

HOW to QUICKLY INSTALL the SOLARIS[™] 10 8/07 OS ON x86 SYSTEMS

> Solaris[™] 10 How To Guides



Angel Camacho, Solaris Marketing Version 1.0 | *Last updated: 08/22/07*

3-5

About This Solaris How To Guide

This How to Guide instructs users unfamiliar with Solaris 10 installation on how to install the Solaris 10 OS on a Sun supported x86 system. This step-by-step guide, complete with screen shots, takes users through the installation process, in 22 simple steps. Novice users should be able to complete a Solaris 10 8/07 Operating System installation on a standalone x86 system using the instructions in this guide.

Contributors: Angel Camacho, Videhi Mallela

Contents

Installation Assumptions	Page 1
Check the Hardware	
Compatibility List	Page 1
Basic System Requirements	Page 1
Obtaining Media for the x86 Platform	Page 1
Power Up and Media Boot	Page 2
Installing the Solaris" 10	
8/07 Operating System	Page 2
Identifying the Console	Page 2
Selecting the Type of Installation	Page 3
System Configuration	Page 4
For More Information	Page 14

Installation Assumptions

This guide makes several assumptions, including:

- The system is an x86 system
- The system is compatible with the Solaris 10 OS and is listed on the Solaris Hardware Compatibility List (HCL)
- The system has a graphical interface

While this guide is most appropriate for a stand-alone system that does not have a network connection, it can also be used as a step-by-step installation procedure for *networked systems*—systems with an IP address that are connected to a network infrastructure—assuming network configuration information is available.

If problems arise during the installation process that are not discussed in this guide, refer to the *Solaris 10 OS Installation Guide: Basic Installations* for more information. This guide is part of the Solaris 10 Release and Installation Collection located on the Sun Web site at http://docs.sun.com/app/docs/prod/solaris.10

Check the Hardware Compatibility List

The first step before the installation process is to verify that the system to be installed is on the hardware compatibility list located at: http://www.sun.com/bigadmin/hcl/.

NOTE: The term "x86" refers to the "family" of 32-bit x86-compatible architecture and 64-bit AMD64 and Intel EM64T.

Basic System Requirements

Verify the computer system meets the following requirements. **NOTE:** The requirements below are recommended minimums.

While it is possible to install the Solaris OS on a system with less disk capacity and CPU speed, it is not recommended.

- Minimum 512 MB of physical RAM
- Minimum 10 GB of available hard drive space
- Minimum 400 MHz CPU speed
- DVD or CD-ROM drive
- Attached monitor or integrated display

For more information on Solaris System requirements, visit http://www.sun.com/solaris/specs.jsp. For a detailed list of 3rdparty applications available on Solaris 10, visit http://www.sun.com/partners/10moves/solutions.html.

Obtaining Media for the x86 Platform

The Solaris 10 OS 8/07 release is available via download from the Sun Web site.

- 1. Go to http://www.sun.com/solaris/ to obtain information about the Solaris 10 OS.
- 2. Go to http://www.sun.com/solaris/get.jsp to begin the download process.
- 3. Choose Solaris 10 on the list of available downloads.
- 4. Click on the appropriate media format (Solaris for x86 systems).
- 5. Register at the Sun Download Center, if you have not already done so.
- 6. Answer the short questionnaire.
- 7. Read and accept the license agreement.
- 8. Download and burn the CDs or DVDs.

See the Solaris 10 Self Help FAQs located at http://www.sun.com/solaris/self_help.jsp for additional guidance, instruction, and tips on downloading the Solaris 10 OS or burning installation CD and DVD media.

Power Up and Media Boot

The following procedure can be used whether another operating system is already running on the system, or for installation on a new system.

- 1. Power up the system and insert the first installation CD or DVD into the drive tray.
- 2. Restart the system.
- 3. If the system appears to be booting from the hard disk, and the Solaris OS installer does not start, power cycle the system (power cycle is shutting the power on the system and then restarting the system). As the system begins to boot, enter setup mode. Typically, the system displays a message indicating which key (such as "Enter F2 to enter setup"). The key to press varies by manufacturer; the ESC and F12 keys are other common options. If you miss the message, simply restart the system a couple of times until you are able to view it.
- 4. Once in setup mode, specify the boot device for the system. This example specifies the CD or DVD drive as the boot device. To do so, find the list that describes boot order and re-order as needed to ensure the CD or DVD drive appears first on the list. The system should then boot from the CD or DVD drive to start the install process, displaying a message resembling the one below:

```
Loading stage 2....
GNU GRUB version 0.95 (xxK lower / xxK upper memory)
```

Installing the Solaris 10 8/07 Operating System

The Solaris 10 8/07 Operating System install and boot process is based on the GNU GRUB loader. Therefore, the messages displayed throughout this process are unique to the GRUB loader and are different than in prior Solaris installations.

