solaris OS with GRUB, see “[x86: To Install or Upgrade With the Solaris Installation Program With GRUB](#)” on page 42.

Note – If you want to install the Solaris OS on a machine or domain that does not have a directly attached DVD-ROM or CD-ROM drive, you can use a DVD-ROM or CD-ROM drive that is attached to another machine. For detailed instructions, refer to Appendix B, “Installing or Upgrading Remotely (Tasks),” in *Solaris 10 Installation Guide: Network-Based Installations*.

Before You Begin

Perform the following tasks before you begin your installation.

- Ensure that you have the following media.
 - If you are installing from a DVD, use the Solaris 10 Operating System for x86 Platforms DVD.
 - If you are installing from CD media, use the following:
 - Solaris 10 Software CDs.
 - Solaris 10 Languages for x86 Platforms CD – The installation program prompts you for this CD if necessary to support languages for specific geographic regions.

Note – If you want to upgrade a system that has non-global zones installed, you cannot use the Solaris 10 Software CDs. You must use the Solaris 10 Operating System DVD or a network installation image.

- Check your system BIOS to make sure you can boot from CD or DVD media. If your system must boot from a diskette, complete the steps described in “Solaris 10 3/05 for x86: Copying the Boot Software to a Diskette” in *Solaris 10 Installation Guide: Network-Based Installations*.
- Acquire any install time updates (ITUs) or drivers that you need to install the Solaris OS on your hardware. To determine if you need an ITU or additional drivers, see your hardware documentation.
- Verify that your system meets the minimum requirements.

Your system should meet the following requirements.

 - Memory – 128 Mbytes or greater
 - Disk space – 6.8 Gbytes or greater
 - Processor speed – 120 MHz or greater with hardware floating point

For detailed information about system requirements, see “[System Requirements and Recommendations](#)” on page 9.

If you are installing the Solaris OS on a system that is not produced by Sun Microsystems, Inc., check the Solaris Hardware Compatibility List at <http://www.sun.com/bigadmin/hcl> before you begin to install.

- You cannot use the Solaris installation program to upgrade to the Solaris 10 7/05 release on a system that has non-global zones installed. For information about how to upgrade a system that has non-global zones installed, see Chapter 27, “Upgrading a Solaris 10 System That Has Installed Non-Global Zones,” in *System Administration Guide: Solaris Containers-Resource Management and Solaris Zones*.
- Gather the information you need to install the Solaris OS.
 - For a nonnetworked system, gather the following information.
 - Host name of the system that you are installing
 - Language and locales that you intend to use on the system
 - For a networked system, gather the following information.
 - Host name of the system that you are installing
 - Language and locales that you intend to use on the system
 - Host IP address
 - Subnet mask
 - Type of name service (for example, DNS, NIS, or NIS+)
 - Domain name
 - Host name of the name server
 - Host IP address of the name server
 - Root password

For information that you need to gather to install your system, see “[Checklist for Installation](#)” on page 14. If you are upgrading your system, see “[Checklist for Upgrading](#)” in *Solaris 10 Installation Guide: Solaris Live Upgrade and Upgrade Planning*.

- If your system must boot from diskette, copy the Solaris Device Configuration Assistant to diskette. To determine if your system must boot from diskette, check the system BIOS.

For instructions, see “Solaris 10 3/05 for x86: Copying the Boot Software to a Diskette” in *Solaris 10 Installation Guide: Network-Based Installations*.

- (Optional) Back up your system.

If you want to preserve any existing data or applications, back up the system. For detailed instructions about how to back up your system, see Chapter 24, “Backing Up and Restoring File Systems (Overview),” in *System Administration Guide: Devices and File Systems*.

Steps 1. Insert the appropriate media in your system.

- If you boot from the Solaris 10 Operating System DVD or the Solaris 10 Software - 1 CD, insert the disc. Your system’s BIOS must support booting from a DVD or CD.

You might need to manually set your BIOS to boot from a DVD or CD. See your hardware documentation for more information about how to set the BIOS.

- If you boot from a diskette, insert a Solaris 10 Device Configuration Assistant diskette into the system's diskette drive.

2. Boot the system by shutting it down and then turning it off and on.

3. If you need to manually set the BIOS to boot from CD or DVD, type the appropriate key sequence to interrupt your system boot process.

Modify the boot priority in the BIOS, and exit the BIOS to return to the installation program.

A memory test and hardware detection are executed. The screen refreshes. The Solaris Booting System screen is displayed.

4. Decide if you need to modify device settings.

You might need to modify device settings if you want to perform the following tasks:

- Install device drivers
- Install ITUs
- Disable Advanced Configuration and Power Interface (ACPI)
- Set up a serial console
- Reset the default boot device

- **If you do not need to modify device settings, continue.**
- **If you need to modify device settings with the Solaris Device Configuration Assistant, press the ESC key.**

Note – You must press the ESC key within five seconds to interrupt the installation and modify device settings.

The Solaris Device Configuration Assistant (DCA) screen is displayed. Follow the instructions on the DCA screens to modify the device settings.

The Solaris installation program checks the default boot disk for the requirements to install or upgrade the system. If the Solaris installation cannot detect the system configuration, the program prompts you for any missing information.

When the check is completed, the installation selection screen is displayed.

5. Select an installation type.

The installation selection screen displays the following options.

Select the type of installation you want to perform:

- 1 Solaris Interactive
- 2 Custom JumpStart

```
3 Solaris Interactive Text (Desktop session)
4 Solaris Interactive Text (Console session)
```

Enter the number of your choice followed by the <ENTER> key.
Alternatively, enter custom boot arguments directly.

