



# Traditional Chinese Solaris Release Overview

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# Preface

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*Traditional Chinese Solaris Release Overview* is an introduction to the Traditional 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 Traditional Chinese Solaris operating environment. It introduces the new features and basic terms that describe the Traditional Chinese Solaris 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:

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

For system administrators and advanced users:

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

For developers/programmers and advanced users:

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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% you have mail.</code>
<b>AaBbCc123</b>	What you type, contrasted with on-screen computer output	<code>machine_name% <b>su</b></code> <code>Password:</code>
<i>AaBbCc123</i>	Command-line placeholder: replace with a real name or value	To delete a file, type <code><b>rm</b> filename.</code>
<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 Traditional Chinese Solaris™ 9 operating environment is the internationalization and Traditional 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 traditional 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 13
- “Printing Facilities” on page 14
- “Remote User Facilities” on page 15
- “Developer Facilities” on page 15

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**Note** – The information in this book applies to both Taiwan and Hong Kong Traditional Chinese.

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## New Localized Features

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

- New `zh_HK.BIG5HK` and `zh_HK.UTF-8` locales that support the HKSCS, the Hong Kong Supplementary Character Set. HKSCS is a supplementary character set of the BIG5 and of the ISO 10646 coding schemes that contains the characters needed for Chinese computing in Hong Kong. The HKSCS characters are not

contained in either the BIG5 or the ISO 10646 character sets.

- New collation locales that follow provide options such as stroke count, and radical, and phonetic collation for all of the Chinese characters supported in each locale.
  - zh\_TW.EUC@zhuyin
  - zh\_TW.BIG5@zhuyin
  - zh\_TW.UTF-8@zhuyin
  - zh\_TW.EUC@stroke
  - zh\_TW.BIG5@stroke
  - zh\_TW.UTF-8@stroke
  - zh\_TW.EUC@radical
  - zh\_TW.BIG5@radical
  - zh\_TW.UTF-8@radical
  - zh\_TW.EUC@pinyin
  - zh\_TW.BIG5@pinyin
  - zh\_TW.UTF-8@pinyin
  - zh\_HK.BIG5HK@stroke
  - zh\_HK.UTF-8@stroke
  - zh\_HK.BIG5HK@radical
  - zh\_HK.UTF-8@radical
- Lookup tables for the following character sets:
  - HKSCS
  - CNS11643
  - BIG5
  - Unicode
- New input methods for all the Chinese locales.
- New input method auxiliary window that provides a more friendly and extensible user interface for Traditional Chinese input.
- New `iconv` modules that support the Big5-HKSCS 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 Traditional 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 Traditional Chinese or English/ASCII characters for the time and date.
- Codesets, which support coding conventions for the CNS11643 and BIG5 character sets. These sets enable you to input, display, and print Traditional Chinese text in file names, system messages, and terminal (TTY), email, and data file content.
- `htt` input method server, which handles Traditional Chinese input for the Solaris operating environment. The `htt` server receives your keyboard input and converts it to Traditional Chinese characters that are used in Traditional Chinese applications.

## Traditional Chinese Locales

The Traditional 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** Traditional Chinese Locales

Locale	Description
<code>zh_TW.EUC (zh_TW)</code>	Traditional Chinese EUC locale (CNS11643-1992)
<code>zh_TW.BIG5</code>	Traditional Chinese BIG5
<code>zh_TW.UTF-8</code>	Traditional Chinese UTF-8 (Unicode 3.1)
<code>zh_HK.BIG5HK</code>	Traditional Chinese (Hong Kong) Big5-HKSCS
<code>zh_HK.UTF-8</code>	Traditional Chinese (Hong Kong) UTF-8 (Unicode 3.1)

## Traditional Chinese Codesets

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

**TABLE 1-2** Traditional Chinese Codesets

Locale	Codeset
<code>zh_TW.EUC (zh_TW)</code>	<code>cns11643</code>

**TABLE 1-2** Traditional Chinese Codesets *(Continued)*

<b>Locale</b>	<b>Codeset</b>
zh_TW.BIG5	BIG5
zh_TW.UTF-8	UTF-8
zh_HK.BIG5HK	Big5-HKSCS
zh_HK.UTF-8	Unicode 3.1

## Traditional Chinese Input Methods and Fonts

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

- New ChuYin
- ChuYin
- TsangChieh
- Array
- BoShiaMyn
- DaYi
- JianYi
- Cantonese
- NeiMa (EUC, BIG5, Big5-HKSCS)
- English-Chinese
- Optional codetable Input Methods, such as PinYin

For a complete list of fonts supported for the Traditional 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:
  - HKSCS
  - CNS11643
  - BIG5
  - Unicode
- User defined characters
- Input method help
- Virtual keyboard

## Locale Categories

In the Traditional Chinese Solaris 9 operating environment, you can use the following general and specific categories as defined by ANSI C for the Traditional 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 Traditional 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 Traditional 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 Traditional 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 Traditional Chinese and English characters in the same document.
- Calendar Manager, which helps you manage business and social appointments. You can to send automatic reminders from the calendar through the Mailer application.

- Personal Digital Assistant (PDA) Synchronization that 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 Traditional Chinese:

- A line printer containing built-in Traditional Chinese fonts. This printer enables you to use `lp` and `iconv` utilities to print any text file encoded in a supported Traditional Chinese character set such as CNS11643, BIG5, 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 Traditional Chinese text to bit-mapped images for printing. These utilities enable you to print Traditional Chinese characters using a Postscript-based printer that does not have Traditional Chinese fonts loaded. Some applications generate Postscript files with embedded Traditional 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 Traditional Chinese Solaris 9 remote user facilities:

- The Traditional Chinese Solaris 9 operating environment supports terminals using CNS11643 and BIG5 character sets. The terminals must have a method to input Traditional Chinese characters, that is, run input conversion.  
For information on using different types of terminals, refer to the *Traditional 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 which supports Traditional Chinese characters. Emulators allow the display of a Traditional Chinese terminal sessions including certain versions of Traditional 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.