

DALIM PAGE PAGE LAYOUT FILE FORMAT DESCRIPTION

The Dalim Page Layout file format is an ASCII language that describes page elements and their positions in a page. The page elements can be of several different types like dct, dlw, Dalim page, string, box

The page elements are placed in the page using an attachment concept :
Each element in the page is attached to an other one, and the last element of the attachment chain is attached in the page.
The Dalim Page Layout file format is directly convertible into a Dalim Page (.pgs).

GENERAL DESCRIPTION

- Sizes and distances are given in millimeters.
- Angles are given in degrees in trigonometric direction.
- Strings starts with: " and end with: "
- Character # or // for comments
- Scaling factors in percentage (*2 = 200%)
- All CT, LW, Pages files must be in the job organisation
- Job names can be given with or without `"/symlinks/io/jobs"`
- Translation positive direction is from bottom left to top right
- Colors can be given as gray value with one integer value or as `"cmyk"` values with four integer values or with the color name of a Pantone color defined in the Pantone color table.

Attachment points:

```
0---1---2
| | |
3---4---5
| | |
6---7---8
```

Color definition:

A DPL color is defined with a name and a color type.
Color names are defined in the `".TXT"` db files (`"/symlinks/colors/pantone"`)
It is possible to define DPL specific colors in the file:
`"/symlinks/colors/pantone/DPL.TXT."`
It is also possible to give a color with its cmyk values by giving a name which starts with '#' and the exadecimal cmyk values (ex: `"#a53c6605"`)
The color name `"ALL"` define a color that will be printed in evry output page channels.
Color types are defined as follows:

- 0 = Add a color with the cmyk values of the color definition
- 1 (default) = Add a new channel if needed without transparencies
- 2 = Add a new channel if needed with transparencies

THE GENERAL FORM OF A DPL FILE IS DEFINED AS FOLLOWS:

- Begin tag
- Header
- Element enumeration
- End tag

Begin tag:

The begin tag is defined as: `dpl1.0begin`

Header:

The header is a general description of the page. It includes the following tags:

- PAGENAME < name of the page >
- TARGETJOB < job name of the page to be generated >
- PAGESIZE < width > < height > (optional)
- SIZEMODE < page size mode > [offset] (optional)
- FINALWIDTH < width > (optional)
- FINALHEIGHT < height > (optional)
- PAGEORIENT < page orientation mode > (optional)

PAGESCALE < scale factor >

Page size modes:

- 0 = SIZE_FIXED : uses the PAGESIZE values
- 1 = SIZE_AUTO : All elements inside the page
- 2 = SIZE_FIRST_ELEMENT : first elt gives the size
- 3 = SIZE_FIRST_LW : first lw gives the size
- 4 = SIZE_FIRST_CT : first ct gives the size
- 5 = SIZE_LAST_LW : last lw gives the size
- 6 = SIZE_LAST_CT : last ct gives the size
- 7 = SIZE_LAST_ELEMENT : last element gives the size
- 8 = SIZE_ELEMENT_ID : The following element id gives the size
- 9 = SIZE_AUTO_SCALE : Used with FINALWIDTH, FINALHEIGHT, PAGEORIENT.
Same as SIZE_AUTO mode but the final size is given with FINALWIDTH and FINALHEIGHT.
The page orientation can also be modified with PAGEORIENT as follows:

Orientation modes:

- 0 = ORIENT_FIXED
- 1 = ORIENT_PORTRAIT
- 2 = ORIENT_LANDSCAPE
- 3 = ORIENT_AUTO

offset: Optional parameter used to jump the elements inside the list.
This parameter is only available for size modes:
SIZE_FIRST_ELEMENT, SIZE_FIRST_LW, SIZE_FIRST_CT.

ex: With the following SIZEMODE the third element of the
elements list is used to define the page size.