Identifying the Console

The next step in the installation process is to select the type of console for the hardware version on which the Solaris OS is being installed. Use the arrow keys to select the version of the Solaris OS that matches the hardware configuration. For most x86 systems, this is the default selection.

[Two serial console options are available in the event a headless rack-mounted system is in use and a serial port is needed as an interface to a serial console. For older x86 systems, such as the Sun Fire[®] LX50, Sun Fire[®] V60x, or Sun Fire[®] V65x servers, select Solaris Serial Console ttyb.]

Edit functions include using the arrow key to select or highlight an entry, the "e" key to edit a command, or the "c" key for a command line. Pressing the ENTER key, boot the version of operating system selected. The highlighted entry boots in 60 seconds even if a key is not pressed.

NOTE: Prompts do not appear during the boot process. If a selection is not made, the screen times out and the system automatically boots the Solaris OS.

```
Solaris
Solaris Serial Console ttya (headless and rack-mounted systems only)
Solaris Serial Console ttyb (for1x50, v60x and v65x)
```

Selecting the Type of Installation

After the ENTER key is pressed, or the counter times out, a series of dots will run on the screen, then six installation options are presented. Select an option using the arrow keys or space bar as appropriate, or let the counter time out to automatically select the default installation method:

```
SunOS Release 5.10 version generic_120012-12 32-bit
Copyright 1983-2005 Sun Microsystems, Inc. All rights reserved.
Use is subject to license terms.
Configuring devices.
1. Solaris Interactive (default)
2. Custom JumpStart
3. Solaris Interactive Text (Desktop session)
4. Solaris Interactive Text (console session)
5. Apply driver updates
6. Single user shell
Automatically continuing in xx seconds
```

When the first option is selected, or the counter times out, the following output is displayed. Keep in mind that the hardware information displayed, such as "ngeo", may differ from the exact data displayed below and that each step can take up to a couple of minutes to complete:

```
Solaris Interactive
```

```
Using install cd in /dev/dsk/c1t0d0p0
Using RPC Bootparams for network configuration information.
Attempting to configure interface nge0...
Skipped interface nge0
Setting up Java. Please wait...
Extracting windowing system. Please wait...
Beginning system identification...
Searching for configuration file(s)...
Search complete.
Discovering additional network configuration...
```

Starting Solaris Interactive (graphical user interface) Installation.

You must respond to the first question within 30 seconds or the installer proceeds in a non-window environment (console mode).

If the screen becomes blank or unreadable the installer proceeds in console mode.

If the screen does not properly revert to console mode, restart the installation and make the following selection:

Solaris Interactive Text (Console session) Press ENTER to continue. When the ENTER key is pressed, the system switches to graphics mode. If you are able to see the graphics window, press ENTER. If not, the system will time out and will continue the installation in Text (Console) Mode. Roll your mouse over the gray window and press ENTER:

If	the	screen	is	legible,	press	ENTER	in	this	window.	
										I

System Configuration

A series of screens guide you through the Solaris OS configuration process.

NOTE: The graphical screens require a mouse to be rolled over the window in order to answer questions posed throughout the configuration process.

- 1. After you press ENTER, the system configuration process will start through a series of windows. Please roll the mouse over the appropriate window and make your selections.
- 2. Select a language for the system:



3. A new window, the Solaris Install Console, appears in the bottom-right corner. This window is used to display pertinent installation messages. Another window appears in which the Solaris OS installation questions should be answered:

-	Solaris Install Console	a.	
	hecking rules.ok file sing begin script: install_begin sing finish script: patch_finish wecuting SolStart preinstall phase wecuting begin script "install_begin" egin script install_begin execution completed. tarting Solaris Installation		

4. The Welcome screen appears. Click Next to continue the installation process. Keep in mind the installation program checks the configuration entered. If the configuration information supplied is incorrect, the system will ask for the correct information to be re-entered on the appropriate screens:

10000000	Welcome
solaris	The following screens will gather information about this system. This information will be used to configure:
microsystems	To go to the next screen, click Next
	Next >

5. The Network Connectivity window appears:



The Host Name window appears. Type in the name for the system and follow the guidelines on the screen, then click on the Next button:

00000000	Host Name
soiaris	Enter a host name which identifies this system on the network. The name must be unique within the domain in which it resides; creating a duplicate host name will cause problems on the network after you install Solaris. A host name must be at least two characters; it can contain letters, digits, and minus signs (-). Host Name:
midospitem	
	≪ Back Next ≫

7. The NFSv4 Domain Name window appears. Let the system use the default option and click on the Next button:



 The Time Zone window appears. Next, set the time zone for the system. This example sets the time zone by specifying the geographic region. Select "Geographic" and click Next:

