

Production date = December 14, 2016

subject: Blanks instead of indented paragraphs

category: TeX/ConTeXt

date: 10-4-2013

key: linespacing,snippet

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: I want to have empty lines between paragraphs, not only indenting.

Answer: Use `\setupwhitespace[line]`

subject: Placing footnotes and endnotes

category: TeX/ConTeXt

date: 11-4-2013

key: footnote,endnote

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: How to place either footnotes or endnotes?

Answer: `\placenames` is an abbreviation for `\placenames[footnote]`, for endnotes use explicitly `\placenames[endnote]`.

onderwerp: ConTeXt Reference manual

categorie: TeX/ConTeXt

datum: 13-5-2016

sleutel: manual

auteur: Hans Hagen,Taco Hoekwater

ConTeXt Reference Manual is te downloaden vanaf internet adres:

`wiki.contextgarden.net`

Laatste versie gezien 27-9-2013.

onderwerp: Metafun Manual

categorie: TeX/Metafont

datum: 13-5-2016

sleutel: manual

auteur: Hans Hagen

Metafun Manual is te downloaden vanaf internet adres:

wiki.contextgarden.net

Laatste versie gezien 8-10-2010.

onderwerp: Plaatsing van `\xmlinclude`

categorie: TeX/ConTeXt-XML

datum: 23-4-2016

sleutel: XML,include

auteur: Hans van der Meer

opmerking: Opgelost in email discussie met Hans Hagen.

Probleem: Het gebruik van `\xmlinclude` geeft problemen als materiaal moet worden ingeladen in de wortel van het huidige document. Het resultaat kan dan een crash van `luatex` opleveren.

Remedie: Zorg dat `\xmlinclude` het materiaal inlaadt voordat toepassing van setups op dat materiaal tot een fatale recursie leidt.

Voorbeeld van correcte positionering:

```
\startxmlsetups xyz:setups
\xmlinclude{#1}{include}{file}
\xmlsetsetup{#1}{...}{xyz:*}
\stopxmlsetups
\xmlregistersetup{xyz:setups}
```

onderwerp: Volgorde van setups

categorie: TeX/ConTeXt-XML

datum: 14-5-2016

sleutel: XML,setup

auteur: Hans van der Meer

opmerking: Opgelost in email discussie met Hans Hagen.

Probleem: De volgorde kan van belang zijn als met `\usemodule` verschillende XML-modules worden ingeladen. Wanneer latere modules afhankelijk zijn van setups in eerder geladen modules, worden de setups niet in de goede volgorde toegepast indien met `\xmlinclude` vooraf te verwerken materiaal is ingeladen. Een voorbeeld waarin dit een rol speelt:

```
\usemodule [bevat abc:setups]
\startxmlsetups xyz:setups
\xmlinclude{#1}{include}{file}
\xmlsetsetup{#1}{...}{xyz:*}
\stopxmlsetups
\xmlregistersetup{xyz:setups}
```

Hier krijgt de ingeladen file niet de `abc:setups` mee. De remedie is om de `xyz:setups` vooraan de lijst met te verwerken setups te zetten met `\xmlbeforesetup`:

```
\usemodule [bevat abc:setups]
\xmlregistersetup{xyz:setups}
\xmlbeforesetup{#1}{xyz:setups}
```

subject: Math typesetting problem

category: TeX/ConTeXt

date: 6-4-2013

key: math,fraction

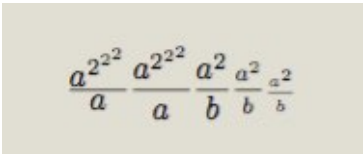
author: Hans Hagen

source: ntg-context@ntg.nl

Hans Hagen redid the MKIV code, illustrated with the following example:

```
\definemathfraction[myfrac] [mathstyle=script]
\definemathfraction[myfracx][mathstyle=script,alternative=outer]
\startformula
  {a^{2^{2^2}}}\over a}
  \frac{a^{2^{2^2}}}{a}
  \frac{a^2}{b}
  \myfrac{a^2}{b}
  \myfracx{a^2}{b}
\stopformula
```

Example:



$$\frac{a^{2^{2^2}}}{a} \quad \frac{a^{2^{2^2}}}{a} \quad \frac{a^2}{b} \quad \frac{a^2}{b} \quad \frac{a^2}{b}$$

subject: Suppressing label in float caption

category: TeX/ConTeXt

date: 14-4-2013

key: label,suppress,caption,snippet

author: Marco Patzer

source: ntg-context@ntg.nl

Question: How to suppress label "Figure number" in the caption of a float?


Answer: For `\startplacefigure` use `\setupfloatcaption[number=no]`. With the argument `Title=...` the title can be kept.

subject: Arc symbol
 category: TeX/ConTeXt
 date: 14-4-2013
 key: math,arc,snippet
 author: Wolfgang Schuster
 source: ntg-context@ntg.nl

Question: How to place an arc symbol under or over?

