

◆ Function 212 (0xD4) = Character Group

The Character Group subfunctions have character orientation.

0xD400

Set Alignment Character

- ▶ <212 (0xD4)> <0 (0x00)> [size = variable] <flags = 0>
[size of non-deletable information = 2]
[alignment/decimal character]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD401

Set Thousands Separator Character

- ▶ <212 (0xD4)> <1 (0x01)> [size = variable] <flags = 0>
[size of non-deletable information = 2]
[separator character]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD402

Set Underline Spaces Mode

- ▶ <212 (0xD4)> <2 (0x02)> [size = variable] <flags = 0>
[size of non-deletable information = 1]
<underline spaces mode>
bit 0: 0 = no, 1 = yes
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD403

Set Underline Tabs Mode

- ▶ <212 (0xD4)> <3 (0x03)> [size = variable] <flags = 0>
[size of non-deletable information = 1]
<underline tabs mode>
bit 0: 0 = no, 1 = yes
<undocumented deletable data> x ?
[size] <0xD4>◀

Set Underline Tabs Mode causes tabs, indents, and aligns to be underlined.

0xD404

Horizontal Advance to Page Position

- ▶ <212 (0xD4)> <4 (0x04)> [size = variable] <flags = 0>
[size of non-deletable information = 3]
<horizontal advance definition>
bit 0: 0 = relative, 1 = absolute
[position/adjustment (WPU/signed WPU)]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD405

Vertical Advance to Page Position

- ▶ <212 (0xD4)> <5 (0x05)> [size = variable] <flags = 0>
[size of non-deletable information = 3]
<vertical advance definition>
bit 0: 0 = relative, 1 = absolute
[position/adjustment (WPU/signed WPU)]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD406

Index Entry

- ▶ <212 (0xD4)> <6 (0x06)> [size = variable] <flags = PRFXID>
<number of PIDs = 1>
[index mark PID (type=0x0E)]
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD407

Table of Authority Entry

- ▶ <212 (0xD4)> <7 (0x07)> [size = variable] <flags = PRFXID>
<number of PIDs = 1>
[parent ToA packet PID (type=0x0D)]
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD408

Cross-Reference Tag

- ▶ <212 (0xD4)> <8 (0x08)> [size = variable] <flags = PRFXID>
<number of PIDs = 1>
[cross-reference tag PID (type=0x0F)]
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD409

Include Subdocument

- ▶ <212 (0xD4)> <9 (0x09)> [size = variable] <flags = PRFXID>
<number of PIDs = 1>
[filename PID (type=0x0C)]
[size of non-deletable information = 2]
[number of lines of text to display]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD40A

Begin Marked Text for Table of Contents

- ▶ <212 (0xD4)> <10 (0x0A)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information]

<level (0-4)>
[ToC name] x ?null terminated
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD40B

End Marked Text for Table of Contents

► <212 (0xD4)> <11 (0x0B)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information]
<level (0-4)>
[ToC name] x ?null terminated
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD40C

Begin Marked Text for List

► <212 (0xD4)> <12 (0x0C)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information]
[list name] x ?
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD40D

End Marked Text for List

► <212 (0xD4)> <13 (0x0D)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information]
[list name] x ?
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD40E

Start of Included Subdocument

► <212 (0xD4)> <14 (0x0E)> [size = variable] <flags = PRFXID + 1 (simple paired function)>
<number of PIDs = 3>
[filename PID (type=0x0C)]
[subdocument summary PID (type=0x2C)]
[password structure packet PID (type=0x2D)]
[size of non-deletable information = 3]
[number of lines of text to display]
<expand flag>
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD40F

End of Included Subdocument

► <212 (0xD4)> <15 (0x0F)> [size = variable] <flags = PRFXID + 1 (simple paired function)>
<number of PIDs = 1>
[filename PID (type=0x0C)]
[size of non-deletable information = 3]
[number of lines of text to display]
<expand flag>
<undocumented deletable data> x ?

[size] <0xD4>◀

0xD410

Begin Hidden Text

- ▶ <212 (0xD4)> <16 (0x10)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 2]
<hide kind/level>
0-7 = outline level number
8 = no paragraph numbers in this hide
-1 = hidden table cell information
-2 = hidden by hide selection
<level number at time of hide> always present, but used only if outline level hide
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD411

End Hidden Text

- ▶ <212 (0xD4)> <17 (0x11)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD412

Start Generate Number Placeholder

This subfunction is used only during generation.

- ▶ <212 (0xD4)> <18 (0x12)> [size = 18] <flags = 0>
[size of non-deletable information = 8]
[record number (for index/ToA)]
<generate number type>
[number]
<method>
[format string PID]
[size] <0xD4>◀

0xD413

End Generate Number Placeholder

This subfunction is used only during generation.

- ▶ <212 (0xD4)> <19 (0x13)> [size = 10] <flags = 0>
[size of non-deletable information = 0]
[size] <0xD4>◀

0xD414

Concordance Match

- ▶ <212 (0xD4)> <20 (0x14)> [size = variable] <flags = 0 or PRFXID>
If the prefix ID bit is set, then the following information exists:
<number of PIDs = 2>
[box caption PID]
[box counter PID]
[size of non-deletable information]

If the prefix ID bit is clear, then the following information exists:

[index name] x ?

[heading name] x ?

[subheading name] x ?

<undocumented deletable data> x ?

