



Simplified Chinese Solaris Release Overview

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Preface

Simplified Chinese Solaris Release Overview contains information specific to the Simplified Chinese Solaris™ 8 operating environment.

Who Should Use This Book

This document is for someone who wants a brief overview of the localized product features of the Simplified Chinese Solaris 8 operating environment.

How This Book Is Organized

The chapters of this book address the following:

Chapter 1 lists the Simplified Chinese Solaris facilities for handling Simplified Chinese text and cultural conventions, including new features.

Chapter 2 introduces basic terms and features of the Simplified Chinese Solaris 8 localization.

Related Books

For the most up-to-date information about the release, see the document that relates to your hardware platform:

- *Asian Solaris 8 (SPARC Platform Edition) Release Notes*
- *Asian Solaris 8 (Intel Platform Edition) Release Notes*

For general users:

- *Solaris User's Guide*
- *Solaris Advanced User's Guide*
- *Simplified Chinese Solaris User's Guide*

For system administrators and advanced users:

- *Simplified Chinese Solaris System Administrator's Guide*

For developers/programmers and advanced users:

- *International Language Environments Guide*
-

What Typographic Changes Mean

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

TABLE P-1 Typographic Conventions

| Typeface or Symbol | Meaning | Example |
|--------------------|--|---|
| AaBbCc123 | The names of commands, files, and directories; on-screen computer output | Edit your <code>.login</code> file. Use <code>ls -a</code> to list all files. <code>machine_name% You have mail.</code> |
| AaBbCc123 | What you type, contrasted with on-screen computer output | <code>machine_name% su</code> <code>Password:</code> |
| <i>AaBbCc123</i> | Command-line placeholder: replace with a real name or value | To delete a file, type <code>rm filename</code> . |

TABLE P-1 Typographic Conventions (Continued)

| Typeface or Symbol | Meaning | Example |
|--------------------|--|---|
| <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 <i>must</i> be root to do this. |

Shell Prompts in Command Examples

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

TABLE P-2 Shell Prompts

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

Overview of Features

The Simplified Chinese Solaris 8 operating environment is the SunSoft™ internationalization and Simplified Chinese localization of the Solaris operating environment as well as the Common Desktop Environment (CDE) and OpenWindows™ window systems. The Simplified Chinese Solaris 8 operating environment incorporates many facilities for handling Simplified Chinese text and cultural conventions. It provides a set of commands and other features for the operation and maintenance of the Solaris operating environment and CDE facilities for Simplified Chinese.

The Simplified Chinese Solaris 8 operating environment is part of the Sun® internationalization efforts, which include and integrate many Asian and European languages.

Localized Features

New Features

The following list summarizes new features of the Simplified Chinese Solaris 8 operating environment:

Locale

The Simplified Chinese Solaris 8 operating environment includes the zh.UTF-8 locale which supports Unicode 3.0.

Partial Locales Supported in Solaris Software CDs

Now partial `zh`, `zh.GBK` and `zh.UTF-8` which support most Simplified Chinese features including minimum Bitmap Fonts, TrueType Fonts and Input Methods are included on the Solaris 8 Software CDs. Other full locale features, including message translations and optional fonts are on the Solaris 8 Language CD.

New iconv Modules

Solaris 8 provides new `iconv` modules to support HZ-GB-2312.

- `HZ-GB-2312%UTF-8.so`
- `HZ-GB-2312%zh_CN.euc.so`
- `HZ-GB-2312%zh_CN.gbk.so`
- `UTF-8%HZ-GB-2312.so`
- `zh_CN.euc%HZ-GB-2312.so`

Other Localized Features

The following list summarizes key features of the Simplified Chinese Solaris 8 operating environment:

- Contains the Simplified Chinese Solaris operating environment, CDE, and OpenWindows
- Supports multibyte and wide characters
- Supports multiple character sets
- Supports different Simplified Chinese coding conventions for the GB2312-80 character set for file names and contents, terminals (TTY) and email contents, display messages, and so on
- Uses the regular Sun keyboards
- Supports dedicated Simplified Chinese input methods
- Allows users to add new input methods with the code table interface
- Uses Simplified Chinese fonts for output with CDE facilities
- Interfaces with major existing equipment, using GB2312-80 code
- Incorporates an open interface that allows system programmers to use their own Simplified Chinese input conversion modules and font files
- Implements the ANSI C `setlocale` library to internationalize existing applications and customize applications for local cultural conventions
- Provides Simplified Chinese bitmap and scalable fonts
- Supports Simplified Chinese input and output at the Xlib and toolkit level, including Motif toolkits