Answer: use $\$\underparent{ABC}\overparent{XYZ}\$$

Example:



subject: Coloring footnote numbers
 category: TeX/ConTeXt
 date: 15-4-2013
 key: footnote,color,setup
 author: Wolfgang Schuster
 source: ntg-context@ntg.nl
 remark: Also use setupnotation for every counter related to footnotes.

Question: How to color the number of a footnote?

Answer: Use for the number in the running text

```
\setupnote[footnote][textcolor=color]
```

and for the number in the footnote block

```
\setupnotation[footnote][headcolor=color]
```

subject: Dividing into chapters new code
 category: TeX/ConTeXt
 date: 16-4-2013
 key: chapter,section
 author: Aditya Mahajan
 source: ntg-context@ntg.nl

The reference manual still mentions `\chapter`, `\section` etc. However these are superseded by

```
\startchapter[title=..., marking=..., list=..., bookmark=...] ... \stopchapter
```

subject: Show sections only in the TOC
category: TeX/ConTeXt
date: 16-4-2013
key: chapter,section,TOC,suppress,snippet
author: Wolfgang Schuster
source: ntg-context@ntg.nl

Question: How to restrict the Table of Contents to specific elements as sections?
Answer: use `\placelist[section,subsection]` to place only sections and subsections.

subject: Suppress specific sections from the TOC
category: TeX/ConTeXt
date: 5-7-2014
key: chapter,section,TOC,suppress,snippet
author: Hans Hagen
source: ntg-context@ntg.nl

Question: How to suppress specific sections from the Table of Contents?
Answer: use special sections from the following example.

```
\definehead[silentsection][section]
\placelist[chapter,section]
\chapter{first}\section{first}
\chapter{first}\silentsection{first}
```

subject: Suppress caption number
category: TeX/ConTeXt
date: 16-4-2013
key: caption,number,suppress,snippet
author: Wolfgang Schuster
source: ntg-context@ntg.nl

Question: How to suppress the number in the caption of a float?
Answer: use `\placefigure[nonumber, ...]{...}{...}`.

subject: Macro not always found in source code

category: TeX/ConTeXt

date: 16-4-2013

key: macro,source,code

author: Hans Hagen

source: ntg-context@ntg.nl

The macro `\completecontent` is an example of a macro not found by searching the source code. Reason: it is formed by combining parts and is a result of the multi lingual interface of ConT_EXt.

One has to look for `e!complete`.

subject: Different behaviour of framed with align

category: TeX/ConTeXt

date: 16-5-2016

key: framed,hbox,vbox,align

author: Wolfgang Schuster

source: ntg-context@ntg.nl

remark: Tried all variations in align and autostrut in example program.

In 18-4-2013 the question arose if certain values of the align parameter in `\framed` lead to an `\hbox` or to a `\vbox` for its content. It turns out that horizontal mode is forced by a strut preceding the content of the framed. Using `\framed[strut=no,autostrut=no]` produces vertical mode at the start of the framed always, at least when one sets a value for the width of the framed.

subject: Hashmark and ampersand in alignments and preambles

category: TeX/ConTeXt

date: 16-5-2016

key: hashmark,ampersand,halign,valign,preamble

author: Hans van der Meer

source: LuaTeX Reference

remark: Originates from `ntg-context@ntg.nl` of 18-4-2013 and answer given by Hans Hagen.

The characters `#` and `&` must be typed of old in TeX as `\#` and `\&`. For `&` this has changed in LuaTeX, no need for the backslash anymore. Both characters have special meaning inside alignment templates `\halign` and `\valign`. For use in these templates LuaTeX now offers the macros `\alignmark` and `\aligntab`.

subject: Inhibiting hyphenation

category: TeX/ConTeXt

date: 21-4-2013

key: hyphenation

author: Hans Hagen

source: `ntg-context@ntg.nl`

In reaction to a request added the macro `\unhyphenated`. This just sets `\leftthyphenmin` to its maximum value.

subject: Placing margin text besides float

category: TeX/ConTeXt

date: 29-4-2013

key: float,margin,snippet

author: Wolfgang Schuster

source: ntg-context@ntg.nl

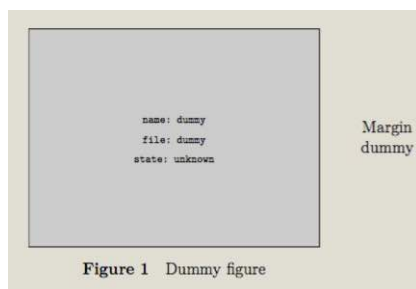
remark: "text=Margin figure" can also be "text={\externalfigure[][]}"

Question: how to associate text in the margin with a figure in a float?

Answer: see the following code snippet using the second argument to startplacefigure.

```
\define\FigureText{\dowithnextbox{%
  \startlinealignment[middle]
  \copy\nextbox\rlap{\hskip\rightmargindistance
    \framed[frame=off,width=\rightmarginwidth,height=\nextboxht]
    {\floatuserdataparameter{text}}}
  \stoplinealignment}\hbox}
\setupfloat[figure][command=\FigureText]
\startplacefigure[title=The figure][text=Margin figure]
  \externalfigure[thefigure][width=.5\textwidth]
\stopplacefigure
```

Example:



subject: Changing the format of chapter numbers
category: TeX/ConTeXt
date: 29-4-2013
key: chapter,heading,number,format,snippet
author: Wolfgang Schuster
source: ntg-context@ntg.nl

Question: how to change the format of the chapter number not only in the chapter heading but in the table of contents too? In this case from "Chapter 1" to "Chapter 1.0".

