

Oracle® Documaker

FAP and NAFILE Formats

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FAP File

The information that defines a section (image) is stored in a FAP file. FAP files are text files with a FAP extension. You can edit FAP files using a text editor, but they are most commonly created and edited using Studio or Image Editor. The FAP file defines the section (image) while the FORM.DAT file defines the sections (images) that comprise a form and form set.

File Record Overview

Record	Description
Image H	H Image Header Record
Image H1	A,H1 Image Header Attributes Record
Image H2	A,H2 Image Header Attributes Record
Image H3	A,H3 Image Header Attributes Record
Image H4	A,H4 Image Header Attributes Record
Image H5	A,H5 Image Header Attributes Record
Image H6	A,H6 Image Header Attributes Record
Image H7	A,H7 Image Header Attributes Record
Image H8	A,H8 Logical Bottom from Normalized file Record
Image H9	A,H9 Minimum height for dynamic image Record
Image V	V Image Version Record
Barcode B	B Barcode Record
Box S	S Shaded box Record (no longer used)
Box X	X Box, Shade, Line Record
Chart D	D Chart Record
Chart D1	A,D1 Chart Attributes Record 1
Chart DA	D,A Chart Series Label Record
Chart DA1	A,DA1 Chart Series Label Attributes Record 1
Chart DB	D,B Chart Custom Data Point Label Record
Chart DB1	A,DB1 Chart Custom Data Point Label Attributes Record
Chart DC	D,C Chart Area Record
Chart DC1	A,DC1 Chart Area Attributes Record 1
Chart DD	D,D Chart Data Record
Chart DE	D,E Chart Scale-Axis Record
Chart DE1	A,DE1 Chart Scale-Axis Attributes Record 1
Chart DE2	A,DE2 Chart Scale-Axis Attributes Record 2
Chart DK	A,DK Chart Linking Attributes Record 1
Chart DL	D,L Chart Legend Record
Chart DL1	A,DL1 Chart Legend Attributes Record 1
Chart DP	D,P Chart Point-Axis Record
Chart DP1	A,DP1 Chart Point-Axis Attributes Record 1
Chart DS	D,S Chart Series Record
Chart DS1	A,DS1 Chart Series Attributes Record 1
Chart DT	D,T Chart Title Record
Chart DT1	A,DT1 Chart Title Attributes Record 1
Chart DX	D,X Chart X-Axis Record (no longer used)
Chart DX1	A,DX1 Chart X-Axis Attributes Record 1 (no longer used)
Chart DY	D,Y Chart Y-Axis Record (no longer used)
Chart DY1	A,DY1 Chart Y-Axis Attributes Record 1 (no longer used)
Color C	C Color Record
Field F	F Field Record
Field F1	A,F1 Field Attributes Record 1
Field F2	A,F2 Field Attributes Record 2
Field F3	A,F3 Field Attributes Record 3
Field F4	A,F4 Field Attributes Record 4

Field F5	A,F5 <i>Field Attributes</i> Record 5
Field F6	A,F6 <i>Field Attributes</i> Record 6
Field F7	A,F7 <i>Field Attributes</i> Record 7
Field F8	A,F8 <i>Field Attributes</i> Record 7
Field F9	A,F9 <i>Field Attributes</i> Record 9
Font R	R <i>Font</i> Record
Font R1	A,R1 <i>Font Attributes</i> Record 1
Font R2	A,R2 <i>Font Attributes</i> Record 2 Syntax A,R2,fid,cgr,cw1,cw2,cw3,...,cw32
Font R3	A,R3 <i>Font Attributes</i> Record 3
Font R4	A,R4 <i>Font Attributes</i> Record 4
Font R5	A,R5 <i>Font Attributes</i> Record 5
Font R6	A,R5 <i>Font Attributes</i> Record 6
Graphic G	G <i>Graphic / logo</i> Record
Graphics BEGLOGO	\BEGLOGO\ <i>Graphic / logo Attributes</i>
Graphics ENDLOGO	\ENDLOGO\ <i>Graphic / logo Attributes</i>
Graphics G1	A,G1 <i>Graphic / logo Attributes</i> Record 1
Graphics G2	A,G2 <i>Graphic / logo Attributes</i> Record 2
Graphics G3	A,G3 <i>Graphic / logo Attributes</i> Record 3
Graphics G4	A,G4 <i>Graphic / logo Attributes</i> Record 4
Graphics G5	A,G5 <i>Graphic / logo Attributes</i> Record 5
Graphics G6	A,G6 <i>Graphic / logo Attributes</i> Record 6
Graphics G7	A,G7 <i>Graphic / logo Attributes</i> Record 7
Guideline L	L <i>Guideline</i> Record
Guideline L1	A,L1 <i>Guideline Attributes</i> Record 1
ImageRule J	L <i>Image Rule</i> Record
Line X1	A,X1 <i>Box, Shade, Line Attributes</i> Record 1
Line X2	A,X2 <i>Box, Shade, Line Attributes</i> Record 2
Line X3	A,X3 <i>Border Flags</i> Record 3
Note N	N <i>Note</i> Record
Note N1	A,N1 <i>Note Attributes</i> Record 1
Signature	Z, <i>Signature token</i> Record
Signature Z1	A,Z1 <i>Document Metadata</i> Record 1
Signature Z2	A,Z2 <i>Signature Metadata</i> Record 2
Text Area E	M,E <i>Text Area End</i> Record
Text Area G	M,G <i>Text Area Graphic</i> Record
Text Area L	M,L <i>Text Area line</i> Record (no longer used)
Text Area LL	M,LL <i>Text Area Guide Line</i> Record
Text Area MH	MH <i>Text Area</i> Record
Text Area MH1	A,MH1 <i>Text Area Attributes</i> Record 1
Text Area N	M,N <i>Text Area Note</i> Record
Text Area O	M,O <i>Text Area format token</i> Record
Text Area O1	M,O1 <i>Text Area format token</i> Record 1
Text Area P	M,P <i>Text Area Paragraph</i> Record
Text Area P1	M,P1 <i>Text Area Paragraph</i> Record 1
Text Area P2	M,P2 <i>Text Area Paragraph</i> Record 2
Text Area P3	M,P3 <i>Text Area Paragraph</i> Record 3
Text Area PX	M,PX <i>Text Area Borders/Shades</i> Record
Text Area T	M,T <i>Text Area Text</i> Record (no longer used)
Text Area TT	M,TT <i>Text Area Text</i> Record
Text Area X	M,X <i>Text Area Box</i> Record
Text T	T <i>Text</i> Record
Text T1	A,T1 <i>Text Attributes</i> Record 1
Text T2	A,T2 <i>Text Attributes</i> Record 2
Vector I	I <i>Illustration</i> Record

Record Format Reference

Image H

H Image Header Record

Syntax

H,units,(paper_size,orientation),(left,top,height,width),name

Parameter	Compiled FAP	Description
Token	CF_START	the "H" header record
upi	long	units (dots per inch, there are 2400 FAP units per inch)
paperSize	long	paper size (0=letter, 1=legal)
orientation	long	form orientation (0=portrait, 1=landscape)
leftMargin	long	left margin in units per tick mark (upi)
topMargin	long	top margin in units per tick mark (upi)
height	long	Image height in units per tick mark (upi)
width	long	Image width in units per tick mark (upi)
name	CF_STR	Image name

Example

H,2400,(98,0),(600,400,7200,20400),image1

Image H1

A,H1 Image Header Attributes Record

Syntax

A,H1,table_file,tbl_mod,tbl_proc,help_file,hlp_mod,hlp_proc

Parameter	Compiled FAP	Description
Token	CF_REC	the "A,H1" header record
tblFileName	CF_STR	default table file name
tblModName	CF_STR	user table dynamic module name (DLL, excluding the file extension)
tblPrcName	CF_STR	user table dynamic procedure name
hlpFileName	CF_STR	default help file name
hlpModName	CF_STR	user help dynamic module name (DLL, excluding the file extension)
hlpPrcName	CF_STR	user help dynamic procedure name

Example

A,H1,deftable ,tablemod ,tableproc ,defhelp ,helpmod ,help_proc

Image H2

A,H2 Image Header Attributes Record

Syntax

A,H2,prm,prp,prd

Parameter	Compiled FAP	Description
Token	CF_REC	"A,H2" header record
ModName	CF_STR	pre-edit dynamic module name (DLL, excluding the file extension)
PrcName	CF_STR	pre-edit procedure name

Data [CF_STR](#) pre-edit data

Example

A,H2,CSTW32,my_pre_proc,123 abc

Image H3

A,H3 Image Header Attributes Record

Syntax

A,H3,prm,prp,prd

Parameter	Compiled FAP	Description
Token	CF_REC	"A,H3" header record.
ModName	CF_STR	post-edit dynamic module name (DLL, excluding the file extension)
PrcName	CF_STR	post-edit procedure name
Data	CF_STR	post-edit data

Example

A,H3,CSTW32,my_post_proc,123 abc

Image H4

A,H4 Image Header Attributes Record

Syntax

A,H4,"designer","update_date","description"

Parameter	Compiled FAP	Description
Token	CF_REC	"A,H4" header record
Designer	CF_STR	designer/user name
Updated	CF_STR	update date/time
Description	CF_STR	description

Image H5

A,H5 Image Header Attributes Record

Syntax

A,H5,"send-copy-to",right_margin,bottom_margin

Parameter	Compiled FAP	Description
Token	CF_REC	"A,H5" header record
sendCopyTo	CF_STR	send-copy-to field name
rightMargin	long	right margin in units per tick mark (upi)
bottomMargin	long	bottom margin in units per tick mark (upi)

Example

A,H5,"INSURED2",600,400

Image H6

A,H6 Image Header Attributes Record

Syntax

A,H6,versnum,revsnum,"guid","eff_date","eff_time"

Parameter	Compiled FAP	Description
Token	CF_REC	"A,H6" header record
versnum	long	Version number
revsnum	long	Revision number
glob_unique_id	CF_STR	GUID
eff_date	CF_STR	Effective date
eff_time	CF_STR	Effective time

Example

A,H6,4,3,"01234567890abcdef01234567890abcd","date","time"

Image H7

A,H7 *Image Header Attributes* Record

Syntax

A,H7,"locale string"

Parameter	Compiled FAP	Description
Token	CF_REC	"A,H7" header record
locale	CF_STR	default ICU locale string for image, reserved for future use

Example

A,H7,"en_US"

Image H8

A,H8 *Logical Bottom from Normalized file*Record

Syntax

A,H8,lLogBot,Duplex

Parameter	Compiled FAP	Description
Token	CF_REC	"A,H8" header record
lLogBot	long	Logical Bottom value
IDuplex	long	DJDE Duplex value

Example

A,H8,0,1

Image H9

A,H9 *Minimum height for dynamic image*Record

Syntax

A,H9,lMinHeight

Parameter	Compiled FAP	Description
Token	CF_REC	"A,H9" header record
lMinHeight	long	Minimum height for dynamic image

Example

A,H9,0

Image V

V *Image Version* Record

Syntax

V,"image_filename","updated_by","update_date","comments"

Parameter	Compiled FAP	Description
Token	CF_REC	The "V" header record.
name	CF_STR	Image "save as" file name.
upd_by	CF_STR	The "updated by" user.
upd_date	CF_STR	Update date/time.
comments	CF_STR	Description.