[size] <0xD4>◀

0xD415

Embedded Printer Command



<212 (0xD4)> <21 (0x15)> [size = variable] <flags = PRFXID>

<number of PIDs = 1>

[filename or commands PID (type=0x24)]

[size of non-deletable information = 1]

<embedded printer command definition>

0 = filename

1 = command

2 = postscript

<undocumented deletable data> x ?

[size] <0xD4>◀

0xD416

Kerning On/Off



<212 (0xD4)> <22 (0x16)> [size = variable] <flags = 0>

[size of non-deletable information = 1]

<kerning mode>

bit 0: 0 = off, 1 = on

<undocumented deletable data> x ?

[size] <0xD4>◀

0xD417

Block On/Off



<212 (0xD4)> <23 (0x17)> [size = variable] <flags = 0>

[size of non-deletable information = 3]

<block state>

bit 0: 0 = off, 1 = on

[block level number]

<undocumented deletable data> x ?

[size] <0xD4>◀

0xD418

Color



<212 (0xD4)> <24 (0x18)> [size = variable] <flags = 0>

[size of non-deletable information = 3]

<print colors (RGB)> x 3

<undocumented deletable data> x ?

[size] <0xD4>◀

0xD419

Character Shading Change



<212 (0xD4)> <25 (0x19)> [size = variable] <flags = 0>

[size of non-deletable information = 1]

<shading> (0 to 100%)

<undocumented deletable data> x ?
[size] <0xD4>◀

0xD41A

Font Face Change

► <212 (0xD4)> <26 (0x1A)> [size = variable] <flags = PRFXID>
 <number of PIDs = 1>
 [font descriptor PID (type=0x55)]
 [size of non-deletable information = 8]
 [old matched point size (3600ths)]
 [hash (matched typeface descriptor)]
 [matched font index in font list]
 [matched point size of font (3600ths)]
 <undocumented deletable data> x ?
 [size] <0xD4>◀

0xD41B

Font Size Change

► <212 (0xD4)> <27 (0x1B)> [size = variable] <flags = PRFXID>
 <number of PIDs = 1>
 [old typeface descriptor PID (type=0x55)]
 [size of non-deletable information = 8]
 [point size (3600ths)]
 [hash (matched typeface descriptor)]
 [matched font index in font list]
 [matched point size of font (3600ths)]
 <undocumented deletable data> x ?
 [size] <0xD4>◀

0xD41C

Set Language

► <212 (0xD4)> <28 (0x1C)> [size = variable] <flags = 0>
 [size of non-deletable information = 2]
 [2-character language code]
 All possible languages should be in this list:
 AF = Afrikaans
 CA = Catalan
 CZ = Czech
 HR = Croatian
 DK = Danish
 NL = Dutch
 EN = English
 OZ = English-Australia
 CE = English-Canada
 UK = English-UK
 SU = Finnish
 LF = French-Canada
 FR = French-National
 GA = Galician
 DE = German-National
 SD = German-Switzerland
 GR = Greek
 MA = Hungarian
 IS = Icelandic

IT = Italian
JP = Japanese
NO = Norwegian
PL = Polish
BR = Portuguese-Brazil
PO = Portuguese-Portugal
RU = Russian
SL = Slovak
SO = Slovenian
ES = Spanish
SV = Swedish
TR = Turkish
YK = Ukrainian
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD41D

Comment

► <212 (0xD4)> <29 (0x1D)> [size = variable] <flags = PRFXID>
<number of PIDs = 1>
[comment text PID (type=0x1B)]
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD41E

Set Dot Leader Characters

► <212 (0xD4)> <30 (0x1E)> [size = variable] <flags = 0>
[size of non-deletable information = 3]
[dot leader character]
<number of spaces between characters>
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD41F

Conditional End of Page

► <212 (0xD4)> <31 (0x1F)> [size = variable] <flags = 0>
[size of non-deletable information = 1]
<number of single spaced lines not to be broken>
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD420

Date

► <212 (0xD4)> <32 (0x20)> [size = variable] <flags = 3 (encased function) + PRFXID>
<number of PIDs = 1>
[format code PID (type=0x65)]
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD421

End of Date

- ▶ <212 (0xD4)> <33 (0x21)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD422

Date Format

- ▶ <212 (0xD4)> <34 (0x22)> [size = variable] <flags = 0>
[size of non-deletable information]
[date format language (set at insertion)]
[date format string (word string)] x ?
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD423

Character Space/Width

- ▶ <212 (0xD4)> <35 (0x23)> [size = variable] <flags = 0>
[size of non-deletable information = 4]
[percent of character width] default = 100
[percent of space width] default = 100
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD424

Space Expansion

- ▶ <212 (0xD4)> <36 (0x24)> [size = variable] <flags = 0>
[size of non-deletable information = 4]
[minimum percent of space width] default = 60
[maximum percent of space width] default = 400
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD425

Bookmark

- ▶ <212 (0xD4)> <37 (0x25)> [size = variable] <flags = PRFXID>
<number of PIDs = 1>
[bookmark PID (type=0x09)]
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD426

Protect Block On

- ▶ <212 (0xD4)> <38 (0x26)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information = 2]
[size of block to protect (WPU)]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD427

Protect Block Off

► <212 (0xD4)> <39 (0x27)> [size = variable] <flags = 1 (simple paired function)>
 [size of non-deletable information = 2]
 [size of block to protect (WPU)]
 <undocumented deletable data> x ?
 [size] <0xD4>◄

