$PSDocId: Document Release 1.0 for Run-time Library Release 4.3$

Dot-file structure

Continuous fixed-length data file

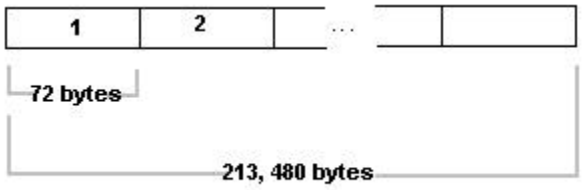
< General file structure >

1) File contents

* Data file of character forming information
  Every data in the font data file is necessary to form characters, and the following data is not included.
  ** File header
  ** JIS code
  ** data except for character forming information
* Non-compression data
  No compression processing is performed for the font data file.

2) Data contents

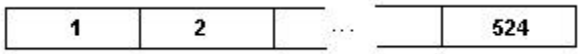
* Continuous structure of fixed-length data
  In each dot size, 1 character data length is fixed, and the file is only the continuity of the fixed-length data. Thus, the file size is found as "1 character data length * number of characters".
  Example: 24*24 JIS first level full-size character
  Size = 24*24 / 8 = 72 bytes / 1 character



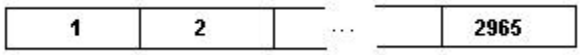
3) File units and number of data

* Basic set
  (1) JIS full-size non-KANJI
  (2) JIS full-size first level KANJI
  (3) JIS full-size second level KANJI
  (4) JIS full-size characters for vertical writing

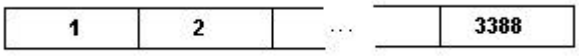
  The content of data in a font is as follows:
  (1) JIS non-KANJI : 524 characters
  Note: A head space is included.



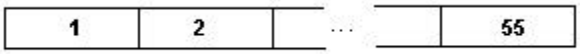
(2) JIS first level KANJI : 2,965 characters



(3) JIS second level KANJI : 3,388 characters



(4) JIS characters for vertical writing : 55 characters



| Data structure |

Start with upper-left point, horizontal slice, byte expanding downward

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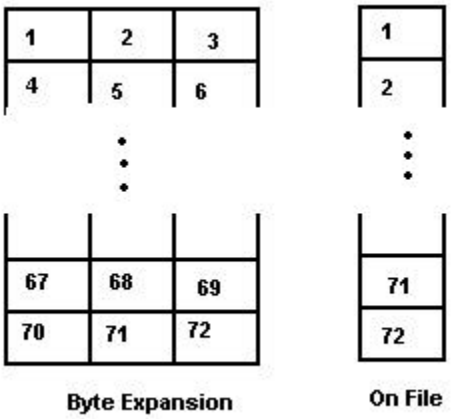
< General data structure >

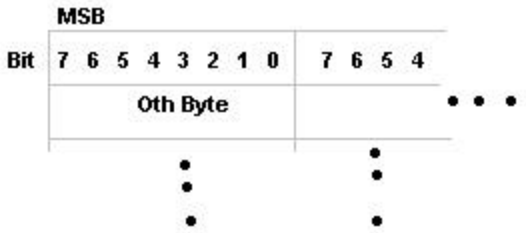
1) Byte-expansion

* "Byte boundary" specification for horizontal direction
  When expanding the font data downward, there is a byte-boundary specification for the horizontal direction. Thus, when there is remainder after dividing the horizontal size of a character by 8, the size is adjusted to be the closest multiple of 8, which must be also more than its original size. Padding is performed, and in some bits (some dots), dummy data (bit off) is stored.
* Start with upper-left point , horizontal slice, expanding downward
  In the following way, the data will be expanded.
  Example: 24*24 (1 to 72 bytes)

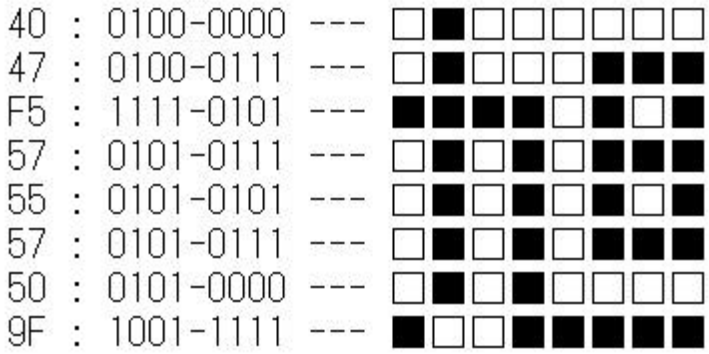


2) Bit expansion

* 1 bit is 1 dot.
  1 bit of the data corresponds to 1 dot used when forming characters. Expansion of each bit will be started from the upper bit.



3) Actual data example (8*8)

Example: Shift-JIS code: 88ae "旭"

Data: F40-47-F5-57-55-57-50-9F (8*8/8=8 bytes / 1 character)