Example

V,"a ","FORMAKER ","Mon Dec 06 17:04:28 1999 "," "

Barcode B

B Barcode Record

Syntax

B,"nam", (top, lft, bot, rgt), typ, orn, fmt, ht, scl, (fid, fch, fcw, fbl),
(red, grn, blu, opt), eff, len, dat

Parameter	Compiled FAP	Description
Token	CF_REC	The "B" barcode record.
nam	CF_STR	name (optional if type = 0, linked field name if type = 1)
top	long	top y-coordinate of rectangle
lft	long	left x-coordinate of rectangle
bot	long	bottom y-coordinate of rectangle
rgt	long	right x-coordinate of rectangle
typ	long	data type of barcode record 0 = Static text on form 1 = Variable data (linked to field record)
orn	long	orientation 0 = Portrait 1 = Landscape
fmt	CF_STR	barcode format type A = CODE39 1:1:3:3 B = CODE39 1:1:2:2 etc (See Appendix B in FormMaker II manual) Z = Postal zipcode (delivery point barcode)
ht	long	height
scl	long	scaling factor
fid	long	font id
fch	long	font character height
fcw	long	font character width
fbl	long	font character baseline
red	long	color index for red
grn	long	color index for green
blu	long	color index for blue
opt	long	color options
eff	long	effects
len	long	length of data
dat	CF_STR	data and 0

Box S

S Shaded box Record (no longer used)

Syntax

(See record type X)

Box X

X *Box, Shade, Line* Record

Syntax

X, (top, lft, bot, rgt), (vth, hth), typ, pat

Parameter	Compiled FAP	Description
Token	CF_REC	The "X" box record.
top	long	top y-coordinate of rectangle (in "upi" units)
lft	long	left x-coordinate of rectangle (in "upi" units)
bot	long	bottom y-coordinate of rectangle (in "upi" units)
rgt	long	right x-coordinate of rectangle (in "upi" units)
vth	long	vertical thickness of line (in "upi" units)
hth	long	horizontal thickness of line (in "upi" units)
typ	long	type of object 0,1 = box 2 = shaded line 3 = shaded area 4 = dashed line
pat	long	type of pattern 0,13 = solid 1 = horizontal lines 2 = vertical lines 3 = lines slanting right 4 = lines slanting left 5 = vertical crosshatch 6 = slanting crosshatch 7 = shaded (lightest) ... 13 = shaded (darkest)

Example

X, (1924, 1615, 3882, 4192), (14, 14), 1, 0

Chart D

D *Chart* Record

Syntax

D, "cname", type, (top, left, bottom, right), btype, dlen, slen, bthick, bpat, fpat, legend, orient, depth, x_angle, y_angle, z_angle

Parameter	Compiled FAP	Description
Token	CF_REC	The "D" Chart begin record.
cname	CF_STR	chart name
type	long	chart type 1 = 2D pie chart 2 = 2D vertical bar chart 3 = 2D horizontal bar chart 4 = 2D line chart 5 = 2D xy chart 6 = 2D area chart 7 = 2D on-top vertical bar chart 8 = 2D on-top horizontal bar chart 9 = 2D percentage vertical bar chart 10 = 2D percentage horizontal bar chart 11 = 2D percentage area chart 12 = 3D pie chart 13 = 3D vertical bar chart 14 = 3D horizontal bar chart 15 = 3D line chart 16 = 3D area chart

		17 = 3D on-top vertical bar chart
		18 = 3D on-top horizontal bar chart
		19 = 3D percentage vertical bar chart
		20 = 3D percentage horizontal bar chart
		21 = 3D percentage area chart
		22 = 3D split vertical bar chart
		23 = 3D split horizontal bar chart
		24 = 3D split area chart
top	long	top y-coordinate of graphic area
left	long	left x-coordinate of graphic area
bottom	long	bottom y-coordinate of graphic area
right	long	right x-coordinate of graphic area
btype	long	boundary type for graphic area 2 = solid line 4 = dashed line
dlen	long	boundary dash length for graphic area
slen	long	boundary space length for graphic area
bthick	long	boundary thickness for graphic area
bpat	long	boundary pattern for graphic area (currently not supported)
fpat	long	filling pattern for graphic area 0,13 = solid 1 = horizontal lines ... 14 = no shade
legend	long	show legend?
orient	long	chart orientation
depth	long	depth for 3D chart
x	long	3D viewing angle along x axis
y	long	3D viewing angle along y axis
z	long	3D viewing angle along z axis
lhgt	long	legend height
lwide	long	legend width

Example

```
D,"CHART",1,(2734,3075,9325,9648),2,400,200,20,0,14,1,75,80,0,400,
30.000000,-30.000000,0.000000,0,0
```

Chart D1

A,D1 Chart Attributes Record 1

Syntax

A,D1,(br,bg,bb,bo),(fr,fg,fb,fo), optn

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,D1" Chart attributes record1.
br	long	red color index for graphic area boundary
bg	long	green color index for graphic area boundary
bb	long	blue color index for graphic area boundary
bo	long	color option for graphic area boundary
fr	long	red color index for graphic area filling
fg	long	green color index for graphic area filling
fb	long	blue color index for graphic area filling
fo	long	color option for graphic area filling
optn	long	object options: (additive values) 0x00000001=does not display or print 0x00000002=does not Print does display 0x00000004=hyphenated text area or paragraph 0x10000000=special 'full page' bitmap

Example

A,D1,(0,0,0,0),(0,0,0,0),512

Chart DA

D,A Chart Series Label Record

Syntax

D,A,(t,l,b,r),btype,dlen,slen,bthick,bpat,fpat,type,font,optn

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,A" Chart series label record.
top	long	top y-coordinate of label
left	long	left x-coordinate of label
bottom	long	bottom y-coordinate of label
right	long	right x-coordinate of label
btype	long	label boundary type (refer to DC)
dlen	long	label boundary dash length
slen	long	label boundary space length
bthick	long	label boundary thickness
bpat	long	label boundary pattern (currently not supported)
fpat	long	filling pattern label (refer to DC)
type	long	type of label
font	long	font id for label
optn	long	object options: (additive values) 0x00000001=does not display or print 0x00000002=does not Print does display 0x00000004=hyphenated text area or paragraph 0x10000000=special 'full page' bitmap

Example

D,A,(0,0,0,0),2,0,0,0,0,14,0,11010,0

Chart DA1

A,DA1 Chart Series Label Attributes Record 1

Syntax

A,DA1,(br,bg,bb,bo),(fr,fg,fb,fo),(lr,lg,lb,lo),orient,effect

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,A1" Chart series label attributes record 1.
br	long	red color index for label boundary
bg	long	green color index for label boundary
bb	long	blue color index for label boundary
bo	CF_STR	color option for label boundary
fr	long	red color index for filling label
fg	long	green color index for filling label
fb	long	blue color index for filling label
fo	CF_STR	color option for filling label
lr	long	red color index for label
lg	long	green color index for label
lb	long	blue color index for label
lo	CF_STR	color option for label
orient	CF_STR	orientation for label
effect	CF_STR	effects for label

Example

A,DA1,(0,0,214,1),(0,0,214,1)(0,0,0,0),0,0,

Chart DB

D,B Chart Custom Data Point Label Record

Syntax

D,B,(top,left,bottom,right),font,len,data

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,B" Chart custom data point label record.
top	long	top y-coordinate of chart custom data point label
left	long	left x-coordinate of chart custom data point label
bottom	long	bottom y-coordinate of chart custom data point label
right	long	right x-coordinate of chart custom data point label
font	long	font id
len	long	length of label character data
data	CF_STR	label character data

Chart DB1

A,DB1 Chart Custom Data Point Label Attributes Record

Syntax

A,DB1,"fname"

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,DB1" Chart custom data point attributes label record 1.
fname	CF_STR	name of a field

Chart DC

D,C Chart Area Record

Syntax

D,C,(top,left,bottom,right),btype,dlength,slength,bthick,bpat,fpat

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,C" Chart area record.
top	long	top y-coordinate of chart area
left	long	left x-coordinate of chart area
bottom	long	bottom y-coordinate of chart area
right	long	right x-coordinate of chart area
btype	long	boundary type for chart area 2 = solid line 4 = dashed line
dlen	long	boundary dash length type for chart area
slen	long	boundary space length type for chart area
bthick	long	boundary thickness type for chart area
bpat	long	boundary pattern type for chart area (currently not supported)
fpat	long	filling pattern type for chart area 0,13 = solid 1 = horizontal lines 2 = vertical lines 3 = lines slanting right 4 = lines slanting left 5 = vertical crosshatch

6 = slanting crosshatch
 7 = shaded (lightest)

 13 = shaded (darkest)

Example

D,C, (4197,3024,5673,4285),2,400,200,20,0,9

Chart DC1

A,DC1 *Chart Area Attributes* Record 1

Syntax

A,DC1, (br,bg,bb,bo), (fr,fg,fb,fo)

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,DC1" Chart area attributes record 1.
br	long	red color index for boundary
bg	long	green color index for boundary
bb	long	blue color index for boundary
bo	long	color option for boundary
fr	long	red color index for filling
fg	long	green color index for filling
fb	long	blue color index for filling
fo	long	color option for filling

Example

A,DC1, (0,255,255,3), (0,255,255,3)

Chart DD

D,D *Chart Data* Record

Syntax

D,D, "sname", "fname", data

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,D" Chart data record.
sname	CF_STR	name of the series (a character string)
fname	CF_STR	name of a field
data	double	series data (a numerical value)

Example

D,D, "Series 1", "FIELD", 10.000000

Chart DE

D,E *Chart Scale-Axis* Record

Syntax

D,E, max, min, munit, tunit, type, dlen, slen, thick, pat, tick, minor, dtext, (top, left, bottom, right), d_font

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,E" Chart Scale-Axis record.
max	long	maximum value of the x axis
min	long	minimum value of the x axis

munit	long	unit per minor axis
tunit	long	unit per tick
type	long	axis line type (refer to DC)
dlen	long	axis dash length
slen	long	axis space length
thick	long	axis thickness
pat	long	axis pattern
tick	long	show tick?
minor	long	show minor axes?
dtext	long	show data text?
top	long	top y-coordinate of data text
left	long	left x-coordinate of data text
bottom	long	bottom y-coordinate of data text
right	long	right x-coordinate of data text
d	long	font id for data text

Example

```
D,E,50.000000,0.000000,10.000000,2.000000,2,0,0,20,0,1,1,1,
(0,0,0,0),11010
```

Chart DE1

A,DE1 Chart Scale-Axis Attributes Record 1

Syntax

```
A,DE1,(r,g,b,o),(dr,dg,db,do),d_orient,d_effect
```

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,DE1" Chart Scale-Axis attributes record 1.
r	long	red color index for x axis
g	long	green color index for x axis
b	long	blue color index for x axis
o	long	color option for x axis
dr	long	red color index for data text
dg	long	green color index for data text
db	long	blue color index for data text
dopt	long	color option for data text
d_or	long	orientation for data text
d_ef	long	effects for data text

Chart DE2

A,DE2 Chart Scale-Axis Attributes Record 2

Syntax

```
A,DE2,minname,maxname,incname,tmname
```

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,DE2" Chart Scale-Axis attributes record 2.
minname	CF_STR	field name for minimum scale axis
maxname	CF_STR	field name for maximum scale axis
incname	CF_STR	field name for increment scale axis
tmname	CF_STR	field name for unit scale axis

Chart DK

A,DK Chart Linking Attributes Record 1

Syntax

A,DK,rfu,Chart

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,K" Chart legend attributes record.
rfu	long	reserved for future use
chart	CF_STR	name of a chart to link with

Chart DL

D,L Chart Legend Record

Syntax

D,L,(top,left,bottom,right),btype,dlen,slen,bthick,bpat,fpad

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,L" Chart legend record.
top	long	top y-coordinate of chart legend
left	long	left x-coordinate of chart legend
bottom	long	bottom y-coordinate of chart legend
right	long	right x-coordinate of chart legend
btype	long	boundary type (refer to DC)
dlen	long	boundary dash length
slen	long	boundary space length
bthick	long	boundary thickness
bpat	long	boundary pattern
fpad	long	filling pattern (refer to DC)
fid	long	font ID
fht	long	font height
fwd	long	font width
fbl	long	font baseline height

Example

D,L,(3969,5351,6913,7241),2,400,200,20,0,14,0,0,0,0

Chart DL1

A,DL1 Chart Legend Attributes Record 1

Syntax

A,DL1,(br,bg,bb,bo),(fr,fg,fb,fo)

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,L" Chart legend attributes record.
br	long	red color index for boundary
bg	long	green color index for boundary
bb	long	blue color index for boundary
bo	long	color option for boundary
fr	long	red color index for filling
fg	long	green color index for filling
fb	long	blue color index for filling
fo	long	color option for filling

Chart DP

D,P Chart Point-Axis Record

Syntax

```
D,P,max,min,munit,tunit,type,dlen,slen,thick,pat,tick,minor,
  dtext,(top,left,bottom,right),d_font
D,P,12.000000,1.000000,1.000000,0.000000,2,0,0,20,0,1,1,1,
(0,0,0,0),11010
```

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,E" Chart Point-Axis record.
max	long	maximum value of the y axis
min	long	minimum value of the y axis
munit	long	unit per minor axis
tunit	long	unit per tick
type	long	axis line type (refer to DC)
dlen	long	axis dash length
slen	long	axis space length
thick	long	axis thickness
pat	long	axis pattern
tick	long	show tick?
minor	long	Show minor axes?
dtext	long	show data text?
top	long	top y-coordinate of data text
left	long	left x-coordinate of data text
bottom	long	bottom y-coordinate of data text
right	long	right x-coordinate of data text
d	long	font id for data text

Chart DP1

A,DP1 Chart Point-Axis Attributes Record 1

Syntax

```
A,DP1,(r,g,b,o),(dr,dg,db,do),d_orient,d_effect
```

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,DE1" Chart Scale-Axis attributes record 1.
r	long	red color index for x axis
g	long	green color index for x axis
b	long	blue color index for x axis
o	long	color option for x axis
dr	long	red color index for data text
dg	long	green color index for data text
db	long	blue color index for data text
dopt	long	color option for data text
d_or	long	orientation for data text
d_ef	long	effects for data text

Chart DS

D,S Chart Series Record

Syntax

```
D,S,"sname",n_font,btype,dlen,slen,bthick,bpat,fpat,marker,msize,exp,fn
(Followed by a DA and a group of DD's)
```

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,S" Chart series record.