SIZEMODE 2 3

ELEMENT ENUMERATION:

An element is composed of a declaration and an attributes list:

Declaration types:

STRING <string>	: For string elements
DCT <job name> <name>	: For Dalim CT elements
DLW <job name> <name>	: For Dalim LW elements
PGS <job name> <name>	: For Dalim pgs elements
BOX [width] [height]	: For boxes
SEGMENT [length]	: For attached line segment
SEGMENT <x0> <y0> <x1> <y1> [ref]	: For positionned line segment
CIRCLE [width] [height]	: For circle & ellipse
ELEMENT <jobName> <name> <type>	: For DCT, DLW and PGS elements

Types: 2 = DCT, 3 = DLW, 5 = PGS

Attribute list:

The attributes list begins with "{" and ends with: "}"

ATTACHMENT <attached_elt> <attachment_ref> <elt_ref>
REFERENCE <attachment_ref> <elt_ref>
SIZE < width > < height >
SIZE_LINK <elt_ref> <mode>
SHAPE <shape>
WINDOW < x > < y > < width > < height > [elt_ref]
WBLEED < left > < top > < right > < bottom >
SCALE < scale x > < scale y > [elt_ref]
ELT_SCALE < scale x > < scale y > [elt_ref]
TRANSLATION < x > < y >
ROTATION < val > [elt_ref]

ELT_ROTATION < val > [elt ref]
MIRROR < yesno > < yesno >
SHEARING < val > [elt ref]
STROKE < width > < dash > < dash width > < join > < cap >
STROKE_COLOR < color definition >
FONT < font name >
STRING_SIZE < size >
STRING_COLOR < color definition >
FILL_COLOR < color definition >
TILE < nbCol > < nbRow > < idCol > < idRow > < clipping >
LAYER < layer name >
PDFLAYER < layer name > < visibility on/off >
COORD_MODE < mode >
CHANNEL_MASK < channel name > < blending mode > [< not found blending mode >]
CHANNEL_MIXER < cyan assign > < magenta assign > < yellow assign > < black assign >
EMBED < boolean >
MASTER < boolean >

ATTACHMENT < attached elt > < attachment ref > < elt ref >:

Set the attachment for the current element:

Two reference points are necessary to place an element, the first one defines the reference point of the attached element (attachment ref), the second one defines the reference point of the element itself (elt ref).

attached_elt: The id of an already defined element that the element will be attached to.
The first declared element takes the id 1.
The page takes the id 0.
A negative value is interpreted as an attachment to a previous element (-1 for the previous element)

attachment_ref: The attachment point of the attached element.

elt_ref: The attachment point of the current element.

By default an element takes the attachment "0 4 4" which means that the element will be placed in the center of the page.

REFERENCE < attached_elt > < elt_ref >

Same as ATTACHMENT but the attached element is the page
(attached_elt = 0)

SIZE < width > < height >

Set the size of the current element

SIZE_LINK < elt_ref > < size_link_mode >

Set the size of the current element with the size of the previously defined element < elt_ref >

Size link modes:

0 = PAGE_SIZE : Fit the element's size on the element < elt_ref >
1 = PAGE_HEIGHT : Fit only on Y axis
2 = PAGE_WIDTH : Fit only on X axis
3 = RATIO_WIDTH : Fit on X axis, and keep ratio
4 = RATIO_HEIGHT : Fit on Y axis, and keep ratio
5 = FIT_MIN : Use the best fit to keep all inside, keep ratio
6 = FIT_MAX : Use the best fit to maximum fill, keep ratio
7 = FIT_IF_BIGGER: If bigger, reduce like FIT_MIN to keep all inside

SHAPE <shape>

Defines the shape of the element.

NRECTANGLE = 0 (default value)
CIRCLE = 3
ELLIPSE = 4

WINDOW < x > < y > < width > < height > [elt ref]

For CT, LW, PGS: Defines visible size of the element

WBLEED < left > < top > < right > < bottom >

Add offsets to the current path

SCALE < scale x > < scale y > [elt ref]

Scaling of the element (elt ref is the point that does not move).

SCALE_ELT < scale x > < scale y > [elt ref]

Scaling of the element before attachment (elt ref is the point that does not move).

TRANSLATION < x > < y >

Applies a translation to the element.

Positive direction on x is from left to right

Positive direction on y is from bottom to top

ROTATION < val > [elt ref]

Applies a rotation to the element (elt ref is the point that does not move).

STROKE <width> <dash> <dash width> <join> <cap>

Defines the stroke of the current element.

width: Width of the stroke

dash:Dash Style

0	: No dashes
1	: x-x-x-x-x-x-x-x-
2	: xxx---xxx---xxx-
3	: x---x---x---x---x
4	: xxxxx-x-xxxxx-xjoin:

Join Style:

0	: Miter
1	: Round
2	: Bevel

cap Cap Style:

0	: Button
1	: Round
2	: Square
3	: Arrow

STROKE_COLOR <color definition>

Defines the stroke of the current element.