If you wait 30 seconds without typing anything,
an interactive installation will be started.

- **To install with the Solaris installation GUI, type 1, then press Enter.**
- **To perform an unattended custom JumpStart installation, type 2, then press Enter.**

For information about the custom JumpStart installation method, see *Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations*.

- **To install with the text installer in a desktop session, type 3, then press Enter. You can also type `b - text` at the prompt.**
Select this installation type to override the default GUI installer and run the text installer.
- **To install with the text installer in a console session, type 4, then press Enter. You can also type `b - nowin` at the prompt.**
Select this installation type to override the default GUI installer and run the text installer.

For detailed information about the Solaris installation GUI and text installer, see [“Solaris Installation Program GUI or Text Installer Requirements”](#) on page 10.

The system configures the devices and interfaces, and searches for configuration files. After a few seconds, the Solaris Installation Program screen is displayed.

6. **On the Solaris Installation Program screen, press F2_Continue.**
 - If the installation program detects the type of keyboard, display, and mouse on your system, the Select a Language screen is displayed. Go to [Step 12](#).
 - If the installation program does not detect the type of keyboard, display, and mouse on your system, the kdmconfig – Introduction screen is displayed. Go to [Step 7](#).
7. **(Optional) Configure your system to use the keyboard, display, and mouse.**
 - **If you want to install the Solaris OS with the text installer in a console session, press F4_Bypass. Go to [Step 12](#).**

- **If you want to install the Solaris OS with the Solaris interactive installation GUI or the text program in a desktop session, press F2_Continue.**

The `kdmconfig` utility detects the drivers that are necessary to configure the keyboard, display, and mouse on your system. The `kdmconfig` utility displays the results of this search in the `kdmconfig – View and Edit Window System Configuration` screen.

Note – If the `kdmconfig` utility cannot detect the video driver for your system, the `kdmconfig` utility selects the 640x480 VGA driver. The Solaris installation GUI cannot be displayed with the 640x480 VGA driver. As a result, the Solaris installation text installer is displayed. To use the Solaris installation GUI, use the `kdmconfig` utility to select the correct video driver for your system.

8. **Examine the configuration information on the `kdmconfig – View and Edit Window System Configuration` screen and make any changes you need.**

If any of the devices that are listed are not properly configured, follow these steps.

 - a. **Select the device you want to change, and press F2_Continue.**
 - b. **Select the appropriate driver for the device, and press F2_Continue.**
 - c. **Repeat Step a through Step b for each device you need to change.**
9. **When you are finished, select No changes needed – Test/Save and Exit and press F2_Continue.**

The `kdmconfig Window System Configuration Test` screen appears.
10. **Press F2_Continue.**

The screen refreshes and the `kdmconfig Window System Configuration Test` palette and pattern screen appears.
11. **Move the pointer and examine the colors that are shown on the palette to ensure that they are displayed accurately.**
 - **If the colors are not displayed accurately, click No. If possible, press any key on the keyboard, or wait until `kdmconfig` exits the `kdmconfig Window System Configuration Test` screen automatically. Repeat Step 7 through Step 11 until the colors are displayed accurately and you can move the pointer as expected.**
 - **If the colors are displayed accurately, click Yes.**

After a few seconds, the `Select a Language` screen is displayed.
12. **Select the language you want to use during the installation, and press Enter.**

After a few seconds, the `Solaris Installation Program` screen appears.

- If you are running the Solaris GUI installation program, the screen that is shown in Figure 2-5 is displayed.
- If you are running the Solaris text installer in a desktop session, the screen that is shown in Figure 2-6 is displayed.