sname	CF_STR	name of the series (a character string)
n	long	font id for series name
btype	long	boundary type for this series (refer to DC)
dlen	long	boundary dash length for this series
slen	long	boundary space length for this series
bthick	long	boundary thickness for this series
bpat	long	boundary pattern for this series (currently not supported)
fpat	long	filling pattern type for this series (refer to DC)
		marker type for this series
		1 = +
		2 = X
		3 = combination of + and X
		4 = *
		5 = diamond
		6 = square
		7 = up triangle
		8 = down triangle
		9 = circle
		10 = filled diamond
		11 = filled square
		12 = filled up triangle
		13 = filled down triangle
		14 = filled circle
marker	long	15 = + in diamond
		16 = + in square
		17 = + in circle
		18 = + and X in diamond
		19 = + and X in square
		20 = + and X in circle
		21 = vertical bar in diamond
		22 = vertical bar in square
		23 = vertical bar in circle
		24 = horizontal bar in diamond
		25 = horizontal bar in square
		26 = horizontal bar in circle
		27 = dot in diamond
		28 = dot in square
		29 = dot in circle
		30 = vertical bar
		31 = horizontal bar
msize	long	marker size for this series (% of the default size)
exp	long	explode % (% of radius)

Example

```
D,S,"Series 1",11010,2,300,150,20,0,0,1,50,20,""
```

Chart DS1

A,DS1 *Chart Series Attributes* Record 1

Syntax

```
A,DS1, (nr,ng,nb,no),n_orient,n_effect, (br,bg,bb,bo), (fr,fg,fb,fo)
```

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,S" Chart series attributes record 1.
nr	long	red color index for series name
ng	long	green color index series name
nb	long	blue color index for series name
no	long	color option for series name
n_or	long	orientation for series name
n_ef	long	effects for series name
br	long	red color index for boundary

bg	long	green color index for boundary
bb	long	blue color index for boundary
bo	long	color option for boundary
fr	long	red color index for filling
fg	long	green color index for filling
fb	long	blue color index for filling
fo	long	color option for filling

Example

A,DS1,(0,0,0,0),0,0,(0,0,214,1),(0,0,214,1)

Chart DT

D,T Chart Title Record

Syntax

D,T,(top,left,bottom,right),font,len,data

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,T" Chart title record.
top	long	top y-coordinate of title
left	long	left x-coordinate of title
bottom	long	bottom y-coordinate of title
right	long	right x-coordinate of title
font	long	font id
len	long	length of title character data
data	CF_STR	title character data

Example

D,T,(7920,6913,8224,7337),11010,3,Pie Chart

Chart DT1

A,DT1 Chart Title Attributes Record 1

Syntax

A,DT1,(r,g,b,o),orient,effect

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,DT1" Chart title attributes record.
r	long	red color index for title
g	long	green color index for title
b	long	blue color index for title
o	long	color option for title
orient	long	orientation
effect	long	effects

Example

A,DT1,(255,0,0,1),90,5

Chart DX

D,X Chart X-Axis Record (no longer used)

Syntax

D,X,max,min,munit,tunit,type,dlen,slen,thick,pat,tick,minor,

dtext, (top, left, bottom, right), d_font
 (followed by DT)

Parameter	Compiled FAP	Description
Token	CF_REC	The "D,X" Chart X-Axis record. This record type is no longer used. The "D,P" point axis and "D,E" scale axis records do this now
max	long	maximum value of the x axis
min	long	minimum value of the x axis
munit	long	unit per minor axis
tunit	long	unit per tick
type	long	axis line type (refer to DC)
dlen	long	axis dash length
slen	long	axis space length
thick	long	axis thickness
pat	long	axis pattern
tick	long	show tick?
minor	long	show minor axes?
dtext	long	show data text?
top	long	top y-coordinate of data text
left	long	left x-coordinate of data text
bottom	long	bottom y-coordinate of data text
right	long	right x-coordinate of data text
d	long	font id for data text

Chart DX1

A,DX1 *Chart X-Axis Attributes* Record 1 (no longer used)

Syntax

A,DX1, (r, g, b, o), (dr, dg, db, do), d_orient, d_effect

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,DX1" Chart X-Axis attributes record 1. This record type is no longer used. The "D,P" point axis and "D,E" scale axis records do this now
r	long	red color index for x axis
g	long	green color index for x axis
b	long	blue color index for x axis
o	long	color option for x axis
dr	long	red color index for data text
dg	long	green color index for data text
db	long	blue color index for data text
dopt	long	color option for data text
d_or	long	orientation for data text
d_ef	long	effects for data text

Chart DY

D,Y *Chart Y-Axis* Record (no longer used)

Syntax

D, Y, max, min, munit, tunit, type, dlen, slen, thick, pat, tick, minor,
 dtext, (top, left, bottom, right), d_font
 (followed by DT)

Parameter	Compiled FAP	Description
-----------	--------------	-------------

Token	CF_REC	The "D,Y" Chart Y-Axis record. This record type is no longer used. The "D,P" point axis and "D,E" scale axis records do this now
max	long	maximum value of the y axis
min	long	minimum value of the y axis
munit	long	unit per minor axis
tunit	long	unit per tick
type	long	axis line type (refer to DC)
dlen	long	axis dash length
slen	long	axis space length
thick	long	axis thickness
pat	long	axis pattern
tick	long	show tick?
minor	long	show minor axes?
dtext	long	show data text?
top	long	top y-coordinate of data text
left	long	left x-coordinate of data text
bottom	long	bottom y-coordinate of data text
right	long	right x-coordinate of data text
d	long	font id for data text

Chart DY1

A,DY1 Chart Y-Axis Attributes Record 1 (no longer used)

Syntax

A,DY1, (r,g,b,o), (dr,dg,db,do), d_orient, d_effect

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,DY1" Chart Y-Axis attributes record 1. This record type is no longer used. The "D,P" point axis and "D,E" scale axis records do this now
r	long	red color index for x axis
g	long	green color index for x axis
b	long	blue color index for x axis
o	long	color option for x axis
dr	long	red color index for data text
dg	long	green color index for data text
db	long	blue color index for data text
dopt	long	color option for data text
d_or	long	orientation for data text
d_ef	long	effects for data text

Color C

C Color Record

Syntax

C, "cnm", typ, sbt, (red, grn, blu, opt), flg, opn

Parameter	Compiled FAP	Description
Token	CF_REC	The "C" color record.
cnm	CF_STR	name
typ	long	type of object 6 = Image background 7 = Lines/boxes/shades 8 = Bitmaps 9 = Merged text

		10 = Static text
		11 = Fields
		12 = Barcode
sbt	long	subtype (not used-- always zero)
red	long	color index for red
grn	long	color index for green
blu	long	color index for blue
opt	long	color options
flg	long	options flag (future use)
opn	long	other options (future use)

Example

C, " ", 4, 0, (0, 255, 255, 1), 0, 0

Field F

F *Field* Record

Syntax

F, (top, lft, bot, rgt), (fid, fch, fcw, fbl), len, vfn

Parameter	Compiled FAP	Description
Token	CF_REC	"F" field record
top	long	top y-coordinate of rectangle in units per tick mark (upi)
lft	long	left x-coordinate of rectangle in units per tick mark (upi)
bot	long	bottom y-coordinate of rectangle in units per tick mark (upi)
rgt	long	right x-coordinate of rectangle in units per tick mark (upi)
fid	long	font ID (see record type R)
fch	long	font character height (see record type R)
fcw	long	font character width (see record type R)
fbl	long	font character baseline (see record type R)
len	long	length of variable field (number of characters)
vfn	CF_STR	variable field name

Example

F, (3972, 24187, 4236, 24387), (57, 333, 400, 264), 22, TESTFIELD

Field F1

A,F1 *Field Attributes* Record 1

Syntax

A, F1, "fnm", ft, "ff", lgf, dof, req, (red, grn, blu, opt), eff, orn, fp

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,F1" field record.
fnm	CF_STR	field name, omitted—use previous field record (record type F)
		field type, case sensitive, for instance: C = custom x = alphanumeric k = international alphanumeric a = alphabetic i = international alphabetic X = uppercase alphanumeric K = international uppercase alphanumeric A = uppercase alphabetic I = international uppercase alphabetic n = numeric
ft	CF_STR	

		y = y/n - y(yes) or n(no)
		m = x or space
		d = date format
		t = table only
		M = multi-line text (linked to multi-line text region)
		B = barcode (linked to barcode record)
		CF_STR ff, /*field format (see FormEntry Manual)
		local/global flag (scope of field name)
lgf	long	0 = local to image 1 = reserved 2 = global to form (images within form) 3 = global to form set (all active forms and images)
dof	long	display-only flag 0 = display and update 1 = display only
req	long	required flag 0 = optional (may be handled in edit procedures) 1 = required (entry required)
red	long	color index for red
grn	long	color index for green
blu	long	color index for blue
opt	long	color options
		effects, for instance:
eff	long	0 = no special effects 1 = underline 2 = strike-out 3 = underline and strikeouts
		orientation (rotation), for instance
orn	long	0 = normal 90 = downward 180 = upside down 270 = upward
fp	CF_STR	field prompt text

Example

A,F1," ",x," ",3,0,0,(255,0,0,0),0,0,Field Prompt

Field F2

A,F2 *Field Attributes Record 2*

Syntax

A,F2,"fnm",hpt,hfn,"hpn",tbt,tfn,tbn,tbr,"bgf","nbf",gin,gds

Parameter	Compiled FAP	Description
Token	CF_REC	"A,F2" field record
fnm	CF_STR	field name: omitted—use the previous field record (record type F)
hpt	long	help type: 0=built-in, 1=user
hfn	CF_STR	help file name (optional, if blank, use image help file name)
hpn	CF_STR	help name
tbt	long	table type: 0=built-in, 1=user
tfn	CF_STR	table file name (optional, if blank, use image table file name)
tbn	CF_STR	table name
		table return
		K = key
tbr	CF_STR	D = description K+D = key and description D+K = description and key empty = nothing
bgf	CF_STR	blank goto field name
nbf	CF_STR	non-blank goto field name

gin	long	group indicator 0 = does not begin a new field group 1 = begins new field group
gds	CF_STR	group description text

Example

```
A,F2," ",0, fldhelp ,"hlpid ",0, fldtable ,tblid ,K+D ,"blarg1 ",
"blarg2 ",1, section description
```

Field F3

A,F3 *Field Attributes* Record 3

Syntax

```
A, F3, "fnm", prm, prp, prd
```

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,F3" field record.
fnm	CF_STR	field name: omitted—use previous field record (record type F)
prm	CF_STR	pre-edit dynamic module name (no extension)
prp	CF_STR	pre-edit dynamic procedure name
prd	CF_STR	pre-edit data

Example

```
A, F3, " ", premodule ,preproc ,pre data
```

Field F4

A,F4 *Field Attributes* Record 4

Syntax

```
A, F4, "fnm", pom, pop, pod
```

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,F4" field record.
fnm	CF_STR	field name: omitted—use previous field record (record type F)
pom	CF_STR	post-edit dynamic module name (no extension)
pop	CF_STR	post-edit dynamic procedure name
pod	CF_STR	post-edit data

Example

```
A, F4, " ", postmodule ,psotproc ,post data
```

Field F5

A,F5 *Field Attributes* Record 5

Syntax

```
A, F5, "fnm", clc
```

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,F5" field record.
F5	CF_STR	subtype (Field attributes record 5)
fnm	CF_STR	field name: omitted—use previous field record (record type F)
clc	CF_STR	field calc text

Example

Field F6

A,F6 *Field Attributes* Record 6

Syntax

A,F6,"fnm",sct,scl,dmy,calc,fmt,"link",spct,spc,tab,tmar,bmar, lind, rind,hind,flg,popt,plang,fopt,flang,"loc",baseline adj

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,F6" field record.
F6	long	subtype (Field attributes record 6)
fnm	CF_STR	field name: omitted—use previous field record (record type F)
sct	long	send copy to flag 0 - not a "send copy to" field 1 - a "send copy to" field
scl	long	scaling factor for barcode type
dmy	long	dummy field flag
calc	long	calc type
fmt	long	Format type for multi line text. Added for version 8.0. Prior versions are supplied with default values.
link	CF_STR	link name. Added for version 8.5.
spct	long	spacing type. Added for version 8.5.
spc	long	spacing. Added for version 8.5.
tab	long	tab stop. Added for version 8.5.
tmar	long	top margin. Added for version 9.5.
bmar	long	bottom margin. Added for version 9.5.
lind	long	left indent. Added for version 9.5.
rind	long	right indent. Added for version 9.5.
hind	long	hanging indent. Added for version 9.5.
popt	long	paragraph options
plang	long	paragraph language for hyphenation
fopt	long	field options
flanguage	long	field language
loc	CF_STR	locale. Added for version 10.2.
baselineAdj	long	adjustment for subscript

Example

A,F6," ",0,1,1,0,0," ",0,0,600,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,"en_US",0

Field F7

A,F7 *Field Attributes* Record 7

Syntax

A,F7,"fnm",bpsdAlign,bpsdEndChar,bpsdLines,bpsdReplaceChar, vsdPointSize,bpsdDeleteChar

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,F7" field record.
F7	CF_STR	subtype (Field attributes record 7)
fnm	CF_STR	field name: omitted—use previous field record (record type F)
bpsdAlign	long	code point for Y/N (decimal), Documerge tag info
bpsdEndChar	long	end char code point, Documerge tag info
bpsdLines	long	number of lines for BPSD, Documerge tag info
bpsdReplaceChar	long	replacement char code point, Documerge tag info

vsdPointSize	long	vsd point size, Documerge tag info
bpsdDeleteChar	long	Documerge tag for Delete= Y/N/1/R