FONT < font name >

Defines the font of a string element.

STRING_SIZE < size >

Defines the size of a string element.

STRING_COLOR <color definition>

Defines the color of a string element.

FILL_COLOR <color definition>

Defines the color of a fill (Usually used to fill a box with a specific color)

TILE <nbCol> <nbRow> <idCol> <idRow> <clipping>

Extract a tile from a fill:

```
          I03I13I23I33
          +-----+
          I02I12I22I32
nbRow +-----+
          I01I11I21I31
          +-----+
          I00I10I20I30
          +-----+

nbCol
```

ex: TILE 4 4 1 2 1 : Select the tile in column 1 and line 2 of a 4 by 4 tiled element with a clipping of 1 percent of the tile width.

LAYER < layer name >

Change the DALIM layer and add a new one.

PDFLAYER < layer name > <visibility>

Create a PDF layer (OCG) and set it's visibility:

```
on
off
```

COORD_MODE < mode >

Allow to give the "WINDOW" coordinates in percent

```
0 = coordinates in mm
1 = coordinates in percentages
```

CHANNEL_MASK < channel name > < blending mode > [< not found blending mode >]

Add a channel mask to the channels of the current element (CTILWIPAGE).

When "CHANNEL_MASK" is specified for an element all its channels are set to "FULLTRANSP" (transparent) and all channels that match a given channel are set to the specified blending mode. Several "CHANNEL_MASK" can be given for the same element

The second blending mode is used when the given channel name is not found in the placed element. Only values of 4 or 5 may be used for the 'not found blending mode'.

Blending modes:

0 = OPAQUE	-> color = source
1 = REPLACE	-> color = alphaSrc*source
2 = MIX	-> color = alphaSrc*source + (1-alphaSrc)*dest
3 = ADD	-> color = alphaSrc*source + dest
4 = ZERO	-> color = 0
5 = FULLTRANSP	-> color = dest
6 = MERGE	-> color = alphaSrc*source + alphaDst*dest

CHANNEL_MIXER < cyan assign > < magenta assign > < yellow assign > < black assign >

Assign a new channel or mode to one of the cyan, magenta, yellow, black

Assign modes:

Cyan	-> cyan as destination color
magenta	-> magenta as destination color
yellow	-> yellow as destination color
black	-> black as destination color
transp	-> channel transparent
transadd	-> channel transparent additive mode
opaque	-> channel opaque
zero	-> channel zero

EMBED <boolean>

For vector document (PDF, EPS, PGS) define if the referenced element must be inserted or referenced.

MASTER <boolean>

Define that element is the master document. This information is used for metadata to be kept.
Only one master document must be defined.