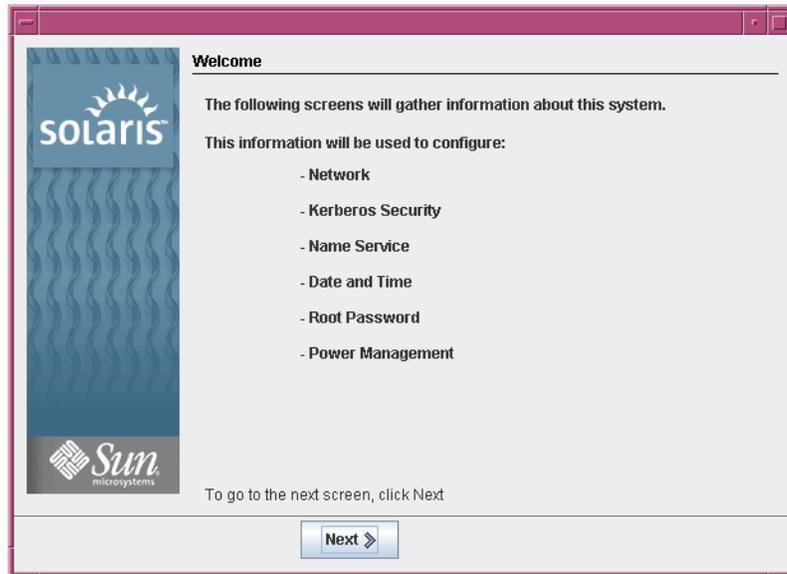


FIGURE 2-5 Solaris GUI Installation Program Welcome Screen

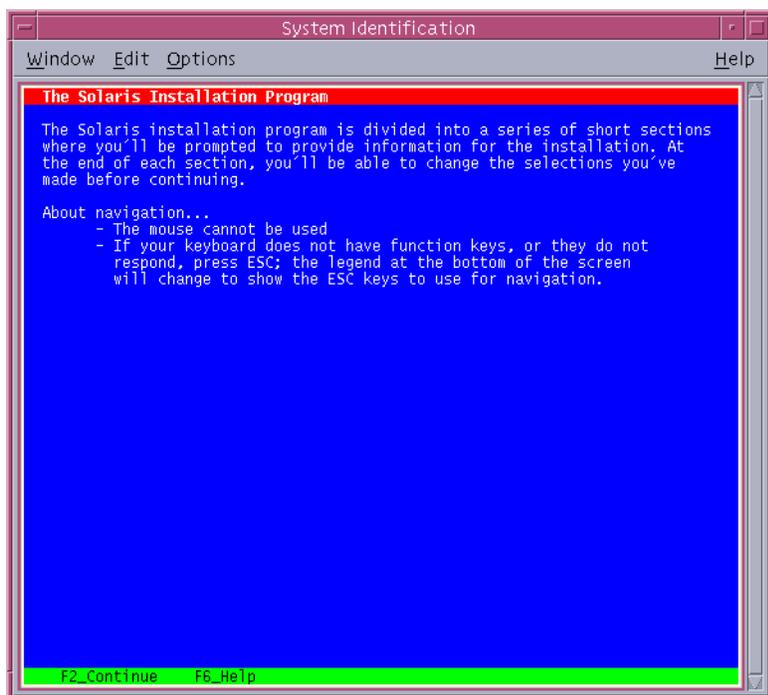


FIGURE 2-6 Solaris Text Installation Program Welcome Screen

13. Click Next to begin the installation. If you are prompted, answer any remaining configuration questions.

- If you preconfigured all of the system information, the installation program does not prompt you to enter any configuration information. See Chapter 6, “Preconfiguring System Configuration Information (Tasks),” in *Solaris 10 Installation Guide: Network-Based Installations* for more information.
- If you did not preconfigure all the system information, the installation program prompts you for this information on several screens. Use the “Checklist for Installation” on page 14 to help you answer the configuration questions.

After you answer the configuration questions, the Welcome to Solaris dialog box appears.

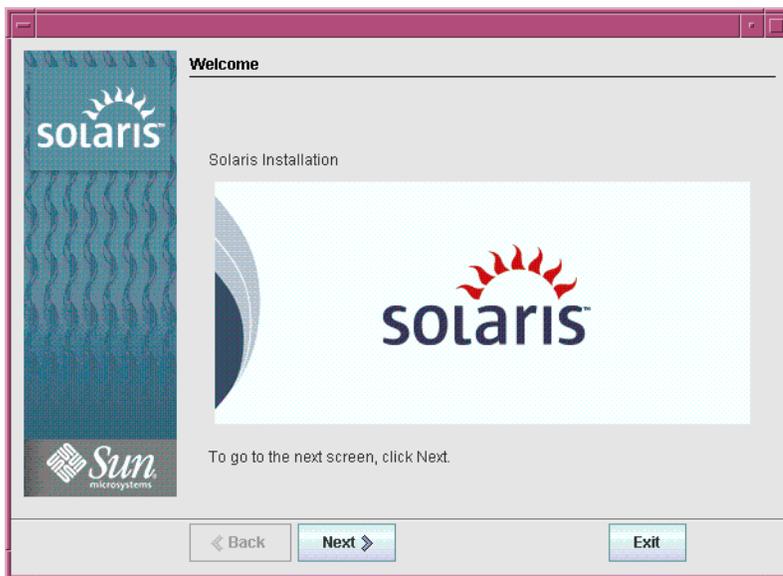


FIGURE 2-7 Welcome to Solaris Screen

14. **Decide if you want to reboot the system automatically and if you want to automatically eject the disc. Click Next.**

The Specify Media screen appears.

15. **Specify the media you are using to install. Click Next.**

The License screen appears.

16. **Accept the license agreement to continue the installation. Click Next.**

The Solaris installation program then determines if the system can be upgraded. To upgrade, the system must have an existing Solaris root (/) file system. The Solaris installation program detects the necessary conditions and then upgrades the system.

The Select Upgrade or Initial Install screen appears.

17. **Decide if you want to perform an initial installation or an upgrade. Click Next.**

Note – If you restored the diagnostic or service partition on your system before you started the installation, you might not be able to upgrade to the Solaris OS. For more information, see “Upgrade” in *Solaris 10 Installation Guide: Solaris Live Upgrade and Upgrade Planning*.

18. Select the type of installation you want to perform. Click Next.

- Select **Default Install** to install the Entire Solaris Software Group.
- Select **Custom Install** if you want to perform the following tasks.
 - Install a specific software group
 - Install additional software
 - Install specific software packages
 - Install a specific locale
 - Customize the disk layout

For more information about software groups, see [“Disk Space Recommendations for Software Groups”](#) on page 12. For information about customizing `fdisk` partitions, see [“Partitioning Recommendations”](#) in *Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations*.

Note – The text installer does not prompt you to select a Default or Custom Installation. To perform a default installation, accept the default values that are provided in the text installer. To perform a custom installation, edit the values in the text installer screens.

19. If you are prompted, answer any additional configuration questions.

When you have provided the information that is required to install the system, the Ready to Install screen is displayed.