Example

A,F7," ",89,162,0,33,0,89

Field F8

A,F8 *Field Attributes* Record 7

Syntax

A,F8,"",flg1,flg2,flg3,flg4,;FmtMask,;SrcFieldName,SrcType,;SrcFormat,;DestLen,DestOffset, TblNdx, SrcLen, SrcOffset, SrcRec, RulParmLen, SrcMult, RuleParms

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,F8" field record.
F8	CF_STR	subtype (Field attributes record 8)
fnm	CF_STR	field name: omitted—use previous field record (record type F)
Flag1	CF_STR	Not Required Y or N
Flag2	CF_STR	Host Required Y or N
Flag3	CF_STR	Operator Required Y or N
Flag4	CF_STR	Optional Required Y or N
FmtMask	CF_STR	Rule format mask
RuleName	CF_STR	Rule name
SrcFieldName	CF_STR	Source field name
SrcType	CF_STR	Source field type
SrcFormat	CF_STR	Source field format
DestLen	long	Destination length
DestOffset	long	Destination offset
TblNdx	long	Index of table name
SrcLen	long	Source length
SrcOffset	long	Source offset
SrcRec	long	Source record?
RuleParmsLen	long	Length of rule data
RuleParms	CF_STR	Rule parameter data

Example

A,F8,"",N,N,N,N,;;,"XDD","Add/Info","",;;,5,0,0,5,0,0,0,0\

Field F9

A,F9 *Field Attributes* Record 9

Syntax

A,F9,"name",type,options,parmslen,parms,hreflen,href

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,F9" field record.
F9	CF_STR	subtype (Field attributes record 9)
Name	CF_STR	Link name
Type	long	1=target, 2=href, 4=hot
Options	long	PDF link style, 0=None, 1=Solid, 2=Dash, 3=Underline
ParamsLen	long	Length of the params string
Params	CF_STR	HREF parameters used by HTML
HrefLen	long	Length of the HREF string

hrefData

[CF_STR](#)

HREF data

Example

A,F9,"",2,0,15,TARGET="_blank",23,http:///www.oracle.com

Font R

R *Font* Record

Syntax

R, fid, fch, fcw, fbl, fntn, fonn

Parameter	Compiled FAP	Description
Token	CF_REC	"R" font record
fid	long	system global font ID
fch	long	font character height in units per tick mark (upi)
fcw	long	font character width in units per tick mark (upi)
fbl	long	font character base line in units per tick mark (upi)
fntn	CF_STR	font file name (*1)
fonn	CF_STR	font width table file name (*2)

Notes

(*1) in the FormMaker DOS environment, this file name has the extension .FNT.

(*2) in the FormMaker DOS environment, this file name has the extension .FON.

Font R1

A,R1 *Font Attributes* Record 1

Syntax

A,R1, fid, ps, orn, spc, sty, wt, "fam", "fac", dsc

Parameter	Compiled FAP	Description
A	CF_REC	"A,R1" header record
fid	long	global system font ID, 0=supplies attributes to preceding font record (record type R)
ps	long	point size in 100ths, 1000 = 10.00 pt size, if < 100, then whole pt size (10, 12, etc.)
orn	long	orientation, 0= portrait, 1=landscape
spc	long	spacing (or type size), 0=fixed, 1=proportional
sty	long	style code
wt	long	stroke weight
fam	CF_STR	typeface family name
fac	CF_STR	typeface name
dsc	CF_STR	description (for font selection window)

Font R2

A,R2 *Font Attributes* Record 2 Syntax A,R2,fid,cgr,cw1,cw2,cw3,...,cw32

Syntax

Parameter	Compiled FAP	Description
A	CF_REC	"A,R2" header record
fid	long	font ID, 0=use previous font record (record type R, or A-R1, or A-R2)

cgr	long	character group record number (1 through 8), each character group consists of 32 characters: group record 1 contains characters 0 through 31, group record 2 contains characters 32 through 63, and so on.
cw	long	width (FAP units) of first through thirty-second characters in group

Notes

Most fonts only need to supply R2 records for character group records 2, 3, and 4 (characters 32 through 127) since most fonts do not supply widths for the other characters.

Font R3

A,R3 *Font Attributes* Record 3

Syntax

A,R3, fid, pt, flg, opt, idx, "ffn", "tfc", "cid", "csn", "dat", sup

Parameter	Compiled FAP	Description
Token	CF_REC	"A,R3" header record (one record per printer type)
fid	long	Font ID, 0=use previous font record (record type R, or A-R1, or A-R2) printer type (must be one of the following) PCL = HP PCL printers AFP = IBM AFP printers XMC = Xerox Metacode printers PS = Postscript printers OTH = Other printer type
pt	CF_STR	
flg	long	flag
opt	long	options
idx	long	index
ffn	CF_STR	font file name
tfc	CF_STR	typeface code
cid	CF_STR	character set ID
csn	CF_STR	character set name
dat	CF_STR	miscellaneous data
sup	CF_STR	font printer setup data

Font R4

A,R4 *Font Attributes* Record 4

Syntax

A,R4, fid, cdp, intlead, extlead, lcascent, ucascent, unicodeID

Parameter	Compiled FAP	Description
Token	CF_REC	"A,R4" header record
fid	long	font ID, 0=use previous font record (record type R, or A-R1, or A-R2)
cdpg	long	code page, legacy for OS/2 display
intlead	long	internalLeading, used for PFMs
extlead	long	externalLeading, used for PFMs
lcascent	long	lowerCaseAscent, used for PFMs
ucascent	long	lowerCaseDescent, used for PFMs
unicodeID	long	unicode font ID, reserved for future

Font R5

A,R5 *Font Attributes* Record 5

Syntax

A,R5, fid, vn, rv, "guid", "ef_dt", "ef_tm"

Parameter	Compiled FAP	Description
Token	CF_REC	"A,R5" header record (version information)
fid	long	font ID, 0=use previous font record (record type R, or A-R1, or A-R2)
vn	long	Version number
rn	long	Revision number
guid	CF_STR	Global unique identifier
ef_dt	CF_STR	Effective date
ef_tm	CF_STR	Effective time

Font R6

A,R5 *Font Attributes* Record 6

Syntax

A,R6, fid, start, end, deltaID, cw1, cw2, cw3, ...

Parameter	Compiled FAP	Description
Token	CF_REC	"A,R6" header record
fid	long	font ID, 0=use previous font record (record type R, or A-R1, or A-R2)
start	long	starting Unicode code point (hex)
end	long	ending Unicode code point (hex)
deltaID	long	delta to calculate glyph ID (hex)
cw	long	char widths (in FAP units) for Unicode code points (start to end)

Graphic G

G *Graphic / logo* Record

Syntax

G, (top, lft, bot, rgt), bmn

Parameter	Compiled FAP	Description
Token	CF_REC	The "G" graphic / logo record.
top	long	top y-coordinate of rectangle (in "upi" units)
lft	long	left x-coordinate of rectangle (in "upi" units)
bot	long	bottom y-coordinate of rectangle (in "upi" units)
rgt	long	right x-coordinate of rectangle (in "upi" units)
bmn	CF_STR	bit-map file name

Graphics BEGLOGO

\BEGLOGO *Graphic / logo Attributes*

Syntax

\BEGLOGO

Parameter	Compiled FAP	Description
Token	CF_STR	The "\BEGLOGO" graphic / logo record follows the "A,G1" record for an inlined logo.

Graphics ENDLOGO

\ENDLOGO *Graphic / logo Attributes*

Syntax

\ENDLOGO

Parameter	Compiled FAP	Description
Token	CF_STR	The "\ENDLOGO\" graphic / logo record follows the last "A,G5" record for an inlined logo.

Graphics G1

A,G1 *Graphic / logo Attributes* Record 1

Syntax

A,G1,typ,res,(red,grn,blu,opt),orn,sty,"nam" inline, optn

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,G" graphic / logo record.
typ	long	graphics type 1 = FormMaker Logo bitmap
res	long	resolution of bitmap in dpi
red	long	color index for red
grn	long	color index for green
blu	long	color index for blue
opt	long	color options orientation (rotation) 0 = normal 90 = downward 180 = upside down 270 = upward
orn	long	style 0 = normal 1 = protected (signature)
nam	CF_STR	name (metacode bitmap font name) (optional)
inline	long	In line bitmap flag object options: (additive values) 0x00000001=does not display or print 0x00000002=does not Print does display 0x00000004=hyphenated text area or paragraph 0x10000000=special 'full page' bitmap
optn	long	

Graphics G2

A,G2 *Graphic / logo Attributes* Record 2

Syntax

A,G2,rows,wide,byteWide,res,bitsper,cmp,nm0,nm90,nm180,nm270,colors

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,G2" graphic / logo record.
rows	long	rows
wide	long	width
byteWide	long	byte width
res	long	resolution of bitmap in dpi
bitsper	long	bitsPerPixel
cmp	long	compression type
nm0	CF_STR	name 0 degrees
nm90	CF_STR	name 90 degrees
nm180	CF_STR	name 180 degrees
nm270	CF_STR	name 270 degrees
colors	long	colors used

Example

A,G2,0264,0450,1350,299,24,5," "," " " " " " " ,0

Graphics G3

A,G3 *Graphic / logo Attributes* Record 3

Syntax

A,G3,rgbBlue,rgbGreen,rgbRed

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,G3" graphic / logo record.
rgbBlue	long	color palette
rgbGreen	long	color palette
rgbRed	long	color palette

Example

A,G3,128,0,0

Graphics G4

A,G4 *Graphic / logo Attributes* Record 4

Syntax

A,G4,type,rows,cols,size

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,G4" graphic / logo record.
type	long	bitmap type
rows	long	rows
cols	long	cols
size	long	size

Example

A,G4,5,264,1352,26044

Graphics G5

A,G5 *Graphic / logo Attributes* Record 5

Syntax

A,G5,data

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,G5" graphic / logo record.
data	CF_STR	row of bitmap data

Example

A,G5,0U9pjchjkv30KXadB0nbkP0CnKihmWqHJpFPJ91o...

Graphics G6

A,G6 *Graphic / logo Attributes* Record 6

Syntax

A,G6,versnum,revsnum,"guid","eff_date","eff_time"

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,G6" graphic / logo record.

versnum	long	Version number
revsnum	long	Revision number
glob_unique_id	CF_STR	GUID
eff_date	CF_STR	Effective date
eff_time	CF_STR	Effective time

Example

A,G6,4,3,"01234567890abcdef01234567890abcd","date","time"

Graphics G7

A,G7 *Graphic / logo Attributes* Record 7

Syntax

A,G7,"name",type,options,parmslen,parms,hreflen,href

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,G7" graphic / logo record.
G7	CF_STR	subtype (Logo attribute record 7)
Name	CF_STR	Link name
Type	long	1=target, 2=href, 4=hot
Options	long	PDF link style, 0=None, 1=Solid, 2=Dash, 3=Underline
ParamsLen	long	Length of the params string
Params	CF_STR	HREF parameters used by HTML
HrefLen	long	Length of the HREF string
hrefData	CF_STR	HREF data

Example

A,G7,"gotofield",4,0,0,,0,

Guideline L

L *Guideline* Record

Syntax

L,(top,lft,bot,rgt),typ,opt

Parameter	Compiled FAP	Description
Token	CF_REC	The "L" guideline record.
top	long	top y-coordinate of rectangle (in "upi" units)
lft	long	left x-coordinate of rectangle (in "upi" units)
bot	long	bottom y-coordinate of rectangle (in "upi" units)
rgt	long	right x-coordinate of rectangle (in "upi" units)
typ	long	type (not currently used)
opt	long	options

Example

L,(5118,15375,6118,16575),0,164

Guideline L1

A,L1 *Guideline Attributes* Record 1

Syntax

A,L1,(red,grn,blu,opt),"nam", optn

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,L1" guideline attributes record.
red	long	color index for red
grn	long	color index for green
blu	long	color index for blue
opt	long	color options
nam	CF_STR	guideline name (optional)
optn	long	object options: (additive values) 0x00000001=does not display or print 0x00000002=does not Print does display 0x00000004=hyphenated text area or paragraph 0x10000000=special 'full page' bitmap

Example

A,L1,(192,192,192,0),"Guide ",164

ImageRule J

L *Image Rule* Record

Syntax

J,rulename,\ruledata

Parameter	Compiled FAP	Description
Token	CF_REC	The "J" image rule record.
rulename	size_t szString	image rule name
ruledata	size_t szString	image rule data

Example

J,SETORIGIN,\Rel+0, Max+0

Line X1

A,X1 *Box, Shade, Line Attributes* Record 1

Syntax

A,X1,"lbn",orn,(red,grn,blu,opt),eff,optn

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,X1" line record.
lbn	CF_STR	line/box name (optional)
gap	long	space from text for borders. (used to have orientation here which was never used) Used in version 8.0.
red	long	color index for red
grn	long	color index for green
blu	long	color index for blue
opt	long	color options
eff	long	effects. Used in version 8.0.
optn	long	object options: (additive values) 0x00000001=does not display or print 0x00000002=does not Print does display 0x00000004=hyphenated text area or paragraph 0x10000000=special 'full page' bitmap