Answer: see the following code snippet.

```
\define[1]\ChapterConversion{\convertnumber{Numbers}{#1}.0}  
\defineconversion[ChapterConversion][\ChapterConversion]  
\setuphead[chapter][conversion=ChapterConversion]  
\completecontent  
\chapter{First Chapter}  
\section{First Section}
```

subject: Drawing line under header
category: TeX/ConTeXt
date: 29-4-2013
key: header,line,snippet
author: Wolfgang Schuster
source: ntg-context@ntg.nl

Question: how to draw a line under the header?

Answer: Use `\setupheader[text][after=\hrule]`

subject: Glyphs for Lucida math fonts

category: TeX/Font

date: 2-5-2013

key: font,lucida,math,glyph

author: Karl Berry

source: ntg-context@ntg.nl

Location of the documents containing the math glyphs of Lucida:

<http://tug.org/store/lucida/otmath-blocks.pdf>

<http://tug.org/store/lucida/otmathdemi-blocks.pdf>

subject: Chapter title in header only

category: TeX/ConTeXt

date: 2-5-2013

key: header,suppress,snippet

author: Piotr Kopszak

source: ntg-context@ntg.nl

Question: how to use chapter titles in the headers only?

Answer: use

```
\setuphead[chapter][placehead=no]
```

```
\setupheadertexts[][chapter][[]]
```

subject: Extra indentation with setupdelimitedtext

category: TeX/ConTeXt

date: 16-5-2016

key: blockquote,indentation,delimitedtext

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: Why is the indentation using `\startblockquote` twice what it should be?

```
\setupdelimitedtext[blockquote]
  [before={\blank[small, fixed]
    \setupnarrower[left=1.5pc, right=0pc]
    \startnarrower[left, right]\noindentation},
  after={\par\stopnarrower\blank[small, fixed]\noindentation}]
```

Answer: The blockquote environment is indented by default, you can disable it with

```
\setupdelimitedtext[blockquote][leftmargin=0pt]
```

subject: Listing glyphs in opentype font

category: TeX/Font

date: 18-5-2016

key: font,opentype,glyph,list

author: Wolfgang Schuster

source: ntg-context@ntg.nl

List of five columns: (1) unicode value (2) glyph (3) hexadecimal (4) name (5) comment

```
\usemodule[fnt-10]
\ShowCompleteFont{file:texgyrepagellaregular}{10pt}{1}
#1=file #2=size #3=columns in output
```

Columns with the glyphs only:

```
\usemodule[fnt-10]
% #1=file #2=size #3=columns in output
\ShowAllGlyphs{file:texgyrepagellaregular}{20pt}{4}
```

This compares two fonts:

```
\usemodule[fonts-coverage]
\showfontcomparison[list={texgyrepagella-regular.otf,LucidaBright0T.otf}]
```

subject: List of fonts installed

category: TeX/Font

date: 18-5-2016

key: font,list

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Fonts installed are listed with:

```
\usemodule[fonts-system]
\usemodule[art-01] \setuplayout[overview] \setupbodyfont[7pt]
\showinstalledfonts
```

subject: List of fonts installed
category: TeX/Font
date: 18-5-2016
key: font,list
author: Wolfgang Schuster
source: ntg-context@ntg.nl

Fonts installed are listed with:

```
\usemodule[fonts-system]
\usemodule[art-01] \setuplayout[overview] \setupbodyfont[7pt]
\showinstalledfonts
```

subject: Mathbold in upright style
category: TeX/Font
date: 19-8-2013
key: math,greek,bold,upright
author: Hans Hagen
source: ntg-context@ntg.nl

Example for upright boldmath, not present in every font. First in cambria, then in lucida.

```

 $\mathupright a$ 
 $\mathupright\bf a$ 
 $\mathupright \lambda$ 
 $\mathupright\bf \lambda$ 

```

Example:

```

no upright bold greek in the font cambria:
a a λ λ

upright bold greek in the font lucida:
a a λ λ

```

subject: Define color can mix them
category: TeX/ConTeXt
date: 22-8-2013
key: color,mixing
author: Hans Hagen
source: ntg-context@ntg.nl

Colors can be mixed as in:

```
\definecolor[whatever][.5(red,green)]
```

subject: First line or word(s) made different
category: TeX/ConTeXt
date: 22-8-2013
key: line,word,first,special
author: Hans Hagen
source: ntg-context@ntg.nl

The first line after can be made different with:

```
\definefirstline[fancy][alternative=line,
color=darkred,style=\setfontfeature{smallcaps}]
\setfirstline[fancy] \input tufte \par
```

Example:

leaf through, skim, refine, enumerate, glean, synopsise, winnow the wheat from the chaff and separate the sheep from the goats.