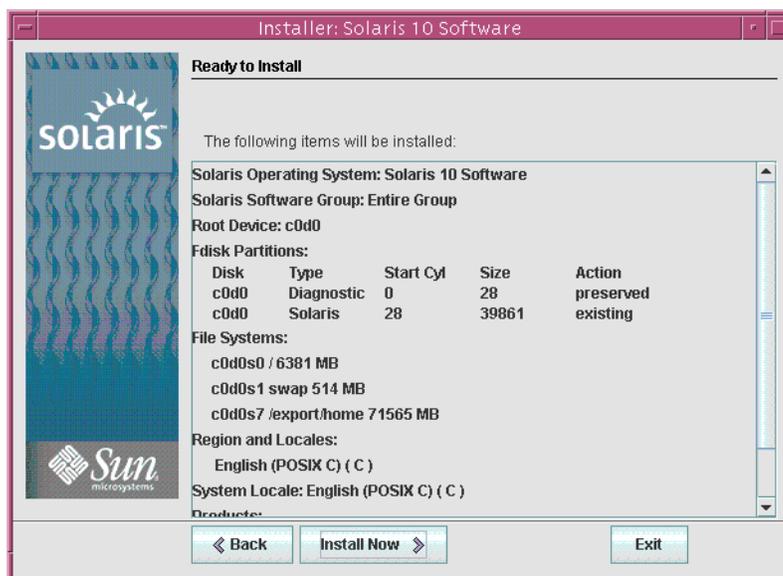


FIGURE 2-8 Solaris Installation Ready to Install Screen

20. Click **Install Now** to install the Solaris software. Follow the instructions on the screen to install the Solaris software and any additional software on the system. When the Solaris installation program is finished installing the Solaris software, the system reboots automatically or prompts you to reboot manually.

After the installation is finished, installation logs are saved in a file. You can find the installation logs in the `/var/sadm/system/logs` and `/var/sadm/install/logs` directories

- If you are performing an initial installation, the installation is complete. Go to [Step 21](#).
- If you are upgrading the Solaris software, you might need to correct some local modifications that were not preserved. Go to [Step a](#).
 - a. Review the contents of the `/a/var/sadm/system/data/upgrade_cleanup` file to determine whether you need to correct local modifications that the Solaris installation program could not preserve.
 - b. Correct any local modifications that were not preserved.

21. If you did not select automatic reboot during the installation, reboot the system.

```
# reboot
```

Troubleshooting If you encounter any problems during the installation or upgrade, see Appendix A, “Troubleshooting (Tasks),” in *Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations*.

▼ x86: To Install or Upgrade With the Solaris Installation Program With GRUB

Starting with the Solaris 10 1/06 release, the Solaris installation programs for x86 based systems use the GRUB boot loader. This procedure describes how to install a standalone x86 based system with the GRUB bootloader from CD or DVD media. For overview information about the GRUB boot loader, see Chapter 4, “GRUB Based Booting For Solaris Installation,” in *Solaris 10 Installation Guide: Network-Based Installations*.

For the Solaris 10 3/05 release, see “x86: To Install or Upgrade With the Solaris Installation Program” on page 31 for instructions about how to install the Solaris OS from CD or DVD.

Note – If you want to install the Solaris OS on a machine or domain that does not have a directly attached DVD-ROM or CD-ROM drive, you can use a DVD-ROM or CD-ROM drive that is attached to another machine. For detailed instructions, refer to Appendix B, “Installing or Upgrading Remotely (Tasks),” in *Solaris 10 Installation Guide: Network-Based Installations*.

Before You Begin Perform the following tasks before you begin your installation.

- Ensure that you have the following media.
 - If you are installing from a DVD, use the Solaris 10 Operating System for x86 Platforms DVD.
 - If you are installing from CD media, use the following:
 - Solaris 10 Software CDs.
 - Solaris 10 Languages for x86 Platforms CD – The installation program prompts you for this CD if necessary to support languages for specific geographic regions.

Note – If you want to upgrade a system that has non-global zones installed, you cannot use the Solaris 10 Software CDs. You must use the Solaris 10 Operating System DVD or a DVD-based network installation image.

- Check your system BIOS to make sure you can boot from CD or DVD media.
- Acquire any install time updates (ITUs) or drivers that you need to install the Solaris OS on your hardware. To determine if you need an ITU or additional drivers, see your hardware documentation.
- Verify that your system meets the minimum requirements.
Your system should meet the following requirements.
 - Memory – 256 Mbytes or greater
 - Disk space – 6.8 Gbytes or greater
 - Processor speed – 120 MHz or greater with hardware floating point

For detailed information about system requirements, see [“System Requirements and Recommendations”](#) on page 9.

If you are installing the Solaris OS on a system that is not produced by Sun Microsystems, Inc., check the Solaris Hardware Compatibility List at <http://www.sun.com/bigadmin/hcl> before you begin to install.

- Gather the information you need to install the Solaris OS.
 - For a nonnetworked system, gather the following information.
 - Host name of the system that you are installing
 - Language and locales that you intend to use on the system
 - For a networked system, gather the following information.
 - Host name of the system that you are installing
 - Language and locales that you intend to use on the system
 - Host IP address
 - Subnet mask
 - Type of name service (for example, DNS, NIS, or NIS+)
 - Domain name
 - Host name of the name server
 - Host IP address of the name server
 - Root password

For information that you need to gather to install your system, see [“Checklist for Installation”](#) on page 14. If you are upgrading your system, see [“Checklist for Upgrading”](#) in *Solaris 10 Installation Guide: Solaris Live Upgrade and Upgrade Planning*.