Example

A,X1,"Test ",0,(0,0,128,1),0,0

Line X2

A,X2 *Box, Shade, Line Attributes* Record 2

Syntax

A,X2,lc,tbw,lbw,bbw,rbw,tbg,lbg,bbg,rbg,tbs,lbs,bbs,rgs

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,X2" line record.
lc	long	line count, DCD paragraph border
tbw	long	top box width, DCD paragraph border
lbw	long	left box width, DCD paragraph border
bbw	long	bottom box width, DCD paragraph border
rbw	long	right box width, DCD paragraph border
tbg	long	top box gap, DCD paragraph border
lbg	long	left box gap, DCD paragraph border
bbg	long	bottom box gap, DCD paragraph border
rbg	long	right box gap, DCD paragraph border
tbs	long	top box style, DCD paragraph border
lbs	long	left box style, DCD paragraph border
bbs	long	bottom box style, DCD paragraph border
rbs	long	right box style, DCD paragraph border

Example

A,X2,1,1,1,1,1,1,1,1,1,1,1,1,1,1

Line X3

A,X3 *Border Flags* Record 3

Syntax

A,X3,bdrFlags

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,X3" line record.
bdrFlags	long	Border Flags

Example

A,X3,63

Note N

N *Note* Record

Syntax

N,(top,lft,bot,rgt),typ,sty,len,txt

Parameter	Compiled FAP	Description
Token	CF_REC	The "N" note record.
top	long	top y-coordinate of rectangle (in "upi" units)
lft	long	left x-coordinate of rectangle (in "upi" units)
bot	long	bottom y-coordinate of rectangle (in "upi" units)
rgt	long	right x-coordinate of rectangle (in "upi" units)
typ	long	type 0 - standard note 3 - table of contents

		4 - index table
		8 - figures table
		16 - citationtable
		other values reserved
		style
		1 - sticky pad
		2 - memo 3 - table of contents
sty	long	4 - index table
		8 - figures table
		16 - citationtable
		The values 3 and greater may be combined to define the types of bookmarks defined. The note type will be 0 in the case of bookmarks.
len	long	note text length
txt	CF_STR	note text

Example

N, (5318,15188,6118,15988),0,2,4,Text

Note N1

A,N1 Note Attributes Record 1

Syntax

A,N1, (red,grn,blu,opt), "nam", "dte", "rcv", "snd", "sbj", optn, level

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,N1" note attributes record.
red	long	color index for red
grn	long	color index for green
blu	long	color index for blue
opt	long	color options
nam	CF_STR	note name (optional)
dte	CF_STR	date (optional and style dependant)
rcv	CF_STR	receiver of note (optional and style dependant)
snd	CF_STR	sender of note (optional and style dependant)
sbj	CF_STR	subject of note (optional and style dependant)
		object options: (additive values)
		0x00000001=does not display or print
		0x00000002=does not Print does display
		0x00000004=hyphenated text area or paragraph
		0x10000000=special 'full page' bitmap
optn	long	
level	long	if a note bookmark, then level number

Example

A,N1, (0,0,0,0), "Note ", "January 12, 2009 ", "Rcv ", "Snd ", "Test", 0,0

Signature

Z, Signature token Record

Syntax

Z, "name", typ, (top, lft, bot, rgt), fid, (red, grn, blu, opt), eff

Parameter	Compiled FAP	Description
Token	CF_REC	The "Z" signature record.
name	CF_STR	signature name
type	long	0=Placeholder, 1=Digital, 2=Skywire
top	long	top y-coordinate of rectangle (in "upi" units)
lft	long	left x-coordinate of rectangle (in "upi" units)

bot	long	bottom y-cord of rectangle (in "upi" units)
rgt	long	right x-coordinate of rectangle (in "upi" units)
fid	long	font id
red	long	color index for red
grn	long	color index for green
blu	long	color index for blue
opt	long	color options
		effects, for instance:
		0 = no special effects
eff	long	1 = underline
		2 = strike-out
		3 = underline and strikeout

Example

Z, "Sig ", 0, (7818, 13300, 8043, 16500), 11212, (0, 255, 255, 3), 0

Signature Z1

A,Z1 Document Metadata Record 1

Syntax

A, Z1, flag, len, "data"

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,Z1" text record.
flag	long	Document Metadata flag
len	long	Document Metadata length
data	CF_STR	Document Metadata

Signature Z2

A,Z2 Signature Metadata Record 2

Syntax

A, Z2, flag, len, "data"

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,Z2" text record.
flag	long	Signature Metadata flag
len	long	Signature Metadata length
data	CF_STR	Signature Metadata

Text Area E

M,E Text Area End Record

Syntax

M, E

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,E" text area record.

Remarks

Ends the most recent Multi-Line Text definition (Header record).

Notes

Added for version 8.0. Prior versions did not have this record type

Text Area G

M,G *Text Area Graphic* Record

Syntax

M,G,.....

See Record type G for syntax of remaining record

Parameter	Compiled FAP	Description
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Token	CF_REC	The "M,G" text area text record. The 'G' is the start of a normal graphic record.
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Remarks

Attaches to most recent Multi-Line Text definition.

Notes

Added for version 8.0

Text Area L

M,L *Text Area line* Record (no longer used)

Syntax

M,L,lid,pid,nchr,nfnt,eop,ht, fid

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,L" text area record.
lid	long	line id (1-based integer)
pid	long	paragraph id (1-based integer)
nchr	long	number of characters defined for this line
nfnt	long	number of font cross reference entries required for this line
eop	long	end of paragraph flag 0 = Soft return - not end of paragraph 1 = Hard return - end of paragraph
ht	long	height of line (FAP units)
fid	long	default font id

Remarks

Attaches to most recent Multi-Line Text definition (Header record).

Notes

Version 8.0: No longer used record type. It is read for compatibility to prior versions but is no longer output.

Text Area LL

M,LL *Text Area Guide Line* Record

Syntax

M,L,.....

See Record type L for syntax of remaining record

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,LL" text area text record. The second 'L' is the start of a normal guide line record.

Remarks

Attaches to most recent Multi-Line Text definition.

Notes

Added for version 8.0

Text Area MH

MH *Text Area* Record

Syntax

M,H, (top,lft,bot,rgt),typ, (fid,fch,fcw,fbl), "nam", ver, sp, tb, ft

Parameter	Compiled FAP	Description
Token	CF_REC	The "MH" text area record.
top	long	top y-coordinate of rectangle (in FAP units)
lft	long	left x-coordinate of rectangle (in FAP units)
bot	long	bottom y-coordinate of rectangle (in FAP units)
rgt	long	right y-coordinate of rectangle (in FAP units)
typ	long	type 0 = Multi-line static text area in the composed form image (full contents supplied in FAP ASCII file) 1 = Multi-line variable text area associated with an entry field (contents supplied in FORM NA Data file) 2 = ? Templated multi-line area ?
fid	long	font id
fch	long	font character height
fcw	long	font character width
fbl	long	font character baseline
nam	CF_STR	for type 0 - optional name for type 1 - associated field name
ver	long	version number (8)
sp	long	default spacing value. Added for version 8.0. Prior versions are supplied with default values.
tb	long	default tab stop. Added for version 8.0. Prior versions are supplied with default values.
ft	long	format type (fixed, float, column, ...). Added for version 8.0. Prior versions are supplied with default values.
spacingType	long	default spacing type 0 = SINGLE SPACE 4 = PARA_DOUBLESPEACE, 16 = PARA_EXACTSPACE, 32 = PARA_ATLEASTSPACE, 256 = PARA_MULTIPLYSPACE
mtParatmargin	long	default top margin
mtParabmargin	long	default bottom margin
mtParalindent	long	default left indent
mtPararindent	long	default right indent
mtParahindent	long	default hanging indent
mtParaflags	long	default paragraph flags
language	long	default hyphenation language

Remarks

Before 80: Subsequent M(L), M(P), and M(T) records will be attached to this record until the next M(H) record is encountered.

Version 8.0 Subsequent records will be attached to this record until the next M(E) ends the text area. Other objects will appear with M, preceding the normal record layout.

Text Area MH1

A,MH1 *Text Area Attributes* Record 1

Syntax

A, MH1, (red, grn, blu, opt), orn, optn

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,MH1" text area record.
red	long	color index for red
grn	long	color index for green
blu	long	color index for blue
opt	long	color options
		orientation (rotation)
		0 = normal
orn	long	90 = downward
		180 = upside down
		270 = upward
		object options: (additive values)
		0x00000001=does not display or print
optn	long	0x00000002=does not Print does display
		0x00000004=hyphenated text area or paragraph
		0x10000000=special 'full page' bitmap

Text Area N

M,N Text Area Note Record

Syntax

M,N,.....

See Record type N for syntax of remaining record

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,N" text area text record. The 'N' is the start of a normal note record.

Remarks

Attaches to most recent Multi-Line Text definition.

Notes

Added for version 8.0

Text Area O

M,O Text Area format token Record

Syntax

M,O, (top,lft,bot,rgt), (fid,fch,fcw,fbl), typ,lead

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,O" text area format record.
top	long	top y-coordinate of rectangle (in "upi" units)
lft	long	left x-coordinate of rectangle (in "upi" units)
bot	long	bottom y-coordinate of rectangle (in "upi" units)
rgt	long	right x-coordinate of rectangle (in "upi" units)
fid	long	font id
fch	long	font character height
fcw	long	font character width
fbl	long	font character baseline
typ	long	type (end of para, tab char, ...)
lead	long	leader character
border	long	boolean for border
shade	long	boolean for shade
num	long	number for numbered bullets

Notes

Added for version 8.0. Prior versions did not have this record type.

Example

M,0,(2312,7711,2680,7711),(11012,456,400,368),1,0,0,0,0

Text Area O1

M,O1 *Text Area format token* Record 1

Syntax

A,O1,(red,grn,blu,opt)

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,O1" text area format record 1
red	long	color index for red
grn	long	color index for green
blu	long	color index for blue
opt	long	color options

Notes

Added for version 8.0. Prior versions did not have this record type.

Example

A,O1,(0,0,0,0),8

Text Area P

M,P *Text Area Paragraph* Record

Syntax

M,P,pid,lin,rin,flg,spc,hin,tm,bm

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,P" text area format record.
pid	long	paragraph id (1-based integer). Added for version 8.0. Prior versions are supplied with default values
lin	long	left indent (margin) (1/100ths of an inch)
rin	long	right indent (margin) (1/100ths of an inch)
flg	long	option flags (additive) 0 = Left justify 1 = Center 2 = Right justify 4 = Double space
spc	long	line spacing (future use)
hin	long	Hanging indent Added for version 8.0. Prior versions are supplied with default values
tm	long	top margin Added for version 8.0. Prior versions are supplied with default values
bm	long	bottom margin Added for version 8.0. Prior versions are supplied with default values

Remarks

Attaches to most recent Multi-Line Text definition (Header record).

Notes

Added for version 8.0

Example

M,P,0,0,0,0,0,0,0,0

Text Area P1

M,P1 Text Area Paragraph Record 1

Syntax

M,P1,tab,tabtyp,lead

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,P" text area format record.
tab	long	tab position
tabtype	long	tab type (left, right, center, ...)
lead	CF_STR	leader character

Remarks

Attaches to most recent Multi-Line Text definition (Paragraph record).

Notes

Added for version 8.0. Prior versions are supplied with default values. Notes: Added for version 8.0

Text Area P2

M,P2 Text Area Paragraph Record 2

Syntax

M,P2,spacing, options, language

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,P2 text area format record.
spacing	long	paragraph spacing type 0 = SINGLE SPACE 4 = PARA_DOUBLESPEACE, 16 = PARA_EXACTSPACE, 32 = PARA_ATLEASTSPACE, 256 = PARA_MULTIPLYSPACE
options	long	paragraph options
language	long	paragraph hyphenation language

Example

M,P2,4,4,0

Text Area P3

M,P3 Text Area Paragraph Record 3

Syntax

M,P3,BulletType,cp,(PreTabStop, PreTabType, LeadChar), (PostTabStop, PostTabType, LeadChar), (prefixChars), (postfixChars), Level, StartPoint, (FontID, fnth, fntw, fntb), (rgrbr, rrgb, rrgb, rrgb), effects

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,P3" text area format record.
type	TFAPBULLETTYPE	bullet, number,
name	CF_STR	logo name
codePoint	long	code point of bullet
preTab_tabStop	long	position for bullet
preTab_tabType	long	tab type (left, right, center, ...)
preTab_leadChar	long	pre tab stop lead character

postTab_tabStop	long	position for text
postTab_tabType	long	tab type (left, right, center, ...)
postTab_leadChar	long	post tab stop lead character
numType	TFAPBULLNUMTYPE	type of bullet 0 = DECIMAL NUMBER, 1 = UPPER CASE LETTER, 2 = LOWER CASE LETTER, 3 = ROMAN NUMERIAL, 4 = ROMAN NUMERIAL LOWER CASE, 5 = CARDINAL (One, Two, Three), 6 = ORDINAL (1st, 2nd, 3rd), 7 = ORDINAL Text (First, Second, Third)
prefix_1	long	first char code point of prefix
prefix_2	long	second char code point of prefix
prefix_3	long	third char code point of prefix
postfix_1	long	first char code point of postfix
postfix_2	long	second char code point of postfix
postfix_3	long	third char code point of postfix
level	long	bullet level
startPoint	long	start point for vector bullets
font_id	long	system global font ID
font_height	long	font character height in FAP units
font_width	long	font character width in FAP units
font_baseline	long	font character baseline in FAP units
rgbRed	long	color palette
rgbGreen	long	color palette
rgbBlue	long	color palette
rgbOptions	long	color options
effects	long	paragraph effects

Example

M,P3,4," ",111,(0,0,0),(1200,0,0),0,(65,65,0),(66,66,0),0,1,(18010,0,0,0),(0,0,0,0),0

Text Area PX

M,PX *Text Area Borders/Shades* Record

Syntax

M,PX,.....
See Record type X for syntax of remaining record

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,PX" text area border and shade record. The 'X' is the start of normal box record.