	<i>\$66666</i> 66	Time Zone		
	solaris	On this scree	n you must select how to specify your default time zone.	
	444444	Specify timez	one by:	
		I Geographi	c Continent/Country/Region	
		🔾 Offset from	n GMT	
01010	(AAAAAAA	🔾 Time zone	file	
The second	SUN.			
	222200000000000000000000000000000000000			
			Next >	
	1			

9. Next, select the continent and country. Detailed information on the exact location is requested. For example, selecting "Americas" results in a screen that lists all time zones in the "Americas". Select the appropriate time zone and click Next:

138888893 <u>-</u>	continent and Country	
June 1	On this screen you can specify your default timezone.	
solaris	Use the tree to choose your Continent or Ocean, Country or Region, and finally Timezone.	
	▶ Africa	
	▼ Americas	
	✓ United States	
1111111	Alaska Time	
	Alaska Time - Alaska panhandle	
化现在现在 化化化	Alaska Time - Alaska panhandle neck	
	Alaska Time - west Alaska	
	Aleutian Islands	
	Central Time	
No Sun	Central Time - Michigan - Wisconsin border	
microsystems	Central Time - North Dakota - Oliver County	-
	& Back Next >>	

 Next, set the date and time and click Next. A date and time is automatically displayed. If correct, click Next. If adjustments are needed, make corrections in the text boxes and click Next:

66666666	Date and Time		_
solaris	Accept the defa	ult date and time or enter new values.	
22222222	Date and time:	Thu Nov 17 13:44:41 PST 2005	
111111	Year (4 digits):	2005	
\$\$\$\$\$\$\$	Month (1-12):	11	
111111	Day (1-31):	17	
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Hour (0-23):	13	
	Minute (0-59):	44	
Sun Sun			
	≪ Back	Next »	

11. The Root Password window appears. Set the root password. Note the password typed remains invisible. Re-enter the password in the second box and click Next:

88888888	Root Password	
solaris	Type in an alphanumeric string to be used as the root password for the computer you are setting up. Revpe the above password for confirmation.	

12. The Remote Services window appears. In this window, you can choose a "Secure by default" Solaris installation, but afterwards individual services should be enabled. If you are unsure of your type of installation, follow the default, "Yes" to enable all remote services:

00000000	Enabling Remote Services
solaris	Would you like to enable network services for use by remote clients? Selecting "No" provides a more secure configuration in which Secure Shell is the only network service provided to remote clients. Selecting "Yes" enables a larger set of services as in previous Solaris releases. If in doubt, it is safe to select"No" as any services can be individually enabled after installation.
222222222	Note: This choice only affects initial installs. It doesn't affect upgrades.
222222222	(i) Yes
100000000	⊖ No
SUN.	
	& Back Next >

9

13. The Confirmation window appears. Please verify that your information is correct and then click the Next button, if any information is incorrect, click the Back button and fix it:

244	Confirm Information
solaris	Selection Summary
	Host Name: angelito NFSv4 Domain Name: << Value to be derived dynamically >> Time Zone: UStPacific Remote services: Enabled
SUN.	ĸ
	& Back Confirm

14. The Solaris installation window appears. From here Solaris will start the installation process based on your preferences:



15. The Installer options window appears. This option only applies in case you want to do some post-install customizations, for this installation process let the system go with the default options. "Yes" on automatic reboot, and "Yes" on Ejection of the install media:

244	
solaris	For many installations the following operations can be automatic. Manual operation may be appropriate if you plan to perform post-install system administration.
	Reboot automatically after software installation?
	Yes
	O No
	Eject additional CDs/DVDs automatically after software installation? Note: The currently booted CD/DVD must be manually ejected during system reboot.
	(i) Yes
SUN.	⊖ No

15a. A pop-up window will appear to remind you to physically remove the CD/DVD. Click on the OK button to continue:

You n devic	Notice You must also manually eject the CD/DVD or select a different boot device after reboot to avoid repeating the installation process.			
Sun	 Yes No Eject additional CDs:DVDs automatically after software in Note: The currently booted (C):DVD must be manually eject reboot. Yes No 	nstallation? ted during syste		

16. The Media window will appear. Unless you are using different media than a CD/DVD, this question does not apply to your case, please use the default CD/DVD and click the Next button:

1000000	Specify Media
solaris	Please specify the media from which you will install the Solaris Operating System.
	Media:
	CD/DVD
	O Network File System
	O HTTP (Flash archive only)
	○ FTP (Flash archive only)
	🔘 Local Tape (Flash archive only)
Sun.	
	& Back Next & Exit

17. The System initialization window will appear with a progress bar, and after a few seconds it will disappear indicating that the system is was initialized:

Initializing The system is being initialized, please wait 3%	

 The License window appears. Please read the Solaris License Agreement, and if you agree, click on the Accept checkbox, then click on the Next button:

