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## Using The International and Keyboard Resources

This section gives an overview of the international resources, including the keyboard resources. The 'itlm', optional 'itl5', 'kcs#', 'kcs4', and 'kcs8' resources described here are new with system software version 7.0. The 'itl4' and the optional 'itlk' resources described here are not new with system software version 7.0; however, they have not been previously documented here.

The international resources are stored in the System file as types 'itl0', 'itl1', 'itl2', 'itl4', 'itl5', 'itlb', 'itlc', 'itlk', and 'itlm'. The 'itl0' and 'itl1' resources contain date, time, and number formats, and basically correspond to the obsolete 'INTL' (0) and (1) resources. The formats are similar, but the **Script Manager** allows multiple 'itl0' and 'itl1' resources (not possible with the old 'INTL' (0) and (1) designations). With system software version 7.0, the 'itl1' resource permits additional date format information.

The 'itl2' resource contains procedures for sorting and, beginning with system software version 6.0.4, contains tables used by the **LwrText** procedure and by the Roman Script System's **CharType**, **Transliterate**, and **FindWord** routines. In version 7.0, these tables are also used by the **LowerText**, **UpperText**, **StripText**, and **StripUpperText** procedures.

The 'itl4' resource contains localizable tables, code for the tokenizer, and number parts for use by the **Script Manager**'s number parsing and formatting routines. The optional 'itl5' resource provides information on character set encoding and text rendering behavior. The 'itlb' resource contains bundle and configuration information for each script. The 'itlc' resource contains international configuration information for the system as a whole. The 'itlm' resource specifies preferred sorting order of script codes, language codes, and region codes and specifies the hierarchical arrangement of these codes.

Each installed script has an associated list of international resource numbers, generally in the range used for its fonts. For example, the Arabic script has the resources 'itl0', 'itl1', 'itl2', and 'itl4' with numbers in the range 0x4600 to 0x47FF; the Roman script has the resources 'itl0', 'itl1', 'itl2', and 'itl4' with numbers in the range 0x0 to 0x3FFF. The only international resources without an ID in the font range are the 'itlb' resource, whose ID is its script number, and the 'itlc' and 'itlm' resources, whose IDs are always 0.

If the *IntlForce* flag is TRUE, the resources that are used by the **International Utilities Package** are determined by the system script. However, you can force them to be determined by the font script by clearing the *IntlForce* flag. You can set and clear the *IntlForce* flag by using the **SetEnviron**s function, described in detail in *Macintosh Worldwide Development: Guide to System Software*. The selected resources are then used internally by the **International Utilities Package**.

The Table below shows which international and keyboard resources are included in the U.S. system software and whether script systems or localized versions of the system software add them to or replace them in the System file.

Versions of the 'itl0', 'itl1', 'itl2', 'itl4', 'KCHR', 'kcs#', 'kcs4', and 'kcs8' resources are available for all localized versions of the system software. Some localized versions also provide the 'itlk' resource. Some non-Roman systems

may use an 'itl5' resource.

### The international and keyboard resources

Resource type	U.S. system software including Roman Script System	Localized versions of system software or other script systems
'itlc'	Roman 'itlc'	May replace 'itlc'
'itlm'*	Default 'itlm'	May replace 'itlm'
'itlb'	Roman 'itlb'	May add non-Roman 'itlb'
'itl0'	U.S. 'itl0'	Adds non-U.S. 'itl0'
'itl1'	U.S. 'itl1'	Adds non-U.S. 'itl1'
'itl2'	U.S. 'itl2'	Adds non-U.S. 'itl2'
'itl4'	U.S. 'itl4'	Adds non-U.S. 'itl4'
'itl5'*	None	May add non-Roman 'itl5'
'itlk'	None	May add an 'itlk'†
'KCHR'	U.S. 'KCHR'	Adds non-U.S. 'KCHR'
'KSWP'	Standard 'KSWP'	May replace 'KSWP'
'KMAP'	Includes needed 'KMAP's	None
'kcs#'*	U.S. 'kcs#'	Adds non-U.S. 'kcs#'†
'kcs4'*	U.S. 'kcs4'	Adds non-U.S. 'kcs4'†
'kcs8'*	U.S. 'kcs8'	Adds non-U.S. 'kcs8'†

\*New with system software version 7.0

†ID corresponds to 'KCHR'