Remarks

Attaches to most recent Multi-Line Text definition (Paragraph record).

Notes

Added for version 8.0

Text Area T

M,T *Text Area Text* Record (no longer used)

Syntax

M,T,(top,lft,bot,rgt),(fid,fch,fcw,fbl),lid,lp,len,txt

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,T" text area text record.

top	long	top y-coordinate of baseline rectangle
lft	long	left x-coordinate of baseline rectangle
bot	long	bottom y-coordinate of baseline rectangle
rgt	long	right x-coordinate of baseline rectangle
fid	long	font id
fch	long	font character height
fcw	long	font character width
fbl	long	font character baseline
lid	long	line id (line to which it belongs) (1-based integer)
lp	long	line position (1-based integer)
len	long	length of text (number of characters)
txt	CF_STR	text data

Remarks

Attaches to most recent Multi-line Text definition (Header record).

Notes

Version 8.0: No longer used record type. It is read for compatibility to prior versions but is no longer output. Uses M(TT) record for version 8.0.

Text Area TT

M,TT *Text Area Text* Record

Syntax

M,TT,.....
See Record type T for syntax of remaining record

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,TT" text area text record. The second 'T' is the start of a normal text record.

Remarks

Attaches to most recent Multi-Line Text definition.

Notes

Added for version 8.0

Example

M,TT, (2312,7031,2680,7711), (11012,456,400,368),4,Test

Text Area X

M,X *Text Area Box* Record

Syntax

M,X,.....
See Record type X for syntax of remaining record

Parameter	Compiled FAP	Description
Token	CF_REC	The "M,X" text area text record. The 'X' is the start of a normal box record.

Remarks

Attaches to most recent Multi-Line Text definition.

Notes

Added for version 8.0

Text T

T *Text Record*

Syntax

T, (top,lft,bot,rgt), (fid,fch,fcw,fbl), len,txt

Parameter	Compiled FAP	Description
Token	CF_REC	The "T" text record.
top	long	top y-coordinate of rectangle (in "upi" units)
lft	long	left x-coordinate of rectangle (in "upi" units)
bot	long	bottom y-coordinate of rectangle (in "upi" units)
rgt	long	right x-coordinate of rectangle (in "upi" units)
fid	long	font id (see record type R)
fch	long	font character height (see record type R)
fcw	long	font character width (see record type R)
fbl	long	font character baseline (see record type R)
len	long	length of text (number of characters)
txt	CF_STR	text data

Text T1

A,T1 *Text Attributes Record 1*

Syntax

A,T1,"tln",orn,(red,grn,blu,opt),eff,optn,"loc"

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,T1" text record.
tln	CF_STR	text label name (optional)
orn	long	orientation 0 = normal 90 = downward 180 = upside down 270 = upward
red	long	color index for red
grn	long	color index for green
blu	long	color index for blue
opt	long	color options
eff	long	effects (strike-out, underline) 0 = no special effects 1 = underline 2 = strike-out 3 = underline and strikeout
optn	long	object options: (additive values) 0x00000001=does not display or print 0x00000002=does not Print does display 0x00000004=hyphenated text area or paragraph 0x10000000=special 'full page' bitmap
loc	CF_STR	locale name
baselineAdj	long	adjustment for subscript

Text T2

A,T2 *Text Attributes Record 2*

Syntax

A,T2,"name",type,options,paramslen,params,hreflen,href

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,T2" text record.
T2	CF_STR	subtype (Text attribute record 2)
Name	CF_STR	Link name
Type	long	1=target, 2=href, 4=hot
Options	long	PDF link style, 0=None, 1=Solid, 2=Dash, 3=Underline
ParamsLen	long	Length of the params string
Params	CF_STR	HREF parameters used by HTML
HrefLen	long	Length of the HREF string
hrefData	CF_STR	HREF data

Example

A,T2,"test",2,0,0,,23,http:///www.test.com

Vector I

I *Illustration* Record

Syntax

I, (top,lft,bot,rgt),typ,pc

Parameter	Compiled FAP	Description
Token	CF_REC	The "I" Illustration record.
top	long	top y-coordinate of rectangle (in "upi" units)
lft	long	left x-coordinate of rectangle (in "upi" units)
bot	long	bottom y-coordinate of rectangle (in "upi" units)
rgt	long	right x-coordinate of rectangle (in "upi" units)
		type of object
		0
		3 = arc
		4 = scanlines
		6 = rectangle
		7 = ellipse
		8 = marker
typ	long	18 = polyline
		20 = winding polygon
		22 = alternative polygon
		23 = pie
		39 = chord
		55 = circle
		72 = round rectangle
pc	long	point count for illustration types requiring points

Example

L, (3750,15375,4750,16575),0,0

Vector I2

A,I2 *Illustration Attributes* Record 2

Syntax

A,I2,(bx,by),(ex,ey),bangle,eangle

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,I2" field record.

bx	long	beginning point x for arc/chord/pie (in "upi" units)
by	long	beginning point y for arc/chord/pie (in "upi" units)
ex	long	ending point x for arc/chord/pie (in "upi" units)
ey	long	ending point y for arc/chord/pie (in "upi" units)
bangle	long	beginning angle for arc/chord/pie
eangle	long	ending angle for arc/chord/pie

Example

A, I2, (5, 5), (10, 5), 90, 270

Vector I3

A,I3 Illustration Attributes Record 3

Syntax

A, I3, pgr, px1, py1, px2, py2, . . . , px16, py16

Parameter	Compiled FAP	Description
Token	CF_REC	The "A,I3" field record.
pgr	long	point group record number), each point group consists of 16 points of x,y pairs: group record 1 contains points 0 through 15, group record 2 contains characters 16 through 31, and so on. If the number of points is not an even multiple of 16 then fewer points will be on the last attribute record.
px1	long	x (FAP units) of first point in group
py1	long	y (FAP units) of first point in group
px2	long	... and so on
py2	long	... and so on
px16	long	x (FAP units) of 16th point in group
py16	long	y (FAP units) of 16th point in group

Example

A, I3, 0, 5, 5, 10, 10, . . . , 80, 3

NA File

The GenData program creates an NAFILE.DAT file, commonly referred to as the NA file, in which it stores section and variable field information. The GenPrint program uses this file, along with the POLFILE.DAT file, which is also produced by the GenData program to print the forms.

If the data is incomplete and GenData cannot complete the form, it creates a manual batch file. The GenWIP program then creates separate DAT and POL files for each incomplete transaction. These files provide the entry system with the information it needs to open the form so a data entry operator can add the missing data. This is a semicolon-delimited text file. You can see examples of this file in the sample resources.

File Record Overview

Record	Description
NA	\NA= ,,,,,, \ Image Header Record
B	B; ; ; ; ; \ Barcode Record
D	D; ; ; ; ; ; ; ; ; ; ; ; ; ; ; \ Begin Dynamic Chart Record
DA	DA; ; ; ; ; ; ; ; ; ; ; ; ; ; ; \ Dynamic Series Label Record
DB	DB; ; ; ; ; ; ; ; ; ; ; ; ; ; ; \ Dynamic Chart Custom Data Point Label Record
DC	DC; ; ; ; ; ; ; ; ; ; ; ; ; ; ; \ Dynamic Chart Area Record
DD	DD; ; ; \ Dynamic Chart Series Data Record
DE	DE; ; ; ; ; ; ; ; ; ; ; ; ; ; ; \ Dynamic Chart Scale-Axis Record
DK	DK; ; ; \ Dynamic Chart Link Record
DL	DL; ; ; ; ; ; ; ; ; ; ; ; ; ; ; \ Dynamic Chart Legend Record
DN	DN; ; ; \ Dynamic Chart Title Record
DP	DP; ; ; ; ; ; ; ; ; ; ; ; ; ; ; \ Dynamic Chart Point-Axis Record
DS	DS; ; ; ; ; ; ; ; ; ; ; ; ; ; ; \ Dynamic Chart Series Record
DT	DT; ; ; ; ; ; ; ; ; ; ; ; ; ; ; \ Dynamic Chart Title Record
DX	DX; ; ; ; ; ; ; ; ; ; ; ; ; ; ; \ Dynamic Chart X-Axis Record
DY	DY; ; ; ; ; ; ; ; ; ; ; ; ; ; ; \ Dynamic Chart Y-Axis Record
EM	EM; \ End Multi-line Field Structure
ENDDOCSET	\ENDDOCSET \ Form set Trailer Record
ENDFAP	\ENDFAP \ End in-line FAP file records
ENDFORM	\ENDFORM \ Form Trailer Record
F	F; ; ; ; ; \ Field Data Record
FAP	\FAP \ Begin in-line FAP file records
G	G; ; ; ; ; ; ; ; ; ; ; \ Dynamic Graphic/Logo Record
L	L; ; ; ; ; \ Old Multi-Line Field Line Attribute Record. NO LONGER USED!
M	M; ; ; ; ; ; ; ; ; ; ; \ Multi-line Field Structure
N	N; ; ; ; ; ; ; ; ; ; ; \ Note Record
O	O; ; ; ; ; ; \ Multi-Line Format Record
OX	OX; ; ; ; ; \ Multi-line Border or Shade Record
P	P; ; ; ; ; \ Multi-line Field Paragraph Format Record
P3	P3; ; ; ; ; \ Text Area Format Record P3
PBG	PB;G; ; ; ; ; \ Text Area Format Record G
PBG1	PB;G1; ; ; ; ; \ Text Area Format Record G1
PBI	PB;I; ; ; ; ; \ Text Area Format Record I
PBI1	PB;I1; ; ; ; ; \ Text Area Format Record I1
PBT	PB;T; ; ; ; ; \ Text Area Format Record T
PBT1	PB;T1; ; ; ; ; \ Text Area Format Record T1
PE	PE; ; ; ; ; \ Multi-line Field Paragraph Format Record
PT	PT; ; ; ; ; \ ... Multi-line Field Paragraph Tab Stop Record
PX	PX; ; ; ; ; \ Multi-line Field Paragraph Border or Shade Record
T	T; ; ; ; ; \ Dynamic (and Multi-Line Field) Text Data Record
X	X; ; ; ; ; ; ; ; ; ; ; \ ... Dynamic Line\Box Record

[Z](#) **Z** ;;;;;;;;;;\ *Signature Record*
[Z1](#) **Z1**;;;\ *Signature Document Metadata Record*
[Z2](#) **Z2**;;;\ *Signature Metadata Record*

Record Format Reference

NA

`\NA=,,,,,,,,\` *Image Header Record*

Syntax

`\NA=img,pol_ln,duplex,paper,tray,x,y,opt,fd,cp,v,r,gid,ed,et\` EOR

Parameter Description

Token	"\NA" header record.
name	Image name (external name, without extension)
pol_Ln	Print options (in any order) LN=POL line index (1-based) LN=1 First form line in POL file
duplex	Duplex settings: DUP=ON DUP=LB Long binding DUP=SB Short binding DUP=OFF
paper	Paper size: SIZE=x where x will be one of the following for full size documents. L (letter), G (legal), J (executive), I (A4), or a numeric value that cross-refernces to the paper size table. For custom sized images, legacy versions will show the letter C. Newer environments will show the actual size in FAP units, height by width. For
tray	Paper tray selection: TRAY=U upper (or usual) tray TRAY=L lower tray
x	Base X-coordinate X=0
y	Base Y-coordinate Y=0
parts	Parts (obsolete) PA=1
opt	Image options. Image options are represented as letter codes. Secondary option values are represented as a number following a pound # sign.
fd	Send-to copy (obsolete) FD
cp	Copy group CG=B1 Select Bin 1
v	Version number V=1
r	Revision number R=0
g	GUID (Global Unique I.D.) G=abcd1234ef098765abcdef0123456789
d	Effective date D=20001128
t	Effective time T=(hex time)

Example

`\NA=DECPAGE, LN=1, DUP=OFF, SIZE=L, TRAY=U, X=0, Y=0, OPT=, FD=, CP=, V=, R=, G=, D=, T=`

B

B;;;;;;;;;\ Barcode Record

Syntax

Bfname;x;y;fid;fmt;scl;rot;opt;rfu\data EOR

Parameter	Description
Token	"B" Barcode record
fname	field name
x	baseline left x-coordinate
y	baseline bottom y-coordinate
fid	font id
fmt	format
scl	scale factor
rot	rotation
opt	options
rfu	reserved "\" end of record header
data	data