0xD428

Pause Printer

► <212 (0xD4)> <40 (0x28)> [size = variable] <flags = 0>
 [size of non-deletable information = 0]
 <undocumented deletable data> x ?
 [size] <0xD4>◄

0xD429

Overstrike

► <212 (0xD4)> <41 (0x29)> [size = variable] <flags = 0>
 [size of non-deletable information]
 [characters to overstrike] x ? word string with attributes
 <undocumented deletable data> x ?
 [size] <0xD4>◄

0xD42A

Table Definition (Table On)

► <212 (0xD4)> <42 (0x2A)> [size = variable] <flags = (0 or PRFXID) + 3 (encased function)>

If the prefix ID bit is set, the following information exists:

<number of PIDs>
 [unique table ID PID (type=0x66)]
 [table outside border PID (type=0x44)]
 [table default line PID (type=0x42)]
 [table names PID (type=0x61)]also contains names of cells, columns, rows, and blocks
 [default table fill PID (type=0x43)]

A maximum of 4 optional override line style PIDs may exist in any order. WP for DOS uses the default line style as a custom line style so only three additional line style PIDs will ever appear.

[top line style PID (type=0x42)]
 [bottom line style PID (type=0x42)]
 [left line style PID (type=0x42)]
 [right line style PID (type=0x42)]
 [secondary table fill PID (type=0x43)]
 [table style PID (type=0x69)]
 [size of non-deletable information]

<table flags>

bit 0: 0 = use border line colors, 1 = user override color
 bit 1: 1 = can enter all locked cells, (engine)
 bit 2: 0 = tab on last row to insert a new row, 1 = tab to leave table
 bit 7: 0 = left to right table, 1 = right to left table

<table position>

bits 0-2: table position options
 0 = align with left margin
 1 = align with right margin
 2 = center between margins
 3 = full (adjust column widths to fit margins)
 4 = absolute offset from left margin

[offset from left edge of paper] for absolute position option

<default cell line color (RGS)> x 4
 [table override size (minimum 2)]
 [table override flags]
 bit 14: 1 = fill override data exists
 bit 15: 1 = border override data exists
 [table border override data size] if bit 15 is set
 [table border override flags] if bit 15 is set
 bit 0: 1 = left line style PID exists
 bit 1: 1 = right line style PID exists
 bit 2: 1 = top line style PID exists
 bit 3: 1 = bottom line style PID exists
 <override data> x ? if bit 15 is set
 [table fill override data size] if bit 14 is set
 [table fill override flags] if bit 14 is set
 <override data> x ? if bit 14 is set
 <alternate fill>
 0 = off
 1 = rows
 2 = columns
 3 = checkerboard
 [count for table fill pattern]
 [count for secondary fill pattern]
 <table items override flags>
 bit 0: 1 = border changed by user since style was applied
 bit 1: 1 = primary fill changed by user since style was applied
 bit 2: 1 = secondary fill changed by user since style was applied
 bit 3: 1 = default line changed by user since style was applied
 bit 4: 1 = alternate fill changed by user since style was applied
 <undocumented deletable data> x ?
 [size] <0xD4>◀

0xD42B

Table Definition End

► <212 (0xD4)> <43 (0x2B)> [size = variable] <flags = 3 (encased function)>
 [size of non-deletable information = 0]
 <undocumented deletable data> x ?
 [size] <0xD4>◀

0xD42C

Table Column

► <212 (0xD4)> <44 (0x2C)> [size = variable] <flags = 0>
 [size of non-deletable information = 17]
 <flags> default = not locked
 [width]
 [left gutter spacing (WPU)]
 [right gutter spacing (WPU)]
 [attribute word 1]
 bit 0: 1 = extra large
 bit 1: 1 = very large
 bit 2: 1 = large
 bit 3: 1 = small print
 bit 4: 1 = fine print
 bit 5: 1 = superscript
 bit 6: 1 = subscript
 bit 7: 1 = outline
 bit 8: 1 = italics

bit 9: 1 = shadow
 bit 10: 1 = redline
 bit 11: 1 = double underline
 bit 12: 1 = bold
 bit 13: 1 = strikeouts
 bit 14: 1 = underline
 bit 15: 1 = small caps
 [attribute word 2]
 bit 0: 1 = blink
 bit 1: 1 = reverse video
 <alignments>
 bits 0-2: justification
 0 = left
 1 = full
 2 = center
 3 = right
 4 = full all lines (kinto waritsuke)
 5 = decimal align
 bit 3: 1 = use absolute position from right
 bits 4-7: number of characters to right of decimal
 [absolute position from right gutter]
 [number type]
 bits 0-3: number of digits to display after decimal point or date index information
 bit 4: 1 = display with commas
 bit 5: rounding
 0 = use full precision in calculations
 1 = use displayed precision
 bits 6-7: negative numbers
 0 = '-' (use minus sign)
 1 = () (use parentheses)
 2 = CR/DR (use credit/debit symbols)
 3 = not defined
 bits 8-11: standard formats
 0 = general
 1 = integer
 2 = fixed
 3 = percent
 4 = currency
 5 = accounting
 6 = commas
 7 = scientific
 8 = date
 9 = text
 bit 12: 1 = text
 bit 13: 1 = set currency symbol on
 bits 14-15: notation
 0 = floating point
 1 = scientific
 2 = fixed
 3 = not defined
 <currency symbol index>
 bits 0-6: index of the desired currency, default = 0
 bit 7: alignment
 <undocumented deletable data> x ?
 [size] <0xD4>◀

