

This document is an example on how to access the different layout areas within the [page] background. It is too late now, but I should have warned you about the excessive color usage.

```

1 \setupcolors[state=start]
2 \setupbodyfont[10pt]
3 \setuplayout[bottom=1cm]%   just to test it
4 \setupbackgrounds
5   [page]
6   [background=page]
7 \defineoverlay[page] [\reuseMPgraphic{page}]
8 \setupheadertexts[left head][right head]
9 \setupfootertexts[left foot][right foot]
10 \startreusableMPgraphic{page}
11   StartPage;
12   path p;
13   fill Page withcolor .95white;
14
15   % backspace and topspace
16   p:= ulcorner Page --
17       llcorner Page --
18       llcorner Page shifted (BackSpace,0) --
19       ulcorner Page shifted (BackSpace,0) -- cycle;
20   fill p withcolor transparent(1,0.5,green);
21
22   p:= ulcorner Page --
23       urcorner Page --
24       urcorner Page shifted (0,-TopSpace) --
25       ulcorner Page shifted (0,-TopSpace) -- cycle;
26   fill p withcolor transparent(1,0.5,blue);
27
28   % a red bottom...
29   p:= (Hstep[LeftEdge], Vstep[Bottom]) --
30       (Hstep[RightEdge], Vstep[Bottom]) --
31       (Hstep[RightEdge], Vstep[Bottom]+Vsize[Bottom]) --
32       (Hstep[LeftEdge], Vstep[Bottom]+Vsize[Bottom]) -- cycle;
33   fill p withcolor transparent(1,0.5,red);
34
35   % leftmargin and rightmargin
36   p:= (Hstep[LeftMargin], Vstep[Text])--
37       (Hstep[LeftMargin] + Hsize[LeftMargin], Vstep[Text]) --
38       (Hstep[LeftMargin] + Hsize[LeftMargin], Vstep[Text]+Vsize[Text])--
39       (Hstep[LeftMargin], Vstep[Text]+Vsize[Text])-- cycle;
40   draw p withpen pencircle scaled .5mm withcolor blue dashed evenly;

```

```
37 p:= (Hstep[RightMargin] , Vstep[Text])--
38 (Hstep[RightMargin] + Hsize[RightMargin],Vstep[Text]) --
39 (Hstep[RightMargin] + Hsize[RightMargin],Vstep[Text]+Vsize[Text])--
40 (Hstep[RightMargin] , Vstep[Text]+Vsize[Text])-- cycle;
41 draw p withpen pencircle scaled .5mm withcolor blue dashed evenly;

42 % let's draw the header (notice that Vsize[Header] and HeaderHeight
43 % are the same!)
44 p:= (BackSpace, Vstep[Header]) --
45 (BackSpace+MakeupWidth, Vstep[Header]) --
46 (BackSpace+MakeupWidth, Vstep[Header]+Vsize[Header]) --
47 (BackSpace, Vstep[Header]+HeaderHeight) -- cycle ;

48 draw p withpen pencircle scaled .5mm withcolor blue dashed evenly;

49 % and now for the footer
50 p:= (BackSpace, Vstep[Footer]) --
51 (BackSpace+MakeupWidth, Vstep[Footer]) --
52 (BackSpace+MakeupWidth, Vstep[Footer]+FooterHeight) --
53 (BackSpace, Vstep[Footer]+FooterHeight) -- cycle ;

54 draw p withpen pencircle scaled .5mm withcolor blue dashed evenly;

55 % And now for something completely different :)
56 drawoptions (withcolor transparent (1,0.9,yellow) withpen pencircle scaled .3mm);

57 draw Field [Text][Top];
58 draw Field [Text][Header];
59 draw Field [Text][Text];
60 draw Field [Text][Footer];
61 % Field[] [] = Area[] [] shifted Location[] []
62 draw Area [Text][Bottom] shifted Location [Text][Bottom];

63 % needed, since LeftMargin+LeftMarginDistance > BackSpace
64 setbounds currentpicture to boundingbox Page;
65 \stopreusableMPgraphic
```

These are the parameters you can use inside the METAPOST-sections

PageNumber	MakeupHeight	BottomDistance	RightEdgeDistance
PaperHeight	MakeupWidth	BottomHeight	RightEdgeWidth
PaperWidth	TopHeight	LeftEdgeWidth	PageOffset
PrintPaperHeight	TopDistance	LeftEdgeDistance	PageDepth
PrintPaperWidth	HeaderHeight	LeftMarginWidth	
TopSpace	HeaderDistance	LeftMarginDistance	
BottomSpace	TextHeight	TextWidth	
BackSpace	FooterDistance	RightMarginDistance	
CutSpace	FooterHeight	RightMarginWidth	

With the pair *Location* and the paths *Area* and *Field*, you can use these array indexes (see the example above):

Horizontal	Vertical
LeftEdge	Top
LeftEdgeSeparator	TopSeparator
LeftMargin	Header
LeftMarginSeparator	HeaderSeparator
Text	Text
RightMarginSeparator	FooterSeparator
RightMargin	Footer
RightEdgeSeparator	BottomSeparator
RightEdge	Bottom

There are also the *Hsize*, *Hstep*, *Vsize* and *Vstep* arrays. They take these the same parameters as given in the table above. (Obviously the *Hsize* and *Hstep* arrays take horizontal parameters and the *Vsize* and *Vstep* arrays the vertical.)

To use all these, you should not forget to initialize the variables with the StartPage MetaFun macro! This will also give you a path *Page* with the page outline!

Info: March 2003 Patrick Gundlach. See also section *Crossing Borders* in the Metafun manual in chapter *Page backgrounds* by Hans Hagen.