- (Optional) Back up your system.
If you want to preserve any existing data or applications, back up the system. For detailed instructions about how to back up your system, see Chapter 24, [“Backing Up and Restoring File Systems \(Overview\)”](#) in *System Administration Guide: Devices and File Systems*.

Steps 1. **Insert the appropriate media in your system.**

If you boot from the Solaris 10 Operating System DVD or the Solaris 10 Software - 1 CD, insert the disc. Your system's BIOS must support booting from a DVD or CD.

You might need to manually set your BIOS to boot from a DVD or CD. See your hardware documentation for more information about how to set the BIOS.

2. **Boot the system by shutting it down and then turning it off and on.**

3. **If you need to manually set the BIOS to boot from CD or DVD, type the appropriate key sequence to interrupt your system boot process.**

Modify the boot priority in the BIOS, and exit the BIOS to return to the installation program.

A memory test and hardware detection are executed. The screen refreshes. The GRUB menu is displayed.

```
GNU GRUB version 0.95 (631K lower / 2095488K upper memory)
```

```
+-----+
| Solaris
| Solaris Serial Console ttya
| Solaris Serial Console ttyb (for lx50, v60x and v65x)
|
+-----+
```

Use the ^ and v keys to select which entry is highlighted.
Press enter to boot the selected OS, 'e' to edit the
commands before booting, or 'c' for a command-line.

4. **Select the appropriate installation option.**

- **If you want to install the Solaris OS from CD or DVD on your current system, select Solaris, then press Enter.**
Select this option if you want to install the system by using the default values.
- **If you want to install the Solaris OS and send the screen output to serial console ttya (COM1), select Solaris Serial Console ttya.**
Select this option if you want to change the system display to a device that is connected to serial port COM1.
- **If you want to install the Solaris OS and send the screen output to serial console ttyb (COM2), select Solaris Serial Console ttyb.**
Select this option if you want to change the system display to a device that is connected to serial port COM2.
- **If you want to install the Solaris OS with specific boot arguments, follow these steps.**
You might want to use specific boot arguments to customize the system configuration during the installation.

- a. **On the GRUB menu, select the installation option you want to edit, then press e.**

Boot commands that are similar to the following text are displayed in the GRUB menu.

```
kernel /boot/multiboot kernel/unix -B install_media=cdrom
module /boot/x86.miniroot
```

- b. **Use the arrow keys to select the boot entry that you want to edit, then press e.**

The boot command that you want to edit is displayed in the GRUB edit window.

- c. **Edit the command by typing the boot arguments or options you want to use.**

The command syntax for the Grub edit menu is as follows.

```
grub edit>kernel /boot/multiboot kernel/unix/ \
install [url|ask] -B options install_media=media_type
```

For information about boot arguments and command syntax, see Chapter 10, “Preparing to Install From the Network (Command Reference),” in *Solaris 10 Installation Guide: Network-Based Installations*.

- d. **To go back to the GRUB menu, press Enter.**

The GRUB menu is displayed. The edits you made to the boot command are displayed.

- e. **To begin the installation, type b in the GRUB menu.**

The Solaris installation program checks the default boot disk for the requirements to install or upgrade the system. If the Solaris installation cannot detect the system configuration, the program prompts you for any missing information.

When the check is completed, the installation selection screen is displayed.

5. Select an installation type.

The installation selection screen displays the following options.

```
Select the type of installation you want to perform:
```

```
1 Solaris Interactive
2 Custom JumpStart
3 Solaris Interactive Text (Desktop session)
4 Solaris Interactive Text (Console session)
5 Apply driver updates
6 Single user shell
```

Enter the number of your choice followed by the <ENTER> key. Alternatively, enter custom boot arguments directly.

If you wait 30 seconds without typing anything, an interactive installation will be started.

- **To install the Solaris OS, choose from the following options.**
 - **To install with the Solaris interactive installation GUI, type 1, then press Enter.**
 - **To install with the interactive text installer in a desktop session, type 3, then press Enter.**

Select this installation type to override the default GUI installer and run the text installer.
 - **To install with the interactive text installer in a console session, type 4, then press Enter.**

Select this installation type to override the default GUI installer and run the text installer.

If you want to perform an unattended custom JumpStart installation (option 2), see *Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations*.

For detailed information about the Solaris installation GUI and text installer, see [“System Requirements and Recommendations”](#) on page 9.

The system configures the devices and interfaces, and searches for configuration files. The `kdmconfig` utility detects the drivers that are necessary to configure the keyboard, display, and mouse on your system. The installation program begins. Go to [Step 6](#) to continue the installation.

- **To perform system administration tasks before your installation, choose from the following options.**
 - **To update drivers or install an install time update (ITU), insert the update media, type 5, then press Enter.**

You might need to update drivers or install an ITU to enable the Solaris OS to run on your system. Follow the instructions for your driver update or ITU to install the update.
 - **To perform system administration tasks, type 6, then press Enter.**

You might want to launch a single user shell if you need to perform any system administration tasks on your system before you install. For information about system administration tasks you can perform prior to installation, see *System Administration Guide: Basic Administration*.

After you perform these system administration tasks, the previous list of options is displayed. Select the appropriate option to continue the installation.

6. Decide if you need to modify the configuration settings.

Note – If the `kdmconfig` utility cannot detect the video driver for your system, the `kdmconfig` utility selects the 640x480 VGA driver. The Solaris installation GUI cannot be displayed with the 640x480 VGA driver. As a result, the Solaris installation text installer is displayed. To use the Solaris installation GUI, use the `kdmconfig` utility to select the correct video driver for your system.