- Supports Simplified Chinese messages for operating system commands, libraries, and applications
- Provides localized installation
- Provides localized Solaris Desktop Tools™ that display Simplified Chinese labels and messages; also supports user input of Simplified Chinese text, file names, and so on

Input Methods

The Simplified Chinese Solaris 8 operating environment is localized for the following input methods:

- zh, zh.GBK and zh.UTF-8 locales
 - New Pinyin
 - New Shuang Pin
 - Quan Pin Yin
- zh locale
 - Location Code
 - Pinyin
 - Full Pinyin
 - Stroke
 - Golden
 - Intelligent Pinyin
 - Chinese Symbol (two-column ASCII characters)
- zh.GBK and zh.UTF-8 locales
 - Japanese (kanji)
 - Hanja
 - Zhuyin
 - Unicode
- zh.GBK locale
 - GBK code

The Simplified Chinese Solaris 8 operating environment provides a code table interface for adding other input methods.

System Environment

The Solaris 8 operating environment builds inherent internationalization features into every localized product. Sun's system localization for the Simplified Chinese Solaris 8 operating environment incorporates the following essential environmental elements on top of internationalization:

- A *locale* includes the specification of a language, territory, code set, and other features. The Simplified Chinese Solaris operating environment includes the following locales:
 - `C` – ASCII English environment
 - `zh` – Simplified Chinese environment in EUC
 - `zh.GBK` – Simplified Chinese environment in GBK, an extension of GB2312-80
 - `zh.UTF-8` – Simplified Chinese environment in Unicode 3.0.
- A *category* is a set of language and cultural environment dependent features, defined by ANSI C, whose behavior depends on the locale.

For example, the Simplified Chinese locale and the English/ASCII locale each have a category that defines how time and dates are displayed according to the cultural norm, and the actual Simplified Chinese or English/ASCII characters for time and date. The categories are listed in “Locale Categories ” on page 14.

The Simplified Chinese Solaris operating environment localization facilities support the ANSI C recommendations for internationalization and localization. The ANSI C recommendations define a user's locale and the categories within each locale.

Setting the Locale

Three components make up the Simplified Chinese Solaris localization facility:

- *Localization interface*—User-level shell environment variables set the current working locale for each category. The application-level `setlocale()` function sets the locale for each category.
- *Localization objects*—These objects hold information suitable for functions that are specific to a locale.
- *Localization support features*—These features include appropriate supporting commands and functions as well as facilities for creation, addition, and maintenance of localization objects.

The Simplified Chinese Solaris 8 operating environment defines six categories to describe the local environment. These categories allow the localization of character typing and conversion functions, date and time, numeric representation, monetary format, collation order, and program messages. Each category can have multiple localizations. For example, date and time can be displayed in C locale format or Simplified Chinese. Applications can switch between locale settings by using the `setlocale()` function.

Users can change their locale settings with shell environment variables. Each category names an existing locale. The `setlocale` function directly sets or queries the setting of these categories. Internationalized functions use these settings to access the appropriate tables for the desired locale.

Environment variables can be used to set the categories indirectly: when `setlocale()` sets the categories to the default setting for that application, it uses the setting of each environment variable to set the associated categories. The `setlocale()` function used in this way does not change the settings of environment variables, it only reads their settings.

Locale Categories

The Simplified Chinese Solaris 8 operating environment allows you to set the Chinese environment or use the English environment. You can specify the following:

- General locale setting—for all locale-related aspects of the environment.
- Specific locale category settings—for particular aspects of the environment.

The general locale setting is `LC_ALL`. The specific locale category settings are listed below. In this book, the designation `LC_XXX` refers to any one of the locale category settings.

The specific locale category settings are:

- `LC_CTYPE`

- LC_TIME
- LC_NUMERIC
- LC_MONETARY
- LC_COLLATE
- LC_MESSAGES

The LC_ALL identifier invokes all of the categories.

TTY Environment

The Simplified Chinese Solaris 8 operating environment supports terminals using GB2312 code. The terminals must have a method to input Simplified Chinese characters, that is, run their own Simplified Chinese input conversion.

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