End tag

The end tag is defined as: dpl1.0end

EXAMPLES:

```
dpl1.0begin
PAGENAME "testBayard" TARGETJOB "dplTests" SIZEMODE 1
PGS "u3tmp/bayardPage" "P086087" { ATTACHMENT 0 4 4 }
BOX 0 0 { ATTACHMENT 1 0 8 }
BOX 0 6.82222 { ATTACHMENT 1 8 0 }
STRING "Coucou REGU 27.06.1997 10:49"
{
  ATTACHMENT 1 8 8
  TRANSLATION -15.0 -4.82222
  FONT "OCRB"
  STRING_SIZE 2.82222 STRING_COLOR "ALL"
}
dpl1.0end
```

```
dpl1.0begin
PAGENAME uliPage TARGETJOB u3idyllJobs/frm SIZEMODE 1
PGS u3idyllJobs/frm noCMYK6
{
  ATTACHMENT 0 4 4 STROKE 0.100 0 1 0 0 STROKE_COLOR "ALL" 2
}
STRING "PANTONE 254 CV"
{
  ATTACHMENT 1 7 1 TRANSLATION 0.0 -2.00 STRING_SIZE 2.82 STRING_COLOR "PANTONE 254 CV" 2
  FONT "OCRB"
}
STRING "PANTONE GREEN CV"
{
  ATTACHMENT 1 7 1 TRANSLATION 0.0 -2.00 STRING_SIZE 2.82 STRING_COLOR "PANTONE GREEN
CV" 2 FONT "OCRB"
}
}
```

```
STRING "PANTONE 101 CV"
{
  ATTACHMENT 1 7 1 TRANSLATION 0.0 -2.00 STRING_SIZE 2.82 STRING_COLOR "PANTONE 101 CV" 2
  FONT "OCRB"
}
STRING "PANTONE 1665 CV"
{
  ATTACHMENT 1 7 1 TRANSLATION 0.0 -2.00 STRING_SIZE 2.82 STRING_COLOR "PANTONE 1665 CV"
  2 FONT "OCRB"
}
STRING "PANTONE 331 CV"
{
  ATTACHMENT 1 7 1 TRANSLATION 0.0 -2.00 STRING_SIZE 2.82 STRING_COLOR "PANTONE 331 CV" 2
  FONT "OCRB"
}
STRING "PANTONE 544 CV"
{
  ATTACHMENT 1 7 1 TRANSLATION 0.0 -2.00 STRING_SIZE 2.82 STRING_COLOR "PANTONE 544 CV" 2
  FONT "OCRB"
}
STRING "cyan"
{
  ATTACHMENT 1 7 1 ATTACHMENT 1 8 2 TRANSLATION 0.0 -2.00 STRING_SIZE 2.82 STRING_COLOR
  "black" 2 FONT "OCRB"
}
BOX 20 20
{
  ATTACHMENT 1 0 8
}
BOX 20 20
{
  ATTACHMENT 1 2 6
}
BOX 20 20
{
  ATTACHMENT 1 6 2
}
BOX 20 20
{
  ATTACHMENT 1 8 0
}
SEGMENT 10
{
  ATTACHMENT 1 0 2 TRANSLATION -10 0 STROKE 1 0 1 0 0 STROKE_COLOR "ALL"
}
SEGMENT 10
{
  ATTACHMENT 1 2 0 TRANSLATION 10 0 STROKE 1 0 1 0 0 STROKE_COLOR 0 255 0 0
}
SEGMENT 10
{
  ATTACHMENT 1 0 6 TRANSLATION 0 10 STROKE 1 0 0 0 0 STROKE_COLOR 0 0 255 0 ROTATION 90
}
dpl1.0end
```

```
dpl1.0begin
PAGENAME G244245
TARGETJOB u3idyllJobs/dplTest
SIZEMODE 9
FINALWIDTH 150
PAGEORIENT 2
//-----
//DCT idyllJobs G244245 { CHANNEL_MASK cyan 0 }
DCT idyllJobs G244245 { ATTACHMENT 0 0 0 }
//-----
```

DCT idyllJobs G244245 { ATTACHMENT 1 8 0 }

//-----

dpl1.0end

CONDENSED NOTATION

"ELEMENT" ==> "ELE" or "ele"
"STRING" ==> "STR" or "str"
"SEGMENT" ==> "SEG" or "seg"
"CIRCLE" ==> "CIR" or "cir"
"PAGENAME" ==> "PAG" or "pag"
"TARGETJOB" ==> "TAR" or "tar"
"PAGESIZE" ==> "PSZ" or "psz"
"SIZEMODE" ==> "SZM" or "szm"
"FINALWIDTH" ==> "FIW" or "fiw"
"FINALHEIGHT" ==> "FIH" or "fih"
"PAGEORIENT" ==> "POR" or "por"
"PAGESCALE" ==> "PSC" or "psc"
"ATTACHMENT" ==> "ATT" or "att"
"WINDOW" ==> "WIN" or "win"
"SIZE" ==> "SZE" or "sze"
"SIZE_LINK" ==> "SZL" or "szl"
"SCALE" ==> "SCA" or "sca"
"TRANSLATION" ==> "TRA" or "tra"
"ROTATION" ==> "ROT" or "rot"
"ELT_ROTATION" ==> "ERO" or "ero"
"STROKE" ==> "STK" or "stk"
"STROKE_COLOR" ==> "SKC" or "skc"
"STRING_COLOR" ==> "STC" or "stc"
"STRING_SIZE" ==> "SSZ" or "ssz"
"CHANNEL_MIXER" ==> "MIX" or "mix"
"CHANNEL_MASK" ==> "MAS" or "mas"
"LAYER" ==> "LAY" or "lay"
"MIRROR" ==> "MIR" or "mir"