- If you do not need to modify the configuration settings, let the Window System Configuration for Installation screen time out. Go to [Step 12](#).
- If you need to modify the configuration settings follow these steps,
 - a. Press the ESC key.

Note – You must press the ESC key within five seconds to interrupt the installation and modify device settings.

The `kdmconfig` – Introduction screen is displayed.

- b. Examine the configuration information on the `kdmconfig` – View and Edit Window System Configuration screen, and determine which devices you need to edit.
- c. Select the device you want to change, and press `F2_Continue`.
- d. Select the appropriate driver for the device, and press `F2_Continue`.
- e. Repeat [Step a](#) through [Step b](#) for each device you need to change.
- f. When you are finished, select No changes needed – Test/Save and Exit and press `F2_Continue`.

The `kdmconfig` Window System Configuration Test screen appears.
- g. Press `F2_Continue`.

The screen refreshes and the `kdmconfig` Window System Configuration Test palette and pattern screen appears.
- h. Move the pointer and examine the colors that are shown on the palette to ensure that they are displayed accurately.
 - If the colors are not displayed accurately, click No. If possible, press any key on the keyboard, or wait until `kdmconfig` exits the `kdmconfig` Window System Configuration Test screen automatically. Repeat [Step 7](#) through [Step 11](#) until the colors are displayed accurately and you can move the pointer as expected.

- If the colors are displayed accurately, click Yes.

After a few seconds, the Select a Language screen is displayed.

7. **Select the language you want to use during the installation, and press Enter.**

After a few seconds, the Solaris Installation Program screen appears.

- If you are running the Solaris GUI installation program, the screen that is shown in Figure 2-5 is displayed.
- If you are running the Solaris text installer in a desktop session, the screen that is shown in Figure 2-6 is displayed.

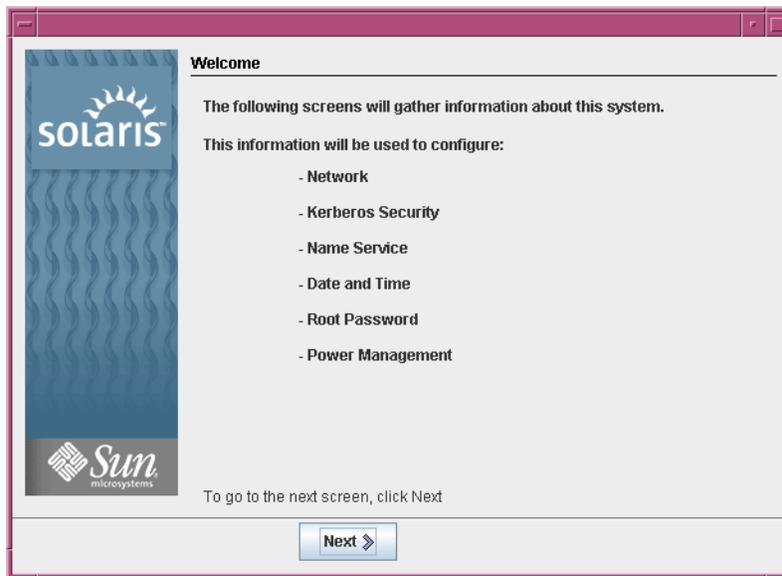


FIGURE 2-9 Solaris GUI Installation Program Welcome Screen

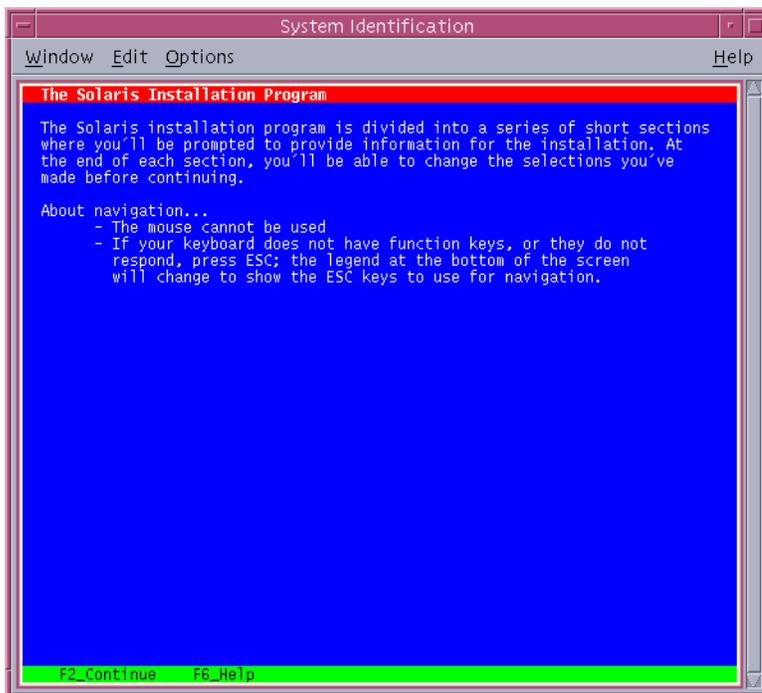


FIGURE 2-10 Solaris Text Installation Program Welcome Screen

8. **Click Next to begin the installation. If you are prompted, answer any remaining configuration questions.**
 - If you preconfigured all of the system information, the installation program does not prompt you to enter any configuration information. See Chapter 6, “Preconfiguring System Configuration Information (Tasks),” in *Solaris 10 Installation Guide: Network-Based Installations* for more information.
 - If you did not preconfigure all the system information, the installation program prompts you for this information on several screens. Use the “[Checklist for Installation](#)” on page 14 to help you answer the configuration questions.

