



# Simplified Chinese Solaris Release Overview

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# Preface

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*Simplified Chinese Solaris Release Overview* is an introduction to the Simplified Chinese Solaris™ 9 operating environment.

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## About This Book

This document is for someone who wants a brief overview of the localized product features of the Simplified Chinese Solaris 9 operating environment. It introduces the new features and basic terms that describe the Simplified Chinese Solaris 9 localization.

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## Related Books

For the most up-to-date information about the release, see the *Solaris 9 (SPARC Platform Edition) Release Notes*.

For general users:

- *Simplified Chinese Solaris User's Guide*
- *Solaris Common Desktop Environment: User's Guide*

For system administrators and advanced users:

- *Simplified Chinese Solaris System Administrator's Guide*
- *Solaris Common Desktop Environment: Advanced User's and System Administrator's Guide*

For developers/programmers and advanced users:

- *International Language Environments Guide*

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## Typographic Conventions

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

TABLE P-1 Typographic Conventions

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

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## Shell Prompts in Command Examples

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

**TABLE P-2** Shell Prompts

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



# Overview of Features

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The Simplified Chinese Solaris™ 9 operating environment is the internationalization and Simplified Chinese localization of the Solaris 9 operating environment and the Common Desktop Environment (CDE) window system.

The following sections provide information on the facilities you can use to input, display, and print multibyte simplified Chinese characters in the Solaris 9 operating environment.

- “New Localized Features” on page 9
- “Language Support” on page 10
- “Common Desktop Environment (CDE)” on page 12
- “Printing Facilities” on page 13
- “Remote User Facilities” on page 14
- “Developer Facilities” on page 15

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## New Localized Features

The new features of the Simplified Chinese Solaris 9 operating environment include support for new locales, collation options, input methods, and `iconv` modules.

- New `zh_CN.GB18030` locale that is enhanced from `zh_CN.GBK` (`zh.GBK`) to support the new GB18030–2000 standard released by the Chinese government.
- New collation locales that follow provide different collations, such as stroke, radical and pinyin, for all of the Chinese characters supported in each locale.
  - `zh_CN.EUC@pinyin`
  - `zh_CN.GBK@pinyin`
  - `zh_CN.GB18030@pinyin`
  - `zh_CN.UTF-8@pinyin`
  - `zh_CN.EUC@stroke`

- zh\_CN.GBK@stroke
  - zh\_CN.GB18030@stroke
  - zh\_CN.UTF-8@stroke
  - zh\_CN.EUC@radical
  - zh\_CN.GBK@radical
  - zh\_CN.GB18030@radical
  - zh\_CN.UTF-8@radical
- New input methods for all the Chinese locales
  - New input method auxiliary window that provides a more friendly and extensible user interface for simplified Chinese input.
  - New iconv modules that support the GB18030–2000 standard.

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## Language Support

The Solaris environment builds inherent internationalization features into every localized product. Localization facilities support the ANSI C recommendations for internationalization and localization that define the locale and related categories.

### Locales

A *locale* contains the language with culturally specific information and conventions for a particular global region. Each process in the Solaris operating environment has the following set of locale attributes:

- Locale settings, which provide the `locale` and `setlocale` commands you use to list and set attributes before you start a process from the command line.  
For example, the Simplified Chinese locales and the English/ASCII locale both have a category that defines the display of time and date according to the cultural format, as well as the actual Simplified Chinese or English/ASCII characters for the time and date.
- Codesets, which support coding conventions for the GB2312 and the GB18030 character sets. These sets enable you to input, display, and print Simplified Chinese text in file names, system messages, and terminal (TTY), email, and data file content.
- `htt` input method server, which handles Simplified Chinese input for the Solaris operating environment. The `htt` server receives your keyboard input and converts it to Simplified Chinese characters that are used in Simplified Chinese applications.

## Simplified Chinese Locales

The Simplified Chinese Solaris operating environment provides simultaneous support for the locales in the following table. The locales look the same to the end user, but the internal character encoding is different.

**TABLE 1-1** Simplified Chinese Locales

Locale	Description
zh_CN.EUC (zh)	Simplified Chinese EUC (GB2312)
zh_CN.GBK (zh.GBK)	Simplified Chinese GBK
zh_CN.GB18030	Simplified Chinese GB18030-2000
zh_CN.UTF-8 (zh.UTF-8)	Simplified Chinese UTF-8 (Unicode 3.1)

## Simplified Chinese Codesets

The following table lists supported codesets for each Simplified Chinese locale.

**TABLE 1-2** Simplified Chinese Codesets

Locale	Codeset
zh_CN.EUC (zh)	gb2312
zh_CN.GBK (zh.GBK)	GBK
zh_CN.GB18030	GB18030
zh_CN.UTF-8 (zh-UTF-8)	UTF-8

## Simplified Chinese Input Methods and Fonts

The Simplified Chinese Solaris environment provides input methods and fonts which allow you to input, display, and print any character in any language. The following input methods are supported for the Simplified Chinese locales:

- New QuanPin
- New ShuangPin
- NeiMa
- QuanPin
- ShuangPin
- English-Chinese
- Codetable Input Methods

For a complete list of fonts supported for the Simplified Chinese locales, see the *International Language Environments Guide*.