D

D;;;;;;;;;;;;;\ Begin *Dynamic Chart* Record

Syntax

D cname;type;left;top;right;bottom;br;bg;bb;bo;btype;dlen;slen;bthick;
bpat;fill;fr;fg;fb;fo;fpat;legend;depth;x_angle;y_angle;z_angle\EOR

Parameter	Description
Token	"D" Chart record
cname	chart name
type	chart type
left	left x-coordinate of graphic area
top	top y-coordinate of graphic area
right	right x-coordinate of graphic area
bottom	bottom y-coordinate of graphic area
br	red color index for boundary
bg	green color index for boundary
bb	blue color index for boundary
bo	color option for boundary
btype	boundary type
dlen	boundary dash length
slen	boundary space length
bthick	boundary thickness
bpat	boundary pattern
fill	filling graphic area?
fr	red color index for filling
fg	green color index for filling
fb	blue color index for filling
fo	color option for filling
fpat	filling pattern
legend	show legend?
depth	depth for 3D chart
x	3D viewing angle along x axis
y	3D viewing angle along y axis
z	3D viewing angle along z axis
rfu	reserved "\" end of record header

DA

DA;;;;;;;;;;;;;\ Dynamic *Series Label* Record

Syntax

```
DA sname; l_left;l_top;l_right;l_bottom;l_br;l_bg;l_bb;l_bo;  
l_btype;l_dlen;l_slen;l_bthick;l_bpat;l_fill;l_fr;l_fg;l_fb;l_fo;  
l_fpat;l_type; lr;lg;lb;lo;l_font;l_orient;l_effect;d_opt;\EOR
```

Parameter	Description
Token	"DA" Chart Series Label record
sname	name of the series (a character string)
left	left x-coordinate of label
top	top y-coordinate of label
right	right x-coordinate of label
bottom	bottom y-coordinate of label
br	red color index for label boundary
bg	green color index for label boundary
bb	blue color index for label boundary
bo	color option for label boundary
btype	label boundary type
dlen	label boundary dash length
slen	label boundary space length
bthick	label boundary thickness
bpat	label boundary pattern
fill	filling label area?
fr	red color index for filling label
fg	green color index for filling label
fb	blue color index for filling label
fo	color option for filling label
fpat	filling pattern label
type	type of label
lr	red color index for label
lg	green color index for label
lb	blue color index for label
lo	color option for label
l_font	font id for label
l_orient	orientation for label
l_effect	effects for label
d_opts	data options
rfu	reserved "\" end of record header

DB

DB;;;;;;;;;;;;;\ Dynamic *Chart Custom Data Point Label* Record

Syntax

```
DB left;top:right;bottom;r;g;b;o;font;orient;effect;\data EOR
```

Parameter	Description
Token	"DB" Chart Data Point Label record
left	left x-coordinate of custom data point label
top	top y-coordinate of custom data point label
right	right x-coordinate of custom data point label
bottom	bottom y-coordinate of custom data point label
r	red color index for custom data point label

g	green color index for custom data point label
b	blue color index for custom data point label
o	color option for custom data point label
font	font id
orient	orientation
effect	effects
rfu	reserved "\" end of record header

DC

DC;;;;;;;;;;;;;\ Dynamic *Chart Area* Record

Syntax

DC left;top:right;bottom;br;bg;bb;bo;btype;dlength;slength;bthick;bpat;
fill;fr;fg;fb;fo;fpat;\EOR

Parameter	Description
Token	"DC" Chart Area record
left	left x-coordinate of chart area
top	top y-coordinate of chart area
right	right x-coordinate of chart area
bottom	bottom y-coordinate of chart area
br	red color index for boundary
bg	green color index for boundary
bb	blue color index for boundary
bo	color option for boundary
btype	boundary type
dlen	boundary dash length
slen	boundary space length
bthick	boundary thickness
bpat	boundary pattern
fill	filling chart area?
fr	red color index for filling
fg	green color index for filling
fb	blue color index for filling
fo	color option for filling
fpat	filling pattern
rfu	reserved "\" end of record header

DD

DD;;\ Dynamic *Chart Series Data* Record

Syntax

DD sname;fname;\data EOR

Parameter	Description
Token	"DD" Chart Series Data record
sname	name of the series (a character string)
fname	name of a field
rfu	reserved "\" end of record header
data	series data (a numerical value)

DE

DE;;;;;;;;;;;;;\ Dynamic *Chart Scale-Axis* Record

Syntax

```
DE max:min:munit:tunit;r:g;b;o:type:dlen:slen:thick:pat:tick:minor;  
dtext;left;top:right;bottom;dr;dg;db;do;d_font;d_orient;d_effect;\EOR
```

Parameter	Description
Token	"DE" Chart Scale Axis record
max	maximum value of the x axis
min	minimum value of the x axis
munit	unit per minor axis
tunit	unit per tick
r	red color index for x axis
g	green color index for x axis
b	blue color index for x axis
o	color option for x axis
type	axis line type
dlen	axis dash length
slen	axis space length
thick	axis thickness
pat	axis pattern
tick	show tick?
minor	show minor axes?
dtext	show data text?
left	left x-coordinate of data text
top	top y-coordinate of data text
right	right x-coordinate of data text
bottom	bottom y-coordinate of data text
dr	red color index for data text
dg	green color index for data text
db	blue color index for data text
dto	color option for data text
font	font id for data text
orient	orientation for data text
effect	effects for data text
rfu	reserved "\" end of record header

DK

DK;;\ Dynamic *Chart Link* Record

Syntax

```
DK rfu;\cname EOR
```

Parameter	Description
Token	"DK" Chart Link record
rfu	reserved "\" end of record header
cname	name of chart to link with

DL

DL;;;;;;;;;;;;;;\ Dynamic *Chart Legend* Record

Syntax

```
DL left;top:right;bottom;br;bg;bb;bo;btype:dlen:slen;bthick;bpat;  
fill;fr;fg;fb;fo;fpatt;\EOR
```

Parameter	Description
-----------	-------------

Token	"DL" Chart Legend record
left	left x-coordinate of chart legend
top	top y-coordinate of chart legend
right	right x-coordinate of chart legend
bottom	bottom y-coordinate of chart legend
br	red color index for boundary
bg	green color index for boundary
bb	blue color index for boundary
bo	color option for boundary
btype	boundary type
dlen	boundary dash length
slen	boundary space length
bthick	boundary thickness
bpat	boundary pattern
fill	filling chart legend?
fr	red color index for filling
fg	green color index for filling
fb	blue color index for filling
fo	color option for filling
fpat	filling pattern
rfu	reserved "\" end of record header

DN

DN;;\ *Dynamic Chart Title* Record

Syntax

DN, sname\ EOR

Parameter	Description
Token	"DN" Chart Title record
sname	name of the series (a character string)
rfu	reserved "\" end of record header

DP

DP;;;;;;;;;;;;;;\ *Dynamic Chart Point-Axis* Record

Syntax

DP max:min:munit:tunit;r:g;b;o:type;dlen:slen;thick;pat;tick;minor;
dtext;left;top;right;bottom;dr;dg;db;do;d_font;d_orient;d_effect;\EOR

Parameter	Description
Token	"DP" Chart Point Axis record
max	maximum value of the y axis
min	minimum value of the y axis
munit	unit per minor axis
tunit	unit per tick
r	red color index for y axis
g	green color index for y axis
b	blue color index for y axis
o	color option for y axis
type	axis line type
dlen	axis dash length
slen	axis space length
thick	axis thickness

pat	axis pattern
tick	show tick?
minor	show minor axes?
dtext	show data text?
left	left x-coordinate of data text
top	top y-coordinate of data text
right	right x-coordinate of data text
bottom	bottom y-coordinate of data text
dr	red color index for data text
dg	green color index for data text
db	blue color index for data text
dto	color option for data text
font	font id for data text
orient	orientation for data text
effect	effects for data text
rfu	reserved "\\" end of record header

DS

DS;;;;;;;;;;;;;;\ *Dynamic Chart Series* Record

Syntax

DS sname;nr;ng;nb;no;n_font;n_orient;n_effect;
 br;bg;bb;bo;btype;dlen;slen;bthick;bpat;
 fill;fr;fg;fb;fo;fpat;marker;msize;exp;fname;\EOR
 (Followed by a DA and a group of DD's)

Parameter	Description
Token	"DS" Chart Series record
sname	name of the series (a character string)
nr	red color index for series name
ng	green color index series name
nb	blue color index for series name
no	color option for series name
n	font id for series name
n	orientation for series name
n	effects for series name
br	red color index for boundary
bg	green color index for boundary
bb	blue color index for boundary
bo	color option for boundary
btype	boundary type
dlen	boundary dash length
slen	boundary space length
bthick	boundary thickness
bpat	boundary pattern
fill	filling this series?
fr	red color index for filling
fg	green color index for filling
fb	blue color index for filling
fo	color option for filling
fpat	filling pattern
marker	marker type
msize	marker size
exp	explode %
fname	field name

rfu reserved "\" end of record header

DT

DT;;;;;;;;;;;;;\ Dynamic *Chart Title* Record

Syntax

DT left;top;right;bottom;r;g;b;o;font;orient;effect;\data EOR

Parameter	Description
Token	"DT" Chart Title record
left	left x-coordinate of title
top	top y-coordinate of title
right	right x-coordinate of title
bottom	bottom y-coordinate of title
r	red color index for title
g	green color index for title
b	blue color index for title
o	color option for title
font	font id
orient	orientation
effect	effects
rfu	reserved "\" end of record header
data	title character data

DX

DX;;;;;;;;;;;;;\ Dynamic *Chart X-Axis* Record

Syntax

DX max;min;munit;tunit;r;g;b;o;type;dlen;slen;thick;pat;tick;minor;
dtext;left;top;right;bottom;dr;dg;db;do;d_font;d_orient;d_effect;\EOR
(followed by DT)

Parameter	Description
Token	"DX" Chart X-Axis Data record
max	maximum value of the x axis
min	minimum value of the x axis
munit	unit per minor axis
tunit	unit per tick
r	red color index for x axis
g	green color index for x axis
b	blue color index for x axis
o	color option for x axis
type	axis line type
dlen	axis dash length
slen	axis space length
thick	axis thickness
pat	axis pattern
tick	show tick?
minor	show minor axes?
dtext	show data text?
left	left x-coordinate of data text
top	top y-coordinate of data text
right	right x-coordinate of data text
bottom	bottom y-coordinate of data text

dr	red color index for data text
dg	green color index for data text
db	blue color index for data text
dto	color option for data text
font	font id for data text
orient	orientation for data text
effect	effects for data text
rfu	reserved "\ " end of record header

Notes

This record is no longer used. The scale and point axis records are now used.

DY

DY ::::::::::::::::::::\ Dynamic Chart Y-Axis Record

Syntax

DY max;min;munit;tunit;r;g;b;o;type;dlen;slen;thick;pat;tick;minor;
dtext;left;top;right;bottom;dr;dg;db;do;d_font;d_orient;d_effect;\EOR
(followed by DT)

Parameter	Description
Token	"DY" Chart Y-Axis Data record
max	maximum value of the y axis
min	minimum value of the y axis
munit	unit per minor axis
tunit	unit per tick
r	red color index for y axis
g	green color index for y axis
b	blue color index for y axis
o	color option for y axis
type	axis line type
dlen	axis dash length
slen	axis space length
thick	axis thickness
pat	axis pattern
tick	show tick?
minor	show minor axes?
dtext	show data text?
left	left x-coordinate of data text
top	top y-coordinate of data text
right	right x-coordinate of data text
bottom	bottom y-coordinate of data text
dr	red color index for data text
dg	green color index for data text
db	blue color index for data text
dto	color option for data text
font	font id for data text
orient	orientation for data text
effect	effects for data text
rfu	reserved "\ " end of record header

Notes

This record is no longer used. The scale and point axis records are now used.

EM

EM;\ End *Multi-line Field* Structure

Syntax

```
EM;rfu\EOR
```

Parameter	Description
Token	"EM" End Multi-line Field record
rfu	reserved "\" end of record header

ENDDOCSET

\ENDDOCSET\ *Form set Trailer* Record

Syntax

```
\ENDDOCSET\ info EOR  
\ENDDOCSET\ = record type
```

Parameter	Description
Token	"\ENDDOCSET" record. Denotes end of a form set.
info	Application dependant information describing the form set such as: "==> 2196564" denotes a policy number.

ENDFAP

\ENDFAP\ End *in-line FAP file* records

Syntax

```
\ENDFAP\ EOR  
\ENDFAP\ = record type
```

Parameter	Description
Token	"\ENDFAP\" record. Denotes end of an in-line FAP file.

ENDFORM

\ENDFORM\ *Form Trailer* Record

Syntax

```
\ENDFORM\ EOR
```

Parameter	Description
Token	"\ENDFORM" record. Denotes end of a form, page, or related set of images (segments.)