After you answer the configuration questions, the Welcome to Solaris dialog box appears.



FIGURE 2-11 Welcome to Solaris Screen

9. **Decide if you want to reboot the system automatically and if you want to automatically eject the disc. Click Next.**

The Specify Media screen appears.

10. **Specify the media you are using to install. Click Next.**

The License screen appears.

11. **Accept the license agreement to continue the installation. Click Next.**

The Solaris installation program then determines if the system can be upgraded. To upgrade, the system must have an existing Solaris root (/) file system. The Solaris installation program detects the necessary conditions and then upgrades the system.

The Select Upgrade or Initial Install screen appears.

12. **Decide if you want to perform an initial installation or an upgrade. Click Next.**

Note – If you restored the diagnostic or service partition on your system before you started the installation, you might not be able to upgrade to the Solaris OS. For more information, see “Upgrade” in *Solaris 10 Installation Guide: Solaris Live Upgrade and Upgrade Planning*.

If you are upgrading a system that has non-global zones installed, follow these steps.

a. When you are prompted to select initial installation or upgrade, choose Upgrade. Click Next.

b. If your system has multiple root (/) partitions, select the partition that you want to upgrade on the Select Version to Upgrade panel.

The Solaris installation program displays a message that indicates that you cannot customize your upgrade. The Solaris installation program analyzes your system to determine if the system can be upgraded. The Ready to Upgrade panel is displayed.

If your system has only one root partition, the Solaris installation program does not prompt you to select a partition to upgrade. The partition is automatically selected.

c. If you want to continue the upgrade, click Install Now on the Ready to Upgrade panel.

The Solaris installation program begins to upgrade your system. After the upgrade is completed, you might need to correct some local modifications that were not preserved. For more information, go to [Step a](#) in [Step 15](#).

If you do not want to continue the upgrade, click Back to perform an initial installation.

13. Select the type of installation you want to perform. Click Next.

■ **Select Default Install to install the Entire Solaris Software Group.**

■ **Select Custom Install if you want to perform the following tasks.**

- Install a specific software group
- Install additional software
- Install specific software packages
- Install a specific locale
- Customize the disk layout

For more information about software groups, see [“Disk Space Recommendations for Software Groups”](#) on page 12. For information about customizing `fdisk` partitions, see [“Partitioning Recommendations”](#) in *Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations*.

Note – The text installer does not prompt you to select a Default or Custom Installation. To perform a default installation, accept the default values that are provided in the text installer. To perform a custom installation, edit the values in the text installer screens.

14. If you are prompted, answer any additional configuration questions.

When you have provided the information that is required to install the system, the Ready to Install screen is displayed.

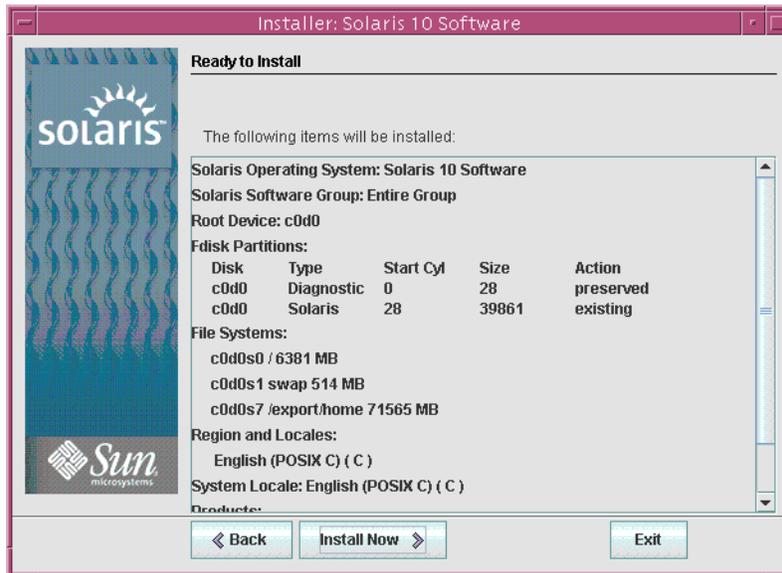


FIGURE 2-12 Solaris Installation Ready to Install Screen

15. Click Install Now to install the Solaris software. Follow the instructions on the screen to install the Solaris software and any additional software on the system.

When the Solaris installation program is finished installing the Solaris software, the system reboots automatically or prompts you to reboot manually.

After the installation is finished, installation logs are saved in a file. You can find the installation logs in the `/var/sadm/system/logs` and `/var/sadm/install/logs` directories

- **If you are performing an initial installation, the installation is complete. Go to [Step 21](#).**
- **If you are upgrading the Solaris software, you might need to correct some local modifications that were not preserved. Go to [Step a](#).**
 - a. **Review the contents of the `/a/var/sadm/system/data/upgrade_cleanup` file to determine whether you need to correct local modifications that the Solaris installation program could not preserve.**
 - b. **Correct any local modifications that were not preserved.**

16. If you did not select automatic reboot during the installation, reboot the system.

```
# reboot
```

**More
Information**

Next Steps

If you install multiple operating systems on your machine, you need to instruct the GRUB boot loader to recognize these operating systems in order to boot. For more information, see “Modifying the Solaris Boot Behavior by Editing the GRUB Menu” in *System Administration Guide: Basic Administration*.