THE EARTH, AS A HABITAT FOR ANIMAL LIFE, IS IN OLD AGE AND HAS A FATAL ILLNESS.

Several, in fact. It would be happening whether humans had ever evolved or not.

The first two words with:

```
\definefirstline[fancy][alternative=word,n=2,
color=darkblue,style=bold,]
```

Example:

as people with many different viewpoints undertake their own experiments.

Imagine trying to live in a world dominated by dihydrogen oxide, a compound that has no taste or smell and is so viable in its properties that it is generally benign

subject: Generate command reference
category: TeX/ConTeXt
date: 18-5-2016
key: manual,command,reference,generate
author: Hans Hagen
source: ntg-context@ntg.nl

The sources are in:

`tex/texmf-context/tex/context/interface/mkiv`

Generate the pdf with:

`context --extra=setups --overview i-context.xml`

subject: Dropcapital as initial letter
category: TeX/ConTeXt
date: 28-8-2013
key: dropcapital,initial
author: Hans Hagen
source: ntg-context@ntg.nl

Typesetting a dropcapital with `\setupinitial` followed by `\placeinitial\strut...`

Parameters on setup:

`n=NUMBER`: line where footline of capital

`m=NUMBER`: number of letters to capitalize

`distance=DIMENSION`: offsets following text from dropcapital

`text=any`: if present fills the dropcapital

others speak for themselves.

Example:

The Earth, as
illness. Sev
had ever ev
old-age patient wh

subject: Stretching word(s) to length

category: TeX/ConTeXt

date: 8-10-2015

key: stretch

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: how to stretch a word to a certain length?

Answer: use the following code sample: `\stretched[features=none,width=...]{word}`

Example: `w o r d a n d s o o n`

subject: Drawing text along a path

category: TeX/Metapost

date: 13-10-2013

key: path,text,draw

author: Hans Hagen

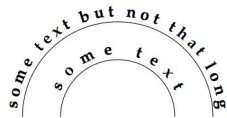
source: ntg-context@ntg.nl

Question: How to draw text along a path in Metapost?

Answer: using the "txt" Metapost library as in the example.

```
\useMPLibrary[txt]
\startsetups text-a
\startuseMPgraphic{followtokens}
  path RotPath; RotPath:=reverse halfcircle xyscaled 5cm; draw RotPath;
\stopuseMPgraphic
\followtokens{{\hskip3pt}some text but not that long{\hskip3pt}}
\stopsetups
\startMPpage draw texttext("\setups{text-a}"); \stopMPpage
```

Example:



subject: Placing transparent background overlay
category: TeX/Metapost
date: 18-5-2016
key: overlay,background,transparent,metapost
author: Alan Braslau,Hans Hagen
source: ntg-context@ntg.nl
remark: See also transparentmpcolor in module[hvdm-clr]

Question: how to place a transparent image on each page.

Answer: see the example.

```
\definetextbackground [mybackgroundOverlay] [mp=mpos:region:whatever]
\definecolor [percent] [s=1,a=1,t=.5] % transparent color
\startuseMPgraphic{mpos:region:whatever}
  for i=1 upto nofmultipars :
    draw texttext("\externalfigure[cow.pdf]
      [background={foreground,color}, backgroundcolor=percent]")
      rotated 10 shifted center multipars[i];
  endfor ;
\stopuseMPgraphic
\startmybackgroundOverlay ... \stopmybackgroundOverlay
```

Example:

The separation of any of these four components would have hurt TeX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important.

But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people with many different viewpoints undertake their own experiments.

Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large-scale user, the designer should also write the first user manual.

The separation of any of these four components would have hurt TeX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important.

But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people

subject: Font path on macOS and OSFONTDIR

category: TeX/Font

date: 19-5-2016

key: font,search,MacOSX,OSFONTDIR

author: Hans Hagen,Hans van der Meer

source: ntg-context@ntg.nl

Look at font directories found in ConT_EXt with:

```
\starttext \ctxlua{inspect(fonts.names.getpaths())} \stoptext Environment OSFONTDIR
not set in .bashrc gives in the log:
```

```
fonts > names > 'OSFONTDIR' specifies path '/Users/user/Library/Fonts'
fonts > names > 'OSFONTDIR' specifies path '/Library/Fonts'
fonts > names > 'OSFONTDIR' specifies path '/System/Library/Fonts'
table={
  "/Library/Fonts",
  "/System/Library/Fonts",
  "/Users/user/Library/Fonts",
}
```

Environment OSFONTDIR set in .bashrc to dummy_fonts directory gives in the log:

```
fonts> names > 'OSFONTDIR' specifies path '/Users/user/.../texmf/dummy_fonts'
table={"/Users/user/.../texmf/dummy_fonts",}
```

Conclusion: dummy directory prevents search of macOS font directories and leaves it to fonts in the context-tree (fontconfig environment variable) avoiding useless file access.

