Worldwide Development

As you develop applications for worldwide markets, you need to consider differences in scripts, languages, and regions. The Macintosh system software presents one of the most flexible architectures for developing applications that can support more than one script.

A script, such as Roman, Kanji, or Arabic, is a writing system for a human language such as English, Japanese or Arabic. Scripts have different characteristics; for example, they can differ in the direction in which their characters and lines run and in the number of characters in their character sets. The way in which you need to input, display, render, and edit text may change depending on the script in use.

A script system is a collection of software facilities that provides for basic differences between writing systems. Script systems include character sets, fonts, keyboards, and routines for text collation and word breaks. Examples of script systems are Roman, Japanese, Arabic, Hebrew, Thai, Devanagari, and Korean. A script system can also be localized for a particular language, region, or country. For example, the Roman script system has been localized for French, British, Italian, and U.S. users (among others). The system software of all Macintosh computers includes the Roman script system. If another script system is required, it is also customized for the particular language or region. You can use the Script Management System to help you display text in the correct format for various scripts.

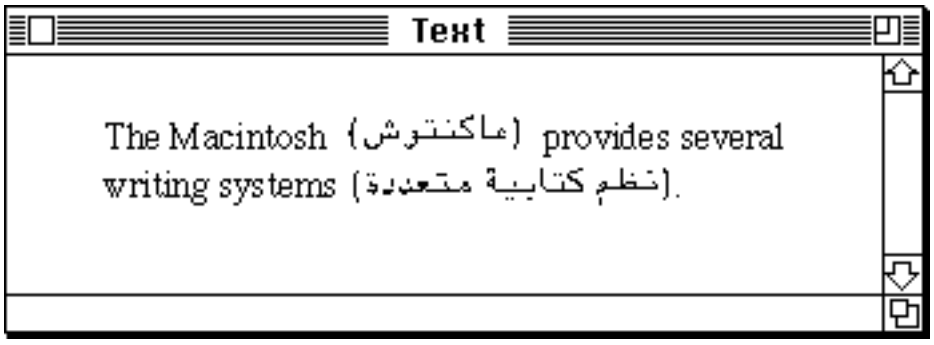
Worldwide system software consists of the Macintosh Script Management System (that is, the **Script Manager** and one or more Macintosh script systems) and related components (**International Utilities Package**, the international resources, and keyboard resources included).

Measurement systems often differ from country to country, as do currency, sorting order, word boundaries, and the formatting of dates and times. The **International Utilities Package** handles formats for the presentation of numbers, currency, time, and dates in countries around the world. The international resources and several of the keyboard resources also contain region-specific or language-specific information, such as date and time formats.

TextEdit also provides support for working with different script systems. You can use **TextEdit** to let the user edit and display text in multiple scripts and styles when a non-Roman script system is in use. **TextEdit** automatically handles text with more than one script, style, and direction. For example, **TextEdit** supports mixing English text (a left-to-right directional script) with Arabic text (a right-to-left directional script) in the same line.

You should use resources to store text for menus, dialog boxes, and other parts of the user interface of your application. This lets a translator localize your application for a particular language, region, or country without requiring modification of your code. In addition, by using routines provided by the Macintosh Script Management System, you can write your application so that it works independently of the particular script in use.

The Figure below shows a document created by an application that uses the Macintosh Script Management System to support more than one script system.



Using multiple scripts in a single document

See the **Worldwide Software Overview** for an introduction to designing your application for worldwide markets, and for guidelines related to developing your application for use around the world see the section called **User Interface Guidelines** . See **TextEdit** for information on using **TextEdit** when a non-Roman script system is in use. *Macintosh Worldwide Development: Guide to System Software* (available from APDA) provides a complete description of all components of the worldwide system software, including routines in the **Script Manager**.