About the International Utilities Package and Keyboard Resources

The international resources and several of the keyboard resources contain information specific to language or region, such as date and time formats. You can use multiple formats for different languages or regions with the same script system by adding multiple versions of **international resources.** Each installed script has an 'itlb' resource and one or more 'itl0', 'itl1', 'itl2', 'itl4', and optional 'itl5' resources, and the resource IDs are generally in the range used for the script's 'FOND' resources (except for the 'itlb' resource). The **keyboard resources** include some localizable information such as keyboard layouts ('KCHR' resources) as well as hardware-specific information (for example, 'KMAP' and 'KCAP' resources).
Using the International and Keyboard Resources includes details on the following resources and on version 7.0 enhancements.

- The 'itlc' resource is the configuration resource that specifies the system script code, the size of the keyboard cache, the states of the font force flags, the international keyboard flag (used for the Macintosh Plus), the general bit flags for the **Script Manager**, and the region code (new with system software version 7.0) that identifies a regional version.

- The 'itlm' resource (new with system software version 7.0) is the configuration resource that specifies the preferred sorting order for script codes, language codes, and region codes, and specifies the default language for each script, the parent script for each language, and the parent language for each region.

- Each 'itlb' resource functions partially as the bundle for a particular script: it specifies the resource IDs for the script's resources. In addition, it contains the script bit flags, the default language code, and the number and date representation codes for the script. With system software version 7.0, the 'itlb' resource also specifies font information, script initialization data, valid styles for the script, and the style to use for designating aliases.

- Each 'itl0' resource contains short date and time formats and formats for currency and numbers and the preferred unit of measurement. It also contains the region code for this particular 'itl0'

- Each 'itl1' resource specifies the long date format for a particular region, including the names of days and months. Each 'itl1' resource also contains the region code for this particular 'itl1'. With system software version 7.0, 'itl1' has an optional extension for additional month and day names as well as abbreviated month and day names.

- Each 'itl2' resource holds the **International Utilities Package** sorting hooks and routines and tables for character type, case conversion, and word breaks. With system software version 7.0, 'itl2' includes length information for the code and tables it contains.

- Each 'itl4' resource contains localizable tables and code for the IntlTokenize function and localizable number parts tables for the formatted number routines. With system software version 7.0, 'itl4' has length information for the code and tables it contains, and it includes a table of white space characters for the script.

- Each 'itl5' resource specifies the character set encoding and rendering behavior in a script-specific format. This optional resource is new with system software version 7.0.

- The 'KCHR' resource specifies a logical keyboard layout, that is, the mapping of virtual key codes to character codes. (It is important to note that changes for different localized versions of system software occur in the 'KCHR'-not the 'KMAP' resource.) With system software version 7.0, the U.S. keyboard layout resource, 'KCHR' (0) has improved consistency with changes in the Command-Caps Lock, Command-dead key, and Command-Option-Caps Lock key combinations. Also new with version 7.0, the
Script Manager only loads the 'KCHR' resource from the System file. See the section, **The 'KCHR' Resource** for details.

- The 'kcs#', 'kcs4', and 'kcs8' resources specify **keyboard icons** for screens of different bit depths. These resources are new with system software version 7.0 and replace the 'SICN' resource associated with keyboard layouts in earlier versions of system software. These icons are used in the new Keyboard menu and in the Keyboard control panel. See **Using the Keyboard Menu** for details. For guidelines for designing your own keyboard icons, see the
User Interface Guidelines.

- The 'KCAP' resource specifies the physical arrangement of keyboards and is used by the Key Caps desk accessory. See
Key Caps and the 'KCAP' Resource for details.

- The 'KSWP' resource specifies modifier-plus-key combinations that can be used to change the keyboard script and the current keyboard layout. New with system software version 7.0, the 'KSWP' resource can be used to change the keyboard layout within a script.

- The optional 'itlk' resource provides hardware-specific modifications to keyboard layout by indicating how to remap certain key combinations. Beginning with system software version 7.0, the **Script** Manager only loads this resource from the System file.