## Input Method Auxiliary Window

The input method auxiliary window supports the following new functions:

- Input method switching
- Input methods properties configuration
- Lookup tables for the following character sets:
  - GB2312
  - GBK
  - GB18030-2000
  - Unicode
- User-defined characters
- Input method help
- Virtual keyboard

## Locale Categories

In the Simplified Chinese Solaris 9 operating environment, you can use the following general and specific categories as defined by ANSI C for the Simplified Chinese and English locales.

- General `LC_ALL` setting that invokes all of the categories for locale-related aspects of the environment.
- Specific settings for particular aspects of the environment which include:
  - `LC_CTYPE`
  - `LC_TIME`
  - `LC_NUMERIC`
  - `LC_MONETARY`
  - `LC_COLLATE`
  - `LC_MESSAGES`

For example, the Simplified Chinese and the English/ASCII locales have the `LC_TIME` category that defines the display of the time and date according to the cultural format, as well as the actual Simplified Chinese or English/ASCII characters used in the display.

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## Common Desktop Environment (CDE)

CDE is an internationalized graphical user environment with a rich set of desktop applications. The environment is localized for Simplified Chinese and other languages. You can work with two or more localized applications simultaneously on the same desktop. Localized CDE applications include the following:

- File Manager, which is a graphical user interface you can use to access files and directories.
- Mailer, which is an application you use to send, receive, and manage email messages. You can drag-and-drop messages and files between the Mailer and other applications.
- Print Manager, which is a graphical front end to the print command that supports drag-and-drop file transfer operations.
- Text editor, which is available in CDE tools such as the Mailer composition window. It enables you to enter Simplified Chinese and English characters in the same document.
- Calendar Manager, which helps you manage business and social appointments. You can send automatic reminders from the calendar through the Mailer application.
- Personal Digital Assistant (PDA) Synchronization, which enables you to synchronize data from CDE applications, such as Calendar Manager, with data in similar applications on your PDA. PDA synchronization also enables you to install applications and databases from a workstation or server to a PDA.

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**Note** – The OpenWindows™ environment is no longer supported for use in this release.

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## Printing Facilities

The Solaris environment provides the following support for Simplified Chinese printing:

- A line printer containing built-in Simplified Chinese fonts. This printer enables you to use `lp` and `iconv` utilities to print any text file encoded in GB2312 and UTF-8. Your system administrator can also set up print filters to automatically convert input from EUC to the codeset of the targeted printer.
- PostScript-based line printer emulation that provides the `xetops` and `xutops` utilities that convert Simplified Chinese text to bit-mapped images for printing. These utilities enable you to print Simplified Chinese characters using a Postscript-based printer that does not have Simplified Chinese fonts loaded. Some applications generate Postscript files with embedded Simplified Chinese fonts.
- The `mp` program reads each filename in sequence and generates a graphical representation of the content in PostScript format. The program accepts international text files of various Solaris locales and produces output which is appropriate for the specified locale. The output can contain proper text layout, bidirectional text rendering, and character shaping. Depending on each locale's

system font configuration for `mp`, the PostScript output file can contain glyph images from Solaris system-resident scalable or bitmap fonts.

Complex text layout (CTL) is supported in `mp`. For more information about Complex Text Layout, see the chapter “Complex Text Layout” in *International Language Environments Guide*.

- An `Xprt` facility that allows developers of X-windows applications to create device-independent print jobs.
- A font downloader command, `fdl`, that enables you to install and remove supported fonts from Postscript printers. The supported font types include: Postscript Types 1, 9 (CID Type 0), 10 (CID type 1), 11 (CID type 2), CMap files, and TrueType.

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## Remote User Facilities

The following list summarizes the Simplified Chinese Solaris 9 remote user facilities:

- The Simplified Chinese Solaris 9 operating environment supports terminals using the GB2312 character set. The terminals must have a method to input Simplified Chinese characters, that is, to run Simplified Chinese input conversion.

For information on using different types of terminals, refer to the *Simplified Chinese Solaris System Administrator's Guide* and the *International Language Environments Guide*.

- Telnet emulators that support input methods and fonts used on non-Sun equipment that supports Simplified Chinese characters. Emulators enable the display of Simplified Chinese terminal sessions, including certain versions of Simplified Chinese Windows.
- SunRay™ enterprise server software running on the Solaris operating environment that supports SunRay enterprise appliances. With the locales installed on the server, SunRay appliances are able to support localized X applications, including the CDE desktop tools.
- X11 remote hosts that allow you to run localized applications in the Solaris environment on a remote host. When you connect to the remote host and set the locale before login, you can use the local host to display localized applications with the aid of locale fonts and related input methods.

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## Developer Facilities

You can add a new locale or variations of existing locales to the Solaris 9 internationalized software environment. If you are a developer responsible for building locales, consult the *International Language Environments Guide* for additional information.

## Messaging Facilities

The Solaris 9 messaging facilities provide localized versions of messages available for a locale. You can add localized messages without recompiling an internationalized application. Messages that are localized use facilities such as the following:

- OS messages that use facilities that conform to XPG4 and POSIX specifications.
- CDE messages that use CDE resource files.
- Java™ message localization that is implemented with Java resource bundles.

