

The 'itl2' Resource Header

The 'itl2' resource header allows you to index localized character type and conversion tables in the Roman Script System. The Figure below shows the structure of the 'itl2' resource header. All fields in this header are 16-bit words. Each field designated as an offset is the signed offset, in bytes, from the beginning of the 'itl2' resource to the specified code block or table. The header is followed by the actual code chunks and tables, which may be in any order. The position of each is specified by the corresponding offset in the header.

With system software version 7.0, the 'itl2' header has been extended to include two new sections: section 3, containing fields for the lengths of all of the code blocks and tables for which there are offsets in sections 1 and 2 in the 'itl2' resource header, and section 4, containing offset and length pairs for tables that are new with system software version 6.0.7 and for future tables.

Section 1 of the header contains a format flag and five offsets to code chunks that can be used to modify the default sorting behavior. Before system software version 6.0.4, the *rsvdHook* offset was an unused sorting hook offset. It now is a format flag: a value of -1 indicates that the 'itl2' resource is in the system software version 6.0.4 (or newer) format.

Section 2 contains offsets to tables for character type (*typeList* offset, *classArray* offset), character conversion (*upperList* offset, *lowerList* offset, *upperNoMarkList* offset, and *noMarkList* offset), and word break (*wordTable* offset and *wrapTable* offset). These offsets to tables are used by the **LowerText**, **UpperText**, **StripText**, and **StripUpperText** procedures and by the **Script Manager's CharType**, **Transliterate**, and **FindWord** routines. They are only used in system software version 6.0.4 and later, and may not be present on earlier systems. It also contains a version number and a format code that are used by DeRez.

The *wordTable* offset and *wrapTable* offset are also offsets to tables used by the Roman **FindWord** routines in system software version 6.0.4 and by the general **FindWord** routine in system software version 7.0.

The remainder of the fields in the resource header, in Section 3 and Section 4, are only required in system software version 7.0 and later, and may not be present in earlier versions.

Section 3 contains fields for the lengths of all of the code blocks and tables for which there are offsets in sections 1 and 2 of the 'itl2' resource header. Lengths in this section need only be supplied for tables that may be returned by the **IUGetItlTable** procedure.

Section 4 contains offset and length pairs for tables to be added in the future. The first offset/length pair in this section is reserved for the FindScriptTable data type, which defines an optional table that associates every character code in a single-byte script's character set with either the Roman or native script. If this table is not present, the offset and length should be 0.

The data structure defined by the FindScriptTable type consists of a series of byte pairs with the format <character code, script code>. The character code is the last character code in a range of characters that belongs to the script specified by the script code. The first character code in the range is assumed to be the last character code in the previous range plus 1, or 0 for the first

range. The last pair must have character code 0xFF. For example, if the character set encoding for script smSample were defined such that 0x00-7F and 0xA0 were Roman characters and the remaining characters were native characters in smSample, the table would appear as follows:

dc.b	0x7F,smRoman
dc.b	0x9F,smSample
dc.b	0xA0,smRoman
dc.b	0xFF,smSample

The Figure below describes the new 'itl2' header format.

0	initHook offset	Section 1: offsets to sorting hooks
2	fetchHook offset	
4	vernierHook offset	
6	projectHook offset	
8	rsvdHook offset/fmt flag	
10	exitHook offset	
12	typeList offset	Section 2: offsets to character type, conversion, and word break tables
14	classArray offset	
16	upperList offset	
18	lowerList offset	
20	upperNoMarkList offset	
22	wordTable offset	
24	wrapTable offset	
26	noMarkList offset	
28	versionNumber	
30	format code	
32	initHook length	Section 3: sizes of the code blocks and tables
34	fetchHook length	
36	vernierHook length	
38	projectHook length	
40	reserved	
42	exitHook length	
44	typeList length	
46	classArray length	
48	upperList length	
50	lowerList length	
52	upperNoMarkList length	
54	wordTable length	
56	wrapTable length	
58	noMarkList length	
60	FindScriptTable offset	Section 4: offset and length pairs for additional tables
62	FindScriptTable length	

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