0xD42D

Disable Writing Tools

- ▶ <212 (0xD4)> <45 (0x2D)> [size = variable] <flags = 0>
[size of non-deletable information = 1]
<writing tools state>bit 0: 0 = off (enabled), 1 = on (disabled)
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD42E

Print Filename Start

- ▶ <212 (0xD4)> <46 (0x2E)> [size = variable] <flags = PRFXID + 3 (encased function)>
<number of PIDs = 1>
[PID]
[size of non-deletable information = 1]
<flag>
bit 0: 0 = insert filename, 1 = insert path + filename
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD42F

Print Filename End

- ▶ <212 (0xD4)> <47 (0x2F)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD430

Bar Code

- ▶ <212 (0xD4)> <48 (0x30)> [size = variable] <flags = 0>
[size of non-deletable information]
<bar code type> 0 = USPS POSTNET
[size of data to follow] format of data is type dependent
<bar code data> x ?
If bar code type = 0, the <bar code data> is the following:
[width of bar code (WPU)]
[height of bar code (WPU)]
<ASCIIZ bar code digits> x 5, 9, or 11
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD431

Sound

- ▶ <212 (0xD4)> <49 (0x31)> [size = variable] <flags = PRFXID>
<number of PIDs = 1>
[PID of the sound clip (type=0x57)]
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD432

Paragraph Number On

- ▶ <212 (0xD4)> <50 (0x32)> [size = variable] <flags = 3 (encased function)>

[size of non-deletable information = 4]
[hash of outline style used for expansion] 0 forces reinsertion
<level number 0-7> 4 if fixed
<flag> bit 0 set if fixed
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD433

Paragraph Number Off

▶ <212 (0xD4)> <51 (0x33)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD434

Hypertext Begin On

▶ <212 (0xD4)> <52 (0x34)> [size = variable] <flags = PRFXID + 2 (encased/paired function)>
 <number of PIDs = 2>
 [filename of macro or where bookmark is PID (type=0x07)]
 [bookmark name PID (type=0x17)]
[size of non-deletable information = 1]
<hypertext action>
 1 = go to a bookmark
 2 = execute a macro
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD435

Hypertext Begin Off

▶ <212 (0xD4)> <53 (0x35)> [size = variable] <flags = 2 (encased/paired function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD436

Hypertext End On

▶ <212 (0xD4)> <54 (0x36)> [size = variable] <flags = 2 (encased/paired function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD437

Hypertext End Off

▶ <212 (0xD4)> <55 (0x37)> [size = variable] <flags = 2 (encased/paired function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD438

Change End of Line Characters

► <212 (0xD4)> <56 (0x38)> [size = variable] <flags = 0>
 [size of non-deletable information]
 [0 or more WP characters] x ?
 <undocumented deletable data> x ?
 [size] <0xD4>◄

0xD439

Change Beginning of Line Characters

► <212 (0xD4)> <57 (0x39)> [size = variable] <flags = 0>
 [size of non-deletable information]
 [0 or more WP characters] x ?
 <undocumented deletable data> x ?
 [size] <0xD4>◄

0xD43A

Define Link Start

► <212 (0xD4)> <58 (0x3A)> [size = variable] <flags = PRFXID + 1 (simple paired function)>
 <number of PIDs = 1>
 [filename PID (type=0x07)] PID = 0 if type is not Spreadsheet, dBase, Paradox,
 DataPerfect, or ASCII.
 [size of non-deletable information]
 [date of file when last linked]
 [time of file when last linked]
 <source type>
 1 (0x01) = spreadsheet
 33 (0x21) = dBase
 34 (0x22) = Paradox
 65 (0x41) = DataPerfect
 97 (0x61) = ASCII delimited text
 129 (0x81) = NetWare SQL
 130 (0x82) = Oracle
 131 (0x83) = DBase2
 132 (0x84) = SQL Server
 133 (0x85) = Sybase
 134 (0x86) = SQLBase
 135 (0x87) = XDB
 <destination type>
 1 = table
 2 = text
 3 = merge text data
 If source type is spreadsheet:
 <user specified>
 1 = name
 2 = range
 [name length]
 [name] x ? null terminated
 [number of range blocks]
 [range blocks] x 6?
 Each block of 6 words contains the following:
 [begin row]
 [begin column]
 [begin sheet]
 [end row]
 [end column]
 [end sheet] the last word [end sheet] also has the high bit set (0x8000)

If source type is dBase or Paradox:

- <flag> bit 0: 1 = field names included
- [field names length]
- <field names (comma-delimited list)> x ?
- [query length]
- <query string> x ?
- [password length]
- <password> x ?

If type is DataPerfect:

- <flag> bit 0: 1 = field names included
- [panel length]
- <panel> x ?
- [field names length]
- <field names (comma-delimited list)> x ?
- [query length]
- <query string> x ?
- [password length]
- <password> x ?

If type is NetWare SQL:

- <flag> bit 0: 1 = field names included
- [file path length]
- <field path> x ?
- [dictionary path length]
- <dictionary path> x ?
- [user length]
- <user> x ?
- [password length]
- <password> x ?
- [query length]
- <query string> x ?