Troubleshooting If you encounter any problems during the installation or upgrade, see Appendix A, “Troubleshooting (Tasks),” in *Solaris 10 Installation Guide: Custom JumpStart and Advanced Installations*.

Index

A

Advanced Configuration and Power Interface (ACPI), disabling, 34

B

BIOS

requirements, 32, 43

setting boot priority, 34, 44

boot priority

setting in system BIOS, 34, 44

booting the system

SPARC based systems, 25

x86 based systems, 34, 44

C

checklist of installation information, 14-21

commands to start an installation

SPARC based systems, 25

x86 based systems, 34, 45

configuring the keyboard, display, and pointing device, 35, 46

Core System Support Software Group

description, 12-14

size, 13

custom installation, description, 29

D

default boot device, resetting, 34

Developer Solaris Software Group

description, 12-14

size, 13

device drivers, installing, 34, 45

device settings, modifying, 34, 46

disabling Advanced Configuration and Power Interface (ACPI), 34

disk space

requirements

for software groups, 13

display, configuring for x86 based systems, 35, 46

E

End User Solaris Software Group

description, 12-14

size, 13

Entire Solaris Software Group

description, 12-14

size, 13

Entire Solaris Software Group Plus OEM Support

description, 12-14

size, 13

G

gathering information before installing, 14-21

- graphical user interface (GUI)
 - command to start (SPARC based systems), 25
 - command to start (x86 based systems), 35, 46
 - description, 11
 - memory requirements, 11
- GRUB, installing x86 based systems with, 42-53

I

- information required for installation, 14-21
- install time updates (ITUs), installing, 34, 45
- installing
 - device drivers, 34, 45
 - information required, 14-21
 - install time updates (ITUs), 34, 45
 - SPARC based systems, 23-31
 - x86 based systems, 31-53, 44
- installing, x86 systems with GRUB, 42-53
- instructions
 - installing SPARC based systems, 23-31
 - installing x86 based systems, 31-53
- IP addresses, specifying a default route, 18

K

- kdmconfig, configuring peripheral devices with, 35, 46
- Kerberos, information to configure, 16
- keyboard, configuring for x86 based systems, 35, 46

L

- languages, selecting during installation, 26, 36, 48
- log files, upgrade installation, 30

M

- media required to install
 - SPARC based systems, 24
 - x86 based systems, 32, 42

- memory requirements for displaying the Solaris installation program, 11
- modifying device settings during installation, 34, 46
- mouse, configuring for x86 based systems, 35, 46

O

- output files, upgrade log, 30

P

- partition, description, 9
- preparing for installation
 - information you need before installing, 14-21
 - SPARC based systems, 24
 - x86 based systems, 32, 42
- prerequisites for installing
 - SPARC based systems, 24
 - x86 based systems, 32, 42

R

- Ready to Install screen, 29-30
- Reduced Network Support Software Group
 - description, 12-14
 - size, 13
- requirements, 9-14
 - BIOS, 32, 43
 - for displaying Solaris installation program, 11
 - media
 - SPARC based systems, 24
 - x86 based systems, 32, 42
 - memory, 10
- resetting the default boot device, 34

S

- serial console, 34, 44
- setting boot priority in system BIOS, 34, 44
- setting up a serial console, 34, 44

- slice, description, 9
- software groups
 - descriptions, 13
 - sizes, 13
- Solaris Device Configuration Assistant,
 - accessing, 34
- Solaris installation program, 23-53
 - description, 10-12
 - graphical user interface (GUI)
 - command to start (SPARC based systems), 25
 - command to start (x86 based systems), 35, 46
 - description, 11
- GRUB instructions, 42-53
- memory requirements, 11
- Ready to Install screen
 - SPARC based systems, 29-30
 - x86 based systems, 40-41, 52
- text installer
 - command to start in console session (SPARC based systems), 25
 - command to start in console session (x86 based systems), 35, 46
 - command to start in desktop session (SPARC based systems), 25
 - command to start in desktop session (x86 based systems), 35, 46
 - description, 11
- upgrading systems with non-global zones installed
 - SPARC based systems instructions, 24-31
 - x86 based systems instructions, 42-53
- SPARC based systems
 - instructions to install, 23-31
 - preparing to install, 24
 - upgrading with non-global zones installed, 24-31
- starting an installation
 - SPARC based systems, 25
 - x86 based systems, 35, 46
- stty command, 20
- system requirements, 9-14

T

- text installer
 - command to start in console session (SPARC based systems), 25
 - command to start in console session (x86 based systems), 35, 46
 - command to start in desktop session (SPARC based systems), 25
 - command to start in desktop session (x86 based systems), 35, 46
 - description, 11
 - memory requirements, 11

U

- upgrade, log file, 30
- upgrading
 - postinstallation tasks
 - SPARC based systems, 30
 - x86 based systems, 41, 52
 - SPARC based systems, 23-31
 - systems with non-global zones installed
 - SPARC based systems instructions, 24-31
 - x86 based systems instructions, 42-53
 - x86 based systems, 31-53

X

- x86 based systems
 - BIOS requirements, 32, 43
 - booting, 34, 44
 - installing with GRUB, 42-53
 - instructions to install, 31-53
 - preparing to install, 32, 42
 - upgrading with non-global zones installed, 42-53

Z

- zones, upgrading systems with
 - SPARC based systems instructions, 24-31
 - x86 based systems instructions, 42-53

