Traditional Chinese Solaris Release Overview

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Preface

Traditional Chinese Solaris Release Overview is an overview of information specific to the Traditional 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 Traditional Chinese Solaris operating environment.

How This Book Is Organized

The chapters of this book address the following:

Chapter 1, “Overview of Features,” lists the Traditional Chinese Solaris facilities for handling Traditional Chinese text and cultural conventions, including new features.

Chapter 2, “System Environment,” introduces basic terms and features of the Traditional Chinese Solaris localization.

Related Books

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

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

For general users:

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

For system administrators and advanced users:

- *Traditional 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.

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

Typeface or Symbol	Meaning	Example
AaBbCc123	Book titles, new words or terms, or words to be emphasized	Read Chapter 6 in *User's Guide*. These are called *class* options. You *must* 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.

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	`#`

CHAPTER 1

Overview of Features

The Traditional Chinese Solaris 8 operating environment is the Sun Microsystems™ internationalization and Traditional Chinese localization of the Solaris operating environment as well as the Common Desktop Environment (CDE) and OpenWindows™ window systems. The Traditional Chinese Solaris 8 operating environment incorporates many facilities for handling Traditional 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 Traditional Chinese.

Localized Features

New Features

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

Support for `zh_TW.UTF-8`

The Traditional Chinese Solaris 8 operating environment now includes the `zh_TW.UTF-8`locale whch supports Unicode 3.0.

Partial Locale Support in Solaris 8 CDs

The Solaris 8 Software CDs now included partial `zh_TW`, `zh_TW.BIG5` and `zh_TW.F-8`, which support most Traditional Chinese language features including minimum Bitmap Fonts, TrueTypeFonts and Input Methods. Other full locale features, including message translations and optional fonts are in the Solaris 8 Language CD.

New `iconv` Modules

Traditional Chinese Solaris 8 provides new `iconv` modules to support `BIG5+`.

- `zh_TW-big5p%UTF-8.so`
- `UTF-8%zh_TW-big5p.so`

Other Localized Features

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

- Contains the Traditional Chinese Solaris operating environment, CDE, and OpenWindows
- Supports multibyte and wide characters
- Supports multiple character sets
- Supports different Traditional Chinese coding conventions for the CNS 11643-92 character set for file names and contents, terminals (TTY) and email contents, display messages, and so on
- Uses the regular Sun keyboards or the new Sun Chinese keyboard
- Supports dedicated Traditional Chinese input methods
- Uses Traditional Chinese fonts for output with CDE facilities
- Interfaces with major existing equipment, using CNS 11643-92 and Big5 code
- Incorporates an open interface that allows system programmers to use their own Traditional 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 Traditional Chinese bitmap and scalable fonts
- Supports Traditional Chinese input and output at the `Xlib` and toolkit level, including Motif toolkits
- Supports Traditional Chinese messages for operating system commands, libraries, and applications
- Provides localized installation

- Provides localized Solaris Desktop Tools™ that display Traditional Chinese labels and messages; also supports user input of Traditional Chinese text, file names, and so on

The Traditional Chinese Solaris 8 operating environment provides users with a tool, `runb5`, that allows terminal-based Big5 applications to run under Sun's TTY window environment.

The Traditional Chinese Solaris 8 operating environment includes a print filter that allows the Chinese characters in CNS 11643 format to be printed on an Epson dot matrix printer. The Chinese characters are sent to the printer in CNS format or in downloaded bitmap data format. For more information, see Chapter 4, "Setting Up Traditional Chinese Solaris Printing Facilities" in the *Traditional Chinese Solaris System Administrator's Guide*.

Input Modes

The Traditional Chinese Solaris 8 operating environment is localized for the following input modes:

- ASCII/English
- Array
- BoShiaMy
- DaYi
- ChuYin
- I-Tien
- Telecode
- TsangChieh
- ChienI
- NeiMa
- ChuanHsing

Standards Support

The Traditional Chinese Solaris 8 operating environment conforms to the revised code set standard CNS 11643, which was updated in late 1992. The Traditional Chinese Solaris 8 operating environment also supports planes 1, 2, and 3, and BIG5 and Unicode 3.0. Traditional Chinese Solaris 8 also conforms to CNS 5205 and CNS 7654.

CHAPTER 2

System Environment

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

- A *locale* includes the specification of a language, territory, code set, and other features. The Traditional Chinese Solaris operating environment includes the following locales:
  - `C` – ASCII English environment
  - `zh_TW` – Traditional Chinese environment in EUC
  - `zh_TW.BIG5` – Traditional Chinese environment in Big5
  - `zh_TW.UTF-8` – Traditional 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 Traditional Chinese locales 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 Traditional Chinese or English/ASCII characters for time and date.

The Traditional 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 Traditional 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 hold information suitable for functions that are specific to that 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 Traditional 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, time and date can be displayed in `C` locale format or Traditional 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 Traditional 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 settings are `LANG` and `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 six categories.

TTY Environment

The Traditional Chinese Solaris 8 operating environment supports terminals using Big5 code. The terminals must have a method to input Traditional Chinese characters, that is, run their own Traditional Chinese input conversion.

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