If type is Oracle, DBase2, SQLBase, SQL Server, or Sybase, XDB:

- <flag> bit 0: 1 = field names included
- [server length]
- <server> x ?
- [user length]
- <user> x ?
- [password length]
- <password> x ?
- [query length]
- <query string> x ?

If type is ASCII delimited text:

- <encapsulate character length> (range is 1-2)
- <encapsulate character> x ?
- <strip characters length> (range is 1-5)
- <strip characters> x ?
- <field delimiter length> (range is 1-5)
- <field delimiter> x ?
- <record delimiter length> (range is 1-5)
- <record delimiter> x ?
- <undocumented deletable data> x ?

[size] <0xD4>◀

0xD43B

Define Link End



<212 (0xD4)> <59 (0x3B)> [size = variable] <flags = PRFXID + 1 (simple paired function)>
 <number of PIDs = 1>
 [filename PID (type=0x07)]

[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD43C

Style Separator Comment Begin

- ▶ <212 (0xD4)> <60 (0x3C)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD43D

Style Separator Comment End

- ▶ <212 (0xD4)> <61 (0x3D)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD43E

Macro Function Begin

- ▶ <212 (0xD4)> <62 (0x3E)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 2]
[extended word string character] in range 0xD000 to 0xFFFFD
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD43F

Macro Function End

- ▶ <212 (0xD4)> <63 (0x3F)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD440

Page Number On

- ▶ <212 (0xD4)> <64 (0x40)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD441

Page Number Off

- ▶ <212 (0xD4)> <65 (0x41)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD442

Start of Text Marked for Hiding

- ▶ <212 (0xD4)> <66 (0x42)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information = 0]

<undocumented deletable data> x ?
[size] <0xD4>◀

0xD443

End of Text Marked for Hiding

► <212 (0xD4)> <67 (0x43)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD444

Floating Cell Begin

► <212 (0xD4)> <68 (0x44)> [size = variable] <flags = PRFXID + 1 (simple paired function)>
 <number of PIDs = 2>
 [unique floating cell ID PID (type = 0x67)]
 [cell name PID (type=0x60)]
[size of non-deletable information]
[number type]
 bits 0-3: number of digits to display after decimal point or date index information
 bit 4: 1 = display with commas
 bit 5: rounding
 0 = use full precision in calculations
 1 = use displayed precision
 bits 6-7: negative numbers
 0 = '-' (use minus sign)
 1 = () (use parentheses)
 2 = CR/DR (use credit/debit symbols)
 3 = not defined
 bits 8-11: standard formats
 0 = general
 1 = integer
 2 = fixed
 3 = percent
 4 = currency
 5 = accounting
 6 = commas
 7 = scientific
 8 = date
 9 = text
 bit 12: 1 = text
 bit 13: 1 = set currency symbol on
 bits 14-15: notation
 0 = floating point
 1 = scientific
 2 = fixed
 3 = not defined
 <currency symbol index>
 bits 0-6: index of the desired currency, default = 0
 bit 7: alignment
[recalculation error if an error occurred during recalculation]
 <number/formula flag>
 bit 0: 1 = number
 bit 1: 1 = formula
 <IEEE floating point number if number bit set> x 8
 If formula bit is set, the following information exists:
 [length of formula]

<tokenized formula> x ?
see *Table Formulas* for list of formula codes.
[size] <0xD4>◀

0xD445

Floating Cell End

► <212 (0xD4)> <69 (0x45)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information = 0]
[size] <0xD4>◀

0xD446

Hidden Text

► <212 (0xD4)> <70 (0x46)> [size = variable] <flags = PRFXID>
<number of PIDs = 1>
[text PID (type=0x08)]
[size of non-deletable information = 0]
[size] <0xD4>◀

0xD447

Attached Text (subtitle) Mark (Fareast)

► <212 (0xD4)> <71 (0x47)> [size = variable] <flags = 0>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD448

Text of Attached Text (Fareast)

► <212 (0xD4)> <72 (0x48)> [size = variable] <flags = 0>
[size of non-deletable information = variable]
[attached text string] x ? word string, no embedded attributes
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD449

Attached Text Options (Fareast)

► <212 (0xD4)> <73 (0x49)> [size = variable] <flags = 0>
[size of non-deletable information = 4]
<justification>
0 = left
1 = full (use 4 instead)
2 = center
3 = right
4 = full all lines (kinto waritsuke)
<subtitle position>
bit 0: 0 = position subtitle text above line
1 = position subtitle text below line
<maximum attached text height % of current font>
[leading adjustment (SWPUs) position to increase]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD44A

Ligature Control for Arabic (Mideast)

- ▶ <212 (0xD4)> <74 (0x4A)> [size = variable] <flags = 0>
[size of non-deletable information = 1]
<ligature setting>
 0 = none
 1 = partial ligatures
 2 = full ligatures
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD44B

Number Shaping for Arabic/Hebrew (Mideast)

- ▶ <212 (0xD4)> <75 (0x4B)> [size = variable] <flags = 0>
[size of non-deletable information = 1]
<number shape>
 0 = context
 1 = force English font
 2 = force Arabic/Hebrew font
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD44C

Start of Right-to-Left Text

- ▶ <212 (0xD4)> <76 (0x4C)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD44D

End of Right-to-Left Text

- ▶ <212 (0xD4)> <77 (0x4D)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD44E

Native Font Change (Mideast)