In a post a week later Hans Hagen advises to put in texmf.local file texmf.cnf.lua with content:

```
return {content = {directives = [{"fonts.usesystemfonts"} = false,,},}
```

But this looks as if it does nothing.

subject: Framing part of math formula

category: TeX/ConTeXt

date: 21-10-2013

key: math,formula,frame

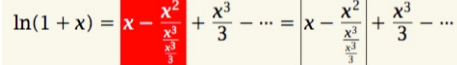
author: Hans Hagen

source: ntg-context@ntg.nl

Question: how to frame part of a formula in math?

Answer: see next example.

```
\definemathframed[mcframed] [location=mathematics]
\startformula
\ln(1+x) = \mcframed[background=color,backgroundcolor=red,
  foregroundcolor=white,frame=off]
  {x-\frac {x^2}{\frac{x^3}{\frac{x^3}{3}}}}+\frac{x^3}{3}-\cdots
= \mcframed{x-\frac {x^2}{\frac{x^3}{\frac{x^3}{3}}}}+\frac{x^3}{3}-\cdots
\stopformula
```

Example: 

subject: Setting document properties on a pdf

category: TeX/ConTeXt

date: 24-12-2013

key: pdf,properties,view

author: Wolfgang Schuster,Henning Hraban Ramm

source: ntg-context@ntg.nl

Question: how to set pdf document properties from ConTeXt?

Answer: use the `\setupinteraction` and `\setupinteractionscreen` macros. This is because document settings normally override the viewer settings, for example twopage mode etc.

```
\setupinteraction[title=, subtitle=, author=, keyword=, date=] and more.
\setupinteractionscreen has option for singlesided, doublesided, landscape,
portrait, etc.
```

subject: Transparent color in Metapost

category: TeX/Metapost

date: 27-3-2014

key: color,transparent

author: Hans Hagen

source: ntg-context@ntg.nl

An alternative for: `withcolor transparent (1,0.5,color)`
is the following: `withcolor color withtransparency (1,0.5)`

subject: Different layouts for left/right pages

category: TeX/ConTeXt

date: 19-4-2014

key: layout,even,odd,page,layout

author: Wolfgang Schuster,Hans hagen

source: ntg-context@ntg.nl

Question: how to achieve different layouts for even/odd pages?

Example for different left and right backspace values:

```
\definelayout [even] [backspace=5cm,width=10cm]
```

```
\definelayout [odd] [backspace=10cm,width=5cm]
```

Other possible values for the first parameter are: last, a pagenumber.

subject: Difference between MPvar and MPrawvar

category: TeX/Metapost

date: 22-4-2014

key: MPvar,MPrawvar

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: what is the difference between `\MPvar` and `\MPrawvar`?

Answer: `\MPvar` has one argument, the key, while `\MPrawvar` has in addition as first argument the name used in the `\setupMPvariables` command where it is set up.

subject: Colored horizontal stripe of full paperwidth

category: TeX/Metapost

date: 6-5-2014

key: background,width

author: Hans Hagen

source: ntg-context@ntg.nl

Question: how to have a colored horizontal stripe of full paperwidth?

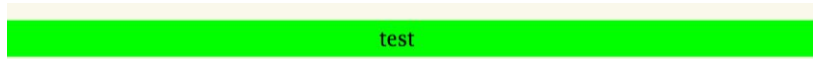
Answer: use a textbackground with MPcode extending into the margins.

```
\startuniqueMPgraphic{whatever}
  fill OverlayBox
    leftenlarged BackSpace rightenlarged CutSpace
    withcolor OverlayColor;
  setbounds currentpicture to OverlayBox enlarged max(BackSpace,CutSpace);
\stopuniqueMPgraphic
\defineoverlay[whatever][\uniqueMPgraphic{whatever}]
```

The example typeset with:

```
\framed[background=whatever,backgroundcolor=green,frame=off,width=\textwidth]{test}
```

Example:



subject: Continuous numbering of items

category: TeX/ConTeXt

date: 8-5-2014

key: item,number,continuous

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: how to number items in a document continuously.

Answer: use the \setupcounter command.

Example:

```
\setupcounter[itemgroup:itemize][way=bytext]
\setupitemgroup[itemize][each][n,continue]
```

subject: Counters for pagenumber

category: TeX/ConTeXt

date: 8-5-2014

key: pagenumber,counter,header,TOC

author: Wolfgang Schuster

source: ntg-context@ntg.nl

ConTeXt uses three different counters for the pages of the document:

1. The realpage counter is used for internal references to pages, this counter should never be reset because it is needed to have unique numbers for each page.
2. The userpage counter which is shown in the header, TOC etc. and you can reset its value at the begin of a new sectionblock etc.
3. The subpage counter can be used when you want to divide a certain sectionblock into smaller parts to have local page numbers for a certain part of your document.

Each of these three counters has a command for setup:

- `\setuprealpagenumber`
- `\setupuserpagenumber`
- `\setupsubpagenumber`

The old `\setuppagenumber` command is a synonym for the `\setupuserpagenumber` command because this is the counter you have to change for your documents.

subject: Text in a layer
category: TeX/ConTeXt
date: 19-5-2014
key: layer;text
author: Hans Hagen
source: ntg-context@ntg.nl

Question: how to put text into a layer?