F

F;;;;;\ *Field Data* Record

Syntax

```
Ffname;x;y;fid;opt;msg;rfu\data EOR
```

Parameter	Description
Token	"F" field data record
fname	field name
x	baseline left x-coordinate absolute relative to (0,0)
y	baseline bottom y-coordinate absolute relative to (0,0)
fid	font-id

	option flag(s):
	E = Error
	M = Manual entry
	P = Protected
	G = Global Scope - to the entire form set
opt	F = Global Scope - to the form
	H = Hidden field (A.K.A. Dummy field, or no-display, no-print)
	N = Nonprintable field (display-only, but no print)
	C = Send-copy-to field (receives current recipient name at print time)
	9 = Rotated 90 degrees
	8 = Rotated 180 degrees
	7 = Rotated 270 degrees
msg	information/message
rfu	reserved "\" end of record header
data	field character data

Notes

Some of these options require the FAP field attributes to be available at runtime, since the DDT file does not include the necessary information. The "CheckImageLoaded" rule can be used to ensure this. At this time, this is the best-known way to get this information.

FAP

`\FAP\` Begin *in-line FAP file* records

Syntax

```
\FAP\  EOR
\FAP\  = record type
```

Parameter	Description
Token	"\FAP\" record. Denotes begin of an in-line FAP file.

G

`G;;;;;;;;;;\` *Dynamic Graphic/Logo* Record

Syntax

```
Glft;top;rgt;bot;typ;res;r;g;b;o;sty,inl,rfu\bmn EOR
```

Parameter	Description
Token	"F" field data record
lft	left x-coordinate of rectangle area
top	top y-coordinate of rectangle area
rgt	right x-coordinate of rectangle area
bot	bottom y-coordinate of rectangle area
typ	type of graphic/logo 1 = FormMaker Logo (if omitted, default = 1)
res	resolution of bitmap in dpi (if omitted, default = 300)
r	color index for red (optional)
g	color index for green (optional)
b	color index for blue (optional)
o	color options (optional)
sty	style
inl	In-line bitmap
rfu	reserved "\" end of record header

L

L;;;;;;;;\ Old *Multi-Line Field Line Attribute* Record. NO LONGER USED!

Syntax

Llid;pid;nchr;nfnt;eop;ht;fid;rfu\EOR

Parameter	Description
Token	"L" Multi-line Field Line Attribute record
lid	line id (1-based integer)
pid	paragraph id (1-based integer)
nchr	number of characters defined for this line
nfnt	number of font cross reference entries required for this line
eop	end of paragraph flag 0 = Soft return - not end of paragraph 1 = Hard return - end of paragraph
ht	height of line
fid	default font ID
rfu	reserved "\" end of record header

Remarks

Can be found in versions prior to 8.0.

M

M;;;;;;;;;;\ *Multi-line Field Structure*

Syntax

Mfname;lft;top;rgt;bot;fid;maxl;spc;ver;tab;fmt;spt;rfu\EOR

Parameter	Description
Token	"M" Multi-line Field record
fname	Multi-line field name
lft	left x-coordinate of rectangle
top	top y-coordinate of rectangle
rgt	right x-coordinate of rectangle
bot	bottom y-coordinate of rectangle
fid	default font ID
maxl	maximum lines allowed (prior to version 8.0) (0 = use internal default, 255)
spc	line spacing
ver	version (8)
tab	tab stop
fmt	format type (fixed, flow, ...)
spt	spacing type
rfu	reserved "\" end of record header

N

N;;;;;;;;;\ *Note* Record

Syntax

Nname;date;rec;send;sub;lft;top;rgt;bot;r;g;b;o;opt;ty;sty;rfu\data EOR

Parameter	Description
Token	"N" note record
name	Note name
date	date
rec	receiver

send	sender
sub	subject
lft	left x-coordinate of baseline rectangle
top	top y-coordinate of baseline rectangle
rgt	right x-coordinate of baseline rectangle
bot	bottom y-coordinate of baseline rectangle
r	color index for red (optional)
g	color index for green (optional)
b	color index for blue (optional)
o	color options (optional)
opt	options
ty	type
sty	style
rfu	reserved "\" end of record header
data	data text of note

O

O;;;;;\ *Multi-Line Format Record*

Syntax

O;lft;top;rgt;bot;fid;typ;lead;brd;shd;rfu\EOR

Parameter	Description
Token	"O" Multi-Line Format record
lft	left x-coordinate of baseline rectangle
top	top y-coordinate of baseline rectangle
rgt	right x-coordinate of baseline rectangle
bot	bottom y-coordinate of baseline rectangle
fid	font id
typ	format type (end of para, tab character)
lead	leader character (ASCII value)
brd	border
shd	shade
rfu	reserved "\" end of record header

OX

OX;;;;;\ *Multi-line Border or Shade Record*

Syntax

OX:.....
See Record type X for syntax of remaining record

Parameter	Description
Token	"OX" Multi-line Field Border or Shade record

P

P;;;;;\ *Multi-line Field Paragraph Format Record*

Syntax

Ppid;lin;rin;flags;spc;hin;tm;bm;spt;rfu\EOR

Parameter	Description
Token	"P" Multi-line Field Paragraph Format record
pid	paragraph id (1-based integer). No longer used with version 8.0 on it is set to 0.

lin	left indent (margin)
rin	right indent (margin)
flags	option flags (additive)
	0 = Left justify (normal)
	1 = Center
	2 = Right justify
spc	4 = Double space
	8 = Justify (left/right)
	line spacing amount
hin	hanging indent
tm	top margin
bm	bottom margin
spt	line spacing type
rfu	reserved "\" end of record header

P3

P3;;;;\ *Text Area Format* Record P3

Syntax

```
P3;type;name;codePoint;preTab_tabStop;preTab_tabType;preTab_leadChar;
postTab_tabStop;postTab_tabType;postTab_leadChar;numType;prefix_1;
prefix_2;prefix_3;postfix_1;postfix_2;postfix_3;level;startPoint;
font_id;font_height;font_width;font_baseline;rgbRed;rgbGreen;rgbBlue;
rgbOptions;effects;rfu\EOR
```

Parameter	Description
Token	"P3" Text Area Format Record
type	bullet type
name	logo name
codePoint	code point or id of bullet
preTab_tabStop	position for bullet
preTab_tabType	tab type (left, right, center,...)
postTab_tabStop	position for text
postTab_tabType	tab type (left, right, center,...)
numType	number type
prefix_1	first char code point of prefix
prefix_2	second char code point of prefix
prefix_3	third char code point of prefix
postfix_1	first char code point of postfix
postfix_2	second char code point of postfix
postfix_3	third char code point of postfix
rfu	reserved "\" end of record header

PBG

PB;G;;;;\ *Text Area Format* Record G

Syntax

```
PB;G;top;left;bottom;right;rfu\EOR
```

Parameter	Description
Token	"G" Text Area Format Record
top	rect top coordinate
left	rect left coordinate
bottom	rect bottom coordinate
right	rect right coordinate

PBG1

PB;G1;;;;\ *Text Area Format* Record G1

Syntax

```
PB;G1;type;resolut;redcolr;grncolr;blucolr;optcolr;orient;style;
name;inlineBM;options;rfu\EOR
```

Parameter	Description
Token	"G1" Text Area Format Record
rfu	reserved "\" end of record header

PBI

PB;I;;;;\ *Text Area Format* Record I

Syntax

```
PB;I;type;cord_top;cord_left;cord_bottom;cord_right;cord_type;
pointCount;rfu\EOR
```

Parameter	Description
Token	"I" Text Area Format Record
cord_top	rect top coordinate
cord_left	rect left coordinate
cord_bottom	rect bottom coordinate
cord_right	rect right coordinate
type	vector type
pointCount	number of poly points
rfu	reserved "\" end of record header

PBI 1

PB;I1;;;;\ *Text Area Format* Record I1

Syntax

```
PB;I1;name;pen_color_rgbRed;pen_color_rgbGreen;pen_color_rgbBlue;
pen_color_rgbOptions;pen_style;pen_width;brush_fgColor_rgbRed;
brush_fgColor_rgbGreen;brush_fgColor_rgbBlue;
brush_fgColor_rgbOptions;brush_bgColor_rgbRed;brush_bgColor_rgbGreen;
brush_bgColor_rgbBlue;brush_bgColor_rgbOptions;brush_style;
PatternName;rfu\EOR
```

Parameter	Description
Token	"I1" Text Area Format Record
name	name of the object
pen_color_rgbRed	pen color
pen_style	pen style
pen_width	pen width
brush_fgColor_rgbRed	brush foreground color
brush_bgColor_rgbRed	brush background color
brush_style	brush style
PatternName	customized name
rfu	reserved "\" end of record header

PBT

PB;T;;;;\ *Text Area Format* Record T

Syntax

```
PB;T;top;left;bottom;right;fontid;fonthi;fontwi;fontba;len;
```

pointCount;rfu\EOR

Parameter	Description
Token	"T" Text Area Format Record
top	rect top coordinate
left	rect left coordinate
bottom	rect bottom coordinate
right	rect right coordinate
fontid	font id
fonthi	font height
fontwi	font width
fontba	font baseline
len	text length

PBT1

**PB;T1; ; ; ; ; ** *Text Area Format Record T1*

Syntax

PB;T1;name;orientation;rgbRed;rgbGreen;rgbBlue;rgbOpts;effects;options;locale;rfu\EOR

Parameter	Description
Token	"T1" Text Area Format Record
name	name of the object
orient	orientation
rgbRed	color
effects	effects
options	options
rfu	reserved "\" end of record header

PE

**PE; ; ; ; ; ** *Multi-line Field Paragraph Format Record*

Syntax

PE,type,rfu\EOR

Parameter	Description
Token	"PE" Multi-line Field Paragraph Format record
type	Box type.
rfu	reserved "\" end of record header

PT

PT; ; ; ; ; \ ... *Multi-line Field Paragraph Tab Stop Record*

Syntax

PT;tab;tabtyp;lead;rfu\EOR

Parameter	Description
Token	"PT" Multi-line Field Paragraph Format Tab Stop record
tab	tab stop
tabtyp	tab type (left, right, center)
lead	leader character (ASCII value)
rfu	reserved "\" end of record header

PX

PX;;;;;\ Multi-line Field Paragraph Border or Shade Record

Syntax

PX:

Parameter	Description
Token	"PX" Multi-line Field Paragraph Border or Shade record

Notes

See Record type X for syntax of remaining record

T

T;;;;;;\ Dynamic (and Multi-Line Field) Text Data Record

Syntax

Tfname:lft;top;rgt;bot;fid;lid;lp;rfu\data EOR

Parameter	Description
Token	"T" Multi-line Field Text record
fname	template field source name (optional) (blank if flowed from canned text)
lft	left x-coordinate of baseline rectangle
top	top y-coordinate of baseline rectangle
rgt	right x-coordinate of baseline rectangle
bot	bottom y-coordinate of baseline rectangle
fid	font id
lid	line id (line to which it belongs) (1-based integer) No longer used from version 8.0 on.
lp	line position (1-based integer) No longer used from version 8.0 on.
r	color index for red (optional)
g	color index for green (optional)
b	color index for blue (optional)
o	color options (optional)
rfu	reserved "\" end of record header
data	character text data

Notes

This record may occur outside of a multi-line merged text structure, in which case it is dynamically loaded text, similar to dynamic boxes and logos.

X

X;;;;;;\ ... Dynamic Line\Box Record

Syntax

Xlft;top;rgt;bot;hth;vth;typ;pat;gap;ef;r;g;b;o\ EOR

Parameter	Description
Token	"N" Dynamic Line\Box record
left	left x-coordinate of rectangle
top	top y-coordinate of rectangle
right	right x-coordinate of rectangle
bot	bottom y-coordinate of rectangle
hth	horizontal thickness
vth	vertical thickness
typ	type of object

pat	type of pattern
gap	gap for border
effects	effects (additive): 0 = all sides of box 1 = top 2 = bottom 4 = left 8 = right
r	color index for red (optional)
g	color index for green (optional)
b	color index for blue (optional)
o	color options (optional)
rfu	reserved "\" end of record header

Z

Z ;;;;;;;;;;; *Signature Record*

Syntax

Z name;typ;top;left;bot;rgt;fid;red;grn;blu;opt;eff;\

Parameter	Description
Token	"Z " Signature record
name	Signature name
type	0 = PDF placeholder, 1 = PDF digital signature 2 = internal Skywire signature
left	left x-coordinate of rectangle
top	top y-coordinate of rectangle
right	right x-coordinate of rectangle
bot	bottom y-coordinate of rectangle
fid	font-id
r	color index for red
g	color index for green
b	color index for blue
o	color options
eff	effects

Z1

Z1;; *Signature Document Metadata Record*

Syntax

Z1;flag;len;\data

Parameter	Description
Token	"Z1" Document Metadata
flag	flag
len	len
data	Document Metadata

Z2

Z2;; *Signature Metadata Record*

Syntax

Z2;flag;len;\data

Parameter	Description
-----------	-------------

Token	"Z2" Signature Metadata
flag	flag
len	len
data	Signature Metadata

CF_REC

```
typedef struct CF\_REC
char RecordType[ ( 4 ) ]
```

Record type token.

CF_START

```
typedef struct CF\_START
char RecordType[ ( 4 ) ]
long LibraryVersion
```

Record type token.
Library version number.

CF_STR

```
typedef struct CF\_STR
size_t StringLen
char* StringValue
```

Length of string including NULL.
String value.