- ▶ <212 (0xD4)> <78 (0x4E)> [size = variable] <flags = PRFXID>
 <number of PIDs = 1>
 [typeface descriptor PID]
[size of non-deletable information = 9]
[old point size]
[hash]
[matched font index in font list]
[matched point size of font (3600th's)]
<language set>
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD44F

Native Font Size Change (Mideast)

► <212 (0xD4)> <79 (0x4F)> [size = variable] <flags = PRFXID>
 <number of PIDs = 1>
 [typeface descriptor PID]
 [size of non-deletable information = 9]
 [point size]
 [hash]
 [matched font index in font list]
 [matched point size of font (3600th's)]
 <language set>
 <undocumented deletable data> x ?
 [size] <0xD4>◀

0xD450

Tracked Region On

► <212 (0xD4)> <80 (0x50)> [size = variable] <flags = PRFXID + 1 (simple paired function)>
 <number of PIDs = 1>
 [prefix of region data]
 [size of non-deletable information = 6]
 {region number}
 <characteristics to track> for each bit: 1 = track characteristic, 0 = do not track
 bit 0: font face
 bit 1: font size
 bit 2: attributes
 bit 3: color
 bit 4: text insertion
 bit 5: text deletion
 <region type>
 1 = OLE
 2 = OBEX
 <undocumented deletable data> x ?
 [size] <0xD4>◀

0xD451

Tracked Region Off

► <212 (0xD4)> <81 (0x51)> [size = variable] <flags = PRFXID + 1 (simple paired function)>
 <number of PIDs = 1>
 [prefix of region data]
 [size of non-deletable information = 6]
 {region number}
 <characteristics to track> for each bit: 1 = track characteristic, 0 = do not track
 bit 0: font face
 bit 1: font size
 bit 2: attributes
 bit 3: color
 bit 4: text insertion
 bit 5: text deletion
 <region type>
 1 = OLE
 2 = OBEX
 <undocumented deletable data> x ?
 [size] <0xD4>◀

0xD452

Style Example Begin

Not implemented in WP6.1.

- ▶ <212 (0xD4)> <82 (0x52)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD453

Style Example End

Not implemented in WP6.1.

- ▶ <212 (0xD4)> <83 (0x53)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD454

Style Prefix Undo

Style prefix undo is used when a style is changed or deleted by the user.

- ▶ <212 (0xD4)> <84 (0x54)> [size = variable] <flags = PRFXID>
<number of PIDs = 2>
[new PID] what is being used now
[old PID] what was deleted by the user
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD455

Delay Prefix Undo

- ▶ <212 (0xD4)> <85 (0x55)> [size = variable] <flags = PRFXID>
<number of PIDs = 1>
[PID of undo information]
[size of non-deletable information = 2]
[current PID] same as in function 0xD115
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD456

Annotate Insert On

- ▶ <212 (0xD4)> <86 (0x56)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information = 2]
[user ID] offset into user list
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD457

Annotate Insert Off

- ▶ <212 (0xD4)> <87 (0x57)> [size = variable] <flags = 1 (simple paired function)>
[size of non-deletable information = 2]
[user ID] offset into user list

<undocumented deletable data> x ?
[size] <0xD4>◀

0xD458

Annotate Delete On

- ▶ <212 (0xD4)> <88 (0x58)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 2]
[user ID] offset into user list
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD459

Annotate Delete Off

- ▶ <212 (0xD4)> <89 (0x59)> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 2]
[user ID] offset into user list
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD45A

Speech Recognition Begin

- ▶ <212 (0xD4)> <90 (0x5A)> [size = variable] <flags = 0>
[size of non-deletable information = 11]
[session ID]
{utterance ID}
<character count> number of word characters in item
{hash} hash of characters when item was inserted
<undocumented deletable data> x ?
[size] <0xD4>◀

0xD45B

Speech Recognition End

- ▶ <212 (0xD4)> <91 (0x5B)> [size = variable] <flags = 0>
[size of non-deletable information = 2]
[session ID]
<undocumented deletable data> x ?
[size] <0xD4>◀

◆ Function 213 (0xD5) = Cross-Reference Group

The Cross-Reference Group subfunctions have character orientation.

The subfunctions in this list are paired so that the even-numbered codes are the On functions and the odd-numbered codes are the Off functions. Each instance of a subfunction will consist of the On subfunction, the associated information and the Off subfunction.

Subfunctions: 0 (0x00) - 17 (0x11)

Subfunction	Description
0 (0x00)	User-Defined Counters On
1 (0x01)	User-Defined Counters Off
2 (0x02)	Box Cross-Reference On
3 (0x03)	Box Cross-Reference Off
4 (0x04)	Page Cross-Reference On
5 (0x05)	Page Cross-Reference Off
6 (0x06)	Secondary Page Cross-Reference On
7 (0x07)	Secondary Page Cross-Reference Off
8 (0x08)	Chapter Cross-Reference On
9 (0x09)	Chapter Cross-Reference Off
10 (0x0A)	Volume Cross-Reference On
11 (0x0B)	Volume Cross-Reference Off
12 (0x0C)	Paragraph Number Cross-Reference On
13 (0x0D)	Paragraph Number Cross-Reference Off
14 (0x0E)	Footnote Cross-Reference On
15 (0x0F)	Footnote Cross-Reference Off
16 (0x10)	Endnote Cross-Reference On
17 (0x11)	Endnote Cross-Reference Off

- <213 (0xD5)> <on subfunction> [size = variable] <flags = 3 (+PRFXID if counter)>
If prefix ID bit set, the following information exists:
 <number of PIDs = 1>
 [PID of counter or box (type = 0x11)]
[size of non-deletable information]
[tag ID] x ?
<undocumented deletable data> x ?
[size] <0xD5>◀
- <associated counter or cross-reference information> x ?
- <213 (0xD5)> <off subfunction> [size = variable] <flags = 3 (encased function)>
[size of non-deletable information = 0]
[size] <0xD5>◀

◆ **Function 214 (0xD6) = Header/Footer Group**

The Header/Footer Group subfunctions have page orientation.