Example:

```
\startbuffer[sometext]
  bla bla bla bla bla bla bla bla bla bla bla bla
\stopbuffer
\definelaye[r][somelayer]
\setlayerframed[somelayer][preset=lefttop,x=1cm,y=4cm]
  [width=10cm,align=normal]{\getbuffer[sometext]}
\setupbackgrounds[text][background=somelayer]
... Content of the page ...
```

subject: Footnotes within background
category: TeX/ConTeXt
date: 22-5-2014
key: background,footnote
author: Wolfgang Schuster
source: ntg-context@ntg.nl

Question: Footnotes within `\startbackground ... \stopbackground` are not displayed, how to?

Answer: use `\automigrateinserts` before the `\starttext`.

subject: Setting style and conversion for numbers of in-command

category: TeX/ConTeXt

date: 22-5-2014

key: number,style,format,conversion

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: how to set the style en conversion of numbers in references for the `\in` command?

Answer:

```
\defineprocessor[sectionstyle][style=italic,color=red]
\defineconversionset[sectionconversion][][sectionstyle->Romannumerals]
\setupreferencestructureprefix[section][default]
  [prefixconversionset=sectionconversion]
```

subject: Customize items in itemize

category: TeX/ConTeXt

date: 29-5-2014

key: itemize,item,custom

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Customizing items in itemize by example:

```
\define[1]\ItemCommand{%
  \hangindent=1.5in\relax
  \simplealignedbox{1.5in}{flushleft}{#1\hss--- }%
  \ignorespaces}
\setupitemize[command=\ItemCommand]
```

Example:

- Knuth — Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large-scale user; the designer should also write the first user manual.
- The separation of any of these four components would have hurt \TeX significantly. If I had not participated fully in all

subject: Customize chapter numbers in the TOC

category: TeX/ConTeXt

date: 6-12-2013

key: chapter,number,TOC,custom

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Customize the chapter number in the TOC using:

```
\define[1]\ChapterListNumber
  {\simplealignedbox{\listparameter{width}}{\flushright}{#1}}
\setuplist[chapter][width=2em,distance=1em,numbercommand=\ChapterListNumber]
```

subject: Special quoting of paragraphs

category: TeX/ConTeXt

date: 1-6-2014

key: quote,custom,block,paragraph

author: Stéphane Goujet

source: ntg-context@ntg.nl

Question: how to do special oldstyle typesetting with quoted blocks?

Answer: the trick is the use of `\localleftbox`, define a quotation block as follows:

```
\define\qbopen{«}%    symbol on first line
\define\qbrep{»}%    symbol on subsequent lines
\define\qbclose{»»»}% symbol at end of last line
\definestartstop[bloccite]
  [before=\qbopen~\begingroup\localleftbox{\qbrep~},
  after=\endgroup~\qbclose]
```

Use within `\startbloccite ... \stopbloccite`

Example:

```
« But a system cannot be successful if it is too strongly influ-
» enced by a single person. Once the initial design is complete
» and fairly robust, the real test begins as people with many
» different viewpoints undertake their own experiments.
»»»

» But a system cannot be successful if it is too strongly influ-
» enced by a single person. Once the initial design is complete
» and fairly robust, the real test begins as people with many
» different viewpoints undertake their own experiments. »»»
```

subject: New macro for mode definition
category: TeX/ConTeXt
date: 26-6-2014
key: mode,enablemode,disablemode,definemode
author: Hans Hagen
source: ntg-context@ntg.nl

Use of new macro `\definemode` is speeding up test on mode setting.

```
\definemode[themode][yes] enables mode
\definemode[themode][no] disables mode
\definemode[themode][keep] saves value if previously used
```

subject: Different visibility of layers on screen and on print
category: TeX/ConTeXt
date: 3-7-2014
key: layer,screen,print,visible
author: Hans Hagen
source: ntg-context@ntg.nl

remark: Adobe Reader shows as intended but Apple Preview ignores the settings.

Making layers that show up on screen and/or on print differently.

```
\defineviewerlayer[visibleandprint] [printable=yes,state=start]
\defineviewerlayer[visibleandnotprint] [printable=no, state=start]
\defineviewerlayer[notvisibleandprint] [printable=yes,state=stop]
\defineviewerlayer[notvisibleandnotprint][printable=no, state=stop]
```

Use as follows:

```
\setupinteraction[state=start]
\startviewerlayer[visibleandprint] visible and print \stopviewerlayer
\startviewerlayer[visibleandnotprint] visible and not print \stopviewer-
layer
\startviewerlayer[notvisibleandprint] not visible and print \stopviewer-
layer
\startviewerlayer[notvisibleandnotprint] not visible and not print \stopview-
erlayer
```

subject: Number of ConTeXt runs
category: TeX/ConTeXt
date: 3-10-2013
key: once,run
author: Wolfgang Schuster,Hans van der Meer
source: ntg-context@ntg.nl

Question: how to restrict the number of ConTeXt runs?