Tant		Installer: Solaris 10 Software			
1	10000000	License			
	July .				
	solaris	Sun Microsystems, Inc. ("Sun") SOFTWARE LICENSE AGREEMENT			
		READ THE TERMS OF THIS AGREEMENT ("AGREEMENT") CAREFULLY BEFO OPENING SOFTWARE MEDIA PACKAGE. BY OPENING SOFTWARE MEDIA PACKAGE, YOU AGREE TO THE TERMS OF THIS AGREEMENT. IF YOU ARE ACCESSING SOFTWARE ELECTRONICALLY, INDICATE YOUR ACCEPTANCE THESE TERMS BY SELECTING THE "ACCEPT"(OR EQUIVALENT) BUTTON AT THE END OF THIS AGREEMENT. IF YOU DO NOT AGREE TO ALL OF THE TERMS, PROMPTLY RETURN THE UNUSED SOFTWARE TO ADUR PLACE OF PURCHASE FOR A REFUND OR, IF SOFTWARE IS ACCESSED ELECTRONIC SELECT THE "DECLINE" (OR EQUIVALENT) BUTTON AT THE END OF THIS AGREEMENT. IF YOU HAVE SEPARATELY AGREED TO LICENSE TERMS CAMASTER TERMS") FOR UN LICENSE TERMS			
	🏶 Sun	1-6 OF THIS AGREEMENT ("SUPPLEMENTAL LICENSE TERMS") SHALL			
	mkrosystems				
		Next 🔉 📐			

19. The Type of Install window appears. Advanced users may want to customize the installation, if not, leave the default and click on the Next button:

		Installer: Solaris 10 S	oftware	1			
1	pooooo	Select Type of Install					
solari	solaris	To install basic Solaris products into their default directory locations, select Default Install.					
	111111	which Solaris products to install. For ea o customize the products install.	ch				
	5555555	Please select one of the following:	£				
	19999		Default Custo Install Insta	om all			
	SULL SULL		۲				
		Next >>	Exit				

20. The confirmation window appears. On this window, you can see a more technical description of how Solaris will be installed on your system. Click on the Install Now button:

-		Ins	taller: Sc	olaris 10 So	ftware		· 1
0.03	100000	Ready to Inst	tall				
SC	SULL SULL	The followin Solaris Oper Solaris Softy Fidisk Partitit Disk c0d00 H File Systems c0d0051 st c0d0051 st c0d0057 ie Region and L English (f System Loca	ng items wil ating Syste ware Group: c0d0 ons: Type Solaris ; i370 MB wap 518 ME xport/home .ocales: POSIX C) (C ale: English	Il be installed: m: Solaris 10 : Entire Group Start Cyl 1 3 27038 MB :) (POSIX C) (C)	Software Size 4078	Action add	
		& Back	Instal	Now >		Exit	

21. The Install Progress window appears. Now just wait for a few minutes while Solaris installs on your system. After the installation is completed, remember to eject the CD/DVD. The system will reboot automatically and will start on Solaris:



22. For Localization, please review the Solaris 10 8/07 installation guide that can be found at: http://docs.sun.com/app/docs/prod/solaris.10

For More Information

For more information regarding the Solaris 10 OS, visit *sun.com/solaris*.

Manuals				
Sun Documentation	http://docs.sun.com/			
Big Admin System Administration Portal	http://www.sun.com/bigadmin/			
Sun BluePrints Articles				
Configuring JumpStart Servers to Provision Sun x86 Systems	http://www.sun.com/blueprints/0205/819-1692.pdf			
Performing Network Installations Without a Local Boot Server	http://www.sun.com/blueprints/0504/817-7288.pdf			
Configuring Multiboot Environments on Sun x86 Systems with AMD Processors	http://www.sun.com/blueprints/0905/819-2889.pdf			
Related Web Sites				
Solaris Laptop List (x86)	http://www.bolthole.com/solaris/x86-laptops.html			
Solaris Hardware Compatibility List	http://www.sun.com/bigadmin/hcl			
Solaris 10 System Requirements	http://www.sun.com/solaris/specs			
Solaris 10 11/06 OS Features Comparison Chart	http://www.sun.com/solaris/newfeatures			
Next Steps to Solaris 10 Adoption				
Get hands on experience with Solaris 10 using "Solaris 10 How To Guides"	http://www.sun.com/solaris/teachme			
Get trained on Solaris 10-free!	http://www.sun.com/solaris/freetraining			
Count on Sun's full enterprise support—whenever you're ready. Get a support contract.	http://www.sun.com/solaris/get_support			
Participate in the OpenSolaris community	http://www.opensolaris.org			

sun.com/solaris



Sun Sun

©2007 Sun Microsystems, Inc. All rights reserved. Sun, Sun Microsystems, the Sun logo, Solaris, and Sun Fire are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.