Subfunctions: 0 (0x00) - 5 (0x05)

Subfunction	Description
0 (0x00)	Header A
1 (0x01)	Header B
2 (0x02)	Footer A
3 (0x03)	Footer B
4 (0x04)	Watermark A
5 (0x05)	Watermark B

► <214 (0xD6)> <subfunction> [size = variable] <flags = PRFXID>
<number of PIDs = 1>
[header/footer text PID (type=0x08)]
[size of non-deletable information = 2]
<occurrence>
bit 0: 0 = does not occur on odd pages
1 = does occur on odd pages
bit 1: 0 = does not occur on even pages
1 = does occur on even pages
bit 2: 0 = horizontal direction (left to right)
1 = vertical direction (top to bottom - East Asia)
bit 3: 0 = use full page to display watermark
1 = use space between headers and footers to display watermark
<undocumented deletable data> x ?
[size] <0xD6>◀

◆ Function 215 (0xD7) = Footnote/Endnote Group

The Footnote/Endnote Group subfunctions have character orientation.

The subfunctions in this list are paired so that the even-numbered codes are the On functions and the odd-numbered codes are the Off functions. Each instance of a subfunction will consist of the On subfunction, the associated information, and the Off subfunction.

0xD700

Footnote On

► <215 (0xD7)> <0 (0x00)> [size = variable] <flags = PRFXID + 3 (encased function)>
<number of PIDs = 1>
[footnote text PID (type=0x08)]
[size of non-deletable information = 0]
<undocumented deletable data> x ?
[size] <0xD7>◀

0xD701

Footnote Off

- ▶ <215 (0xD7)> <1 (0x01)> [size = 10] <flags = 3 (encased function)>
[size of non-deletable information = 0]
[size] <0xD7>◀

0xD702

Endnote On

- ▶ <215 (0xD7)> <2 (0x02)> [size = 13] <flags = PRFXID + 3 (encased function)>
<number of PIDs = 1>
[endnote text PID (type=0x08)]
[size of non-deletable information = 0]
[size] <0xD7>◀

WP for DOS has the following variances:

- ▶ <215 (0xD7)> <2 (0x02)> [size = 14] <flags = PRFXID + 3 (encased function)>
<number of PIDs = 1>
[endnote text PID (type=0x08)]
[size of non-deletable information = 1]
<0x00>
[size] <0xD7>◀

0xD703

Endnote Off

- ▶ <215 (0xD7)> <3 (0x03)> [size = 10] <flags = 3 (encased function)>
[size of non-deletable information = 0]
[size] <0xD7>◀

WP for DOS has the following variances:

- ▶ <215 (0xD7)> <3 (0x03)> [size = 11] <flags = 3 (encased function)>
[size of non-deletable information = 1]
<0x00>
[size] <0xD7>◀

◆ Function 216 (0xD8) = Set Number Group

The Set Number Group subfunctions have character orientation.

Subfunctions: 0 (0x00) - 9 (0x09)

Subfunction	Description
0 (0x00)	Set User-Defined Counter
1 (0x01)	Set Box Number
2 (0x02)	Set Page Number
3 (0x03)	Set Secondary Page Number
4 (0x04)	Set Chapter Number
5 (0x05)	Set Volume Number

Subfunction	Description
6 (0x06)	Set Paragraph Number
7 (0x07)	Set Footnote Number
8 (0x08)	Set Endnote Number
9 (0x09)	Set Line Number

- <216 (0xD8)> <subfunction> [size = variable] <flags = 0 or PRFXID>
If the prefix ID bit is set, the following information exists:
 <number of PIDs = 1>
 [counter PID (type=0x11)]
[size of non-deletable information]
<count of level numbers setting>
<starting level number (0-n)>
[count numbers] x ?
<undocumented deletable data> x ?
[size] <0xD8>◀

◆ **Function 217 (0xD9) = Numbering Method Group**

The Numbering Method Group subfunctions have character orientation.

Subfunctions: 0 (0x00) - 9 (0x09)

Subfunction	Description
0 (0x00)	Set User-Defined Counter Numbering Mode
1 (0x01)	Set Box Numbering Mode
2 (0x02)	Set Page Numbering Mode
3 (0x03)	Set Secondary Page Numbering Mode
4 (0x04)	Set Chapter Numbering Mode
5 (0x05)	Set Volume Numbering Mode
6 (0x06)	Set Paragraph Numbering Mode
7 (0x07)	Set Footnote Numbering Mode
8 (0x08)	Set Endnote Numbering Mode
9 (0x09)	Set Line Numbering Mode

- <217 (0xD9)> <subfunction> [size = variable] <flags = 0 or PRFXID>
If the prefix ID bit is set, the following information exists:
 <number of PIDs = 1>
 [counter PID (type=0x11)]