Answer: there are two possibilities:

1. Execute the run with: `mtxrun --once`
2. Parameter in the first line of the document: `% nofruns=1`

subject: Make plain format in ConTeXt
category: TeX/ConTeXt
date: 11-7-2014
key: format,plain,make
author: Hans Hagen
source: ntg-context@ntg.nl

Generate the plain format from the ConTeXt system with:

```
mtxrun --script plain --make
```

Run with:

```
mtxrun --script plain myfile.tex
```

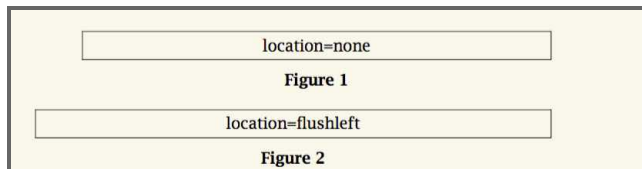
See the options with:

```
mtxrun --script plain
```

subject: Extending a figure into the margin
category: TeX/ConTeXt
date: 25-7-2014
key: figure,margin,extend
author: Hans Hagen
source: ntg-context@ntg.nl
remark: Missing location=flushleft/right on startplacefigure
Question: how to extend a figure into the left or right margin?
Example:

```
\setupfloat[figure][location=none]
\startplacefigure
  \framed[width=\textwidth]{location=none}
\stopplacefigure
\setupfloat[figure][location=flushleft]
\startplacefigure
  \framed[width=1.1\textwidth]{location=flushleft}
\stopplacefigure
```

Example:



subject: Buffers, environments and doifmode
category: TeX/ConTeXt
date: 30-7-2014
key: mode,doifmode,catcode
author: Hans Hagen
source: ntg-context@ntg.nl

With the arguments of macros like `\doifmode{...}{...}` one should be careful because when one passes arguments their catcodes are frozen. In case of trouble it is better to use `\startmode[...]` etc. as these do not pick up arguments.

subject: Changing and switching backgroundcolor of pages

category: TeX/ConTeXt

date: 15-10-2014

key: page,background,color,switch

author: Hans Hagen

source: ntg-context@ntg.nl

Change the backgroundcolor of a full page and even switch it temporarily.

```
\setupbackgrounds[page][background=color,backgroundcolor=cyan]
% cyan page ... text ... \page
\setupbackgrounds[page][background=,backgroundcolor=]
% uncolored page ... text ... \page
\setupbackgrounds[page][background=color,backgroundcolor=orange]
% orange page ... text ... \page
\pushbackground[page]
  \page\setupbackgrounds[page][background=color,backgroundcolor=green]
  % green page ... text ... \page
\popbackground
% return to previous (orange) page ... text ...\page
```

subject: Placing sidefloats and inmargin

category: TeX/ConTeXt

date: 15-10-2014

key: float,sidefloat,margin,inmargin

author: Hans Hagen

source: ntg-context@ntg.nl

Placing floats on the side in the margin can interfere with the use of `\inmargin`. The example shows how `\doifelsesidefloat` catches a clash with an extending sidefloat. The second sidefloat is too long and pushes the OKAY-text to the text-body.

```
% figure smaller than height of text
\placefigure[left,nonumber]{}
  {\framed[height=15mm,width=2cm]{} } \input knuthpar
\doifelsesidefloat
  {\dontleavehmode{\bf OKAY}: HERE}{\inmargin{OKAY} HERE}
% figure larger than height of text
\placefigure[left,nonumber]{}
  {\framed[height=30mm,width=2cm]{} } \input knuthpar
\doifelsesidefloat
  {\dontleavehmode{\bf OKAY}: HERE}{\inmargin{OKAY} HERE}
```

Example:



But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people with many different viewpoints undertake their own experiments.

OKAY: HERE



But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people with many different viewpoints undertake their own experiments.

OKAY: HERE

subject: Reduction of color strength

category: TeX/Metapost

date: 22-5-2016

key: color,reduction

author: Hans van der Meer

Colors in Metapost can be reduced in strength by taking a fraction.
For example "withcolor red/4" or "withcolor 0.25red".

subject: Alternating drawing and clearing with fill

category: TeX/Metapost

date: 18-10-2014

key: color,reverse,clear,new

author: Hans van der Meer

Alternating drawing and clearing with the Metapost fill command can be done in two ways.

1. use reverse before the path of the fill
2. use a new feature, the eofill command that alternates between drawing and clearing

Both fills in the example produce the same picture, albeit in different color.

```
fill fullcircle scaled 10cm --
  reverse fullcircle scaled 8cm --
  reverse fullcircle scaled 4cm -- cycle
  withcolor green/4 withtransparency (1,.5) ;
currentpicture := currentpicture shifted (-5cm,0) ;
eofill fullcircle scaled 10cm --
  fullcircle scaled 8cm --
  fullcircle scaled 4cm -- cycle
  withcolor blue/4 withtransparency (1,.5) ;
currentpicture := currentpicture shifted (-5cm,0) ;
```

Example:



subject: Using euler font for math

category: TeX/ConTeXt

date: 1-1-2015

key: math,font,euler

author: John Kitzmiller

source: ntg-context@ntg.nl

remark: The appendtoks is needed because Euler exists in rm style only.