[size of non-deletable information = 2]
 <level number (0-n)>
 <numbering method>
 0 = Arabic numbers
 1 = lowercase letters (a-z)
 2 = uppercase letters (A-Z)
 3 = lowercase Roman
 4 = uppercase Roman
 5 = character string (only valid for footnotes and endnotes)
 6 = leading-zero Arabic numbers
 for Asia:
 64 (0x40) = 2-byte Arabic
 65 (0x41) = 2-byte lowercase letters (a-z)
 66 (0x42) = 2-byte uppercase letters (A-Z)
 67 (0x43) = 2-byte lowercase Roman
 68 (0x44) = 2-byte uppercase Roman
 69 (0x45) = 2-byte character string (only valid for footnotes and endnotes)
 70 (0x46) = 2-byte leading zero Arabic numbers
 128 (0x80) = kanji 1 (ten = ichi maru)
 129 (0x81) = 1-byte katakana (aiueo)
 130 (0x82) = 2-byte katakana (aiueo)
 131 (0x83) = 1-byte katakana (iroha)
 132 (0x84) = 2-byte katakana (iroha)
 133 (0x85) = available
 134 (0x86) = standard kanji with leading-zero
 192 (0xC0) = kanji 2 (ten = juu)
 If the numbering method is character string, the following information exists:
 [character string] x ?
 <undocumented deletable data> x ?
 [size] <0xD9>◀

◆ Function 218 (0xDA) = Display Number Reference Group

The Display Number Reference Group subfunctions have character orientation.

The subfunctions in this list are paired so that the even-numbered codes are the On functions and the odd-numbered codes are the Off functions. Each instance of a subfunction will consist of the On subfunction, the associated information, and the Off subfunction.

Subfunctions: 0 (0x00) - 19 (0x13)

Subfunction	Description
0 (0x00)	User-Defined Number Display On
1 (0x01)	User-Defined Number Display Off
2 (0x02)	Box Number Display On
3 (0x03)	Box Number Display Off
4 (0x04)	Page Number Display On

Subfunction	Description
5 (0x05)	Page Number Display Off
6 (0x06)	Secondary Page Number Display On
7 (0x07)	Secondary Page Number Display Off
8 (0x08)	Chapter Number Display On
9 (0x09)	Chapter Number Display Off
10 (0x0A)	Volume Number Display On
11 (0x0B)	Volume Number Display Off
12 (0x0C)	Paragraph Number Display On
13 (0x0D)	Paragraph Number Display Off
14 (0x0E)	Footnote Number Display On
15 (0x0F)	Footnote Number Display Off
16 (0x10)	Endnote Number Display On
17 (0x11)	Endnote Number Display Off
18 (0x12)	Line Number Display On
19 (0x13)	Line Number Display Off
20 (0x14)	Total Number of Pages Display On
21 (0x15)	Total Number of Pages Display Off

► function)> <218 (0xDA)> <on subfunction> [size = variable] <flags = (0 or PRFXID) + 3 (encased

If the prefix ID bit is set, the following information exists:

<number of PIDs = 1>
 [counter PID (type=0x11)]
 [size of non-deletable information = 1]
 <level number to display (0-n)>
 <undocumented deletable data> x ?
 [size] <0xDA>◀

►

<associated display number reference information> x ?

<218 (0xDA)> <off subfunction> [size = 10] <flags = 3 (encased function)>
 [size of non-deletable information = 0]
 [size] <0xDA>◀

◆ **Function 219 (0xDB) = Increment Number Group**

The Increment Number Group subfunctions have character orientation.

Subfunctions: 0 (0x00) - 9 (0x09)

Subfunction	Description
0 (0x00)	Increment User-Defined Number
1 (0x01)	Increment Box Number
2 (0x02)	Increment Page Number
3 (0x03)	Increment Secondary Page Number
4 (0x04)	Increment Chapter Number
5 (0x05)	Increment Volume Number
6 (0x06)	Increment Paragraph Number
7 (0x07)	Increment Footnote Number
8 (0x08)	Increment Endnote Number
9 (0x09)	Increment Line Number

► <219 (0xDB)> <subfunction> [size = variable] <flags = 0 or PRFXID>
 If the PID bit is set, the following information exists:
 <number of PIDs = 1>
 [counter PID (type=0x11)]
 [size of non-deletable information = 1]
 <level number to increment (0-n)>
 <undocumented deletable data> x ?
 [size] <0xDB>◄

◆ **Function 220 (0xDC) = Decrement Number Group**

The Decrement Number Group subfunctions have character orientation.

Subfunctions: 0 (0x00) - 9 (0x09)

Subfunction	Description
0 (0x00)	Decrement User-Defined Number
1 (0x01)	Decrement Box Number
2 (0x02)	Decrement Page Number
3 (0x03)	Decrement Secondary Page Number
4 (0x04)	Decrement Chapter Number
5 (0x05)	Decrement Volume Number
6 (0x06)	Decrement Paragraph Number

Subfunction	Description
7 (0x07)	Decrement Footnote Number
8 (0x08)	Decrement Endnote Number
9 (0x09)	Decrement Line Number



<220 (0xDC)> <subfunction> [size = variable] <flags = 0 or PRFXID>

If the PID bit is set, the following information exists:

<number of PIDs = 1>

[counter PID (type=0x11)]

[size of non-deletable information = 1]

<level number to decrement (0-n)>

<undocumented deletable data> x ?

[size] <0xDC>◀