Get Euler font substituted as math font. All fonts, except pagellaovereuler, can be changed for others or kept as is by using `\fontclass`.

```
\usetyescriptfile[euler]
\definetypface[myeuler][rm][serif][pagella][default]
\definetypface[myeuler][ss][sans][dejavu][default]
\definetypface[myeuler][tt][mono][inconsolata][default]
\definetypface[myeuler][mm][math][pagellaovereuler][default]
\appendtoks \rm \to \everymathematics
\setupmathematics[lcgreek=normal, ucgreek=normal]
```

Example: Formula was: " $y = ax^2 + bx + c$ " becomes " $y = ax^2 + bx + c$ "

subject: Using a smaller size for mono only

category: TeX/ConTeXt

date: 22-5-2016

key: font,size,change

author: Hans van der Meer

remark: Used the post by John Kitzmiller of 1-1-2015

remark: fontclass produces the name of the current font.

This can be used to just change the size of `\tt`:

```
\setupbodyfont[cambria]
\definetypface [mytype][tt][mono][\fontclass][default][rscale=0.8]
\setupbodyfont[mytype]
```

subject: Locally suppress page header or footer

category: TeX/ConTeXt

date: 22-5-2015

key: page,header,footer,suppress

author: Hans Hagen

source: ntg-context@ntg.nl

The header (or footer) will be suppressed by `\page[header]`. This changes the state on the current page, but on itself will not generate a pagebreak.

With `\page[header,yes]` one breaks the page and the current one will have its header suppressed. On the next page the header is reinstalled.

Note that `\page[header,yes]` and `\page[yes,header]` differ in their effect.

subject: Drawing in Metapost directly from Lua code
category: TeX/Metapost
date: 4-1-2015
key: lua,draw
author: Hans Hagen
source: ntg-context@ntg.nl
remark: The drawpoints call sticks a dot to each of the points on the path.

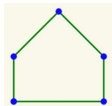
Drawing from a Lua table directly into a page:

```

\startluacode
context.metafun.start()
local data = {{0,0},{0,2},{2,4},{4,2},{4,0}}
for i=1,#data do
    data[i] = string.formatters["(%s,%s)"](unpack(data[i]))
end
context.metafun("path p; p := (%s -- cycle) scaled cm;",
    table.concat(data,"--"))
context.metafun("draw p withpen pencircle scaled 2pt withcolor green/2;")
context.metafun("drawpoints p withpen pencircle scaled 8pt withcolor blue ")
context.metafun.stop()
\stoptluacode

```

Example:



subject: How to ignore nodes in xml processing

category: TeX/ConTeXt-XML

date: 15-1-2015

key: node,ignore

author: Hans Hagen

source: ntg-context@ntg.nl

Question: how to ignore an XML-node?

Answer: define a nonexisting setup for that node, for example:

```
\startxmlsetups example:setup
\xmlsetsetup{#1}{a|b|c|d}{example:*}
\xmlsetsetup{#1}{x}{example:nonexisting}
\stopxmlsetups
```

This will ignore nodes `<x>...</x>`.

subject: Link to an URL

category: TeX/ConTeXt

date: 22-1-2015

key: url,goto,link

author: Hans Hagen

source: ntg-context@ntg.nl

Question: how to link to an URL?

Answer:

```
\setupinteraction[state=start]
\goto{Link to the Pragma site}[url(http://www.pragma-ade.nl)]
```

Makes the text "Link to the Pragma sit" a link to the Pragma site.

subject: Updating fonts
category: TeX/ConTeXt
date: 27-1-2015
key: font,generate,update,cache,mtxrun
author: Hans Hagen
source: ntg-context@ntg.nl

Normally it is automatically detected if a font is updated or when a font is not found. Only when one changes fonts (locations) it is needed to rebuild the database using `--reload` or `--reload --force` for a full reload. ConTeXt itself will do a fast update when needed.

Use: `mtxrun --generate` or `context --generate`

The main thing you need to keep in mind as user is:

`mtxrun --generate` : when the tree changes

`mtxrun --script font --reload` : when fonts were moved / added / removed

If the cache is wiped all happens automatically anyway.

subject: Crosshatching trapezoid figure

category: TeX/Metapost

date: 9-2-2015

key: hatching,numberstriped,anglestriped

author: Hans Hagen

source: ntg-context@ntg.nl

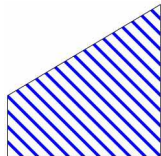
remark: The role of the 1st parameter is unclear.

Next code hatches the interior of a trapezoid figure. The 2nd parameter is number of stripes.

```
\startMPpage[offset=2pt]
  path p, q, r; pair z;
  p := unitsquare scaled 4cm;
  z := point 3.6 of p;
  q := z--urcorner p;
  r := q -- reverse bottomboundary p -- cycle;
  draw r numberstriped (.25,10,5) withcolor blue;
\stopMPpage
```

A variation is `anglestriped` where the 2nd parameter is the angle in degrees for the stripes and the 3rd the number of stripes.

Example:



subject: Footnotes in separate groups

category: TeX/ConTeXt

date: 15-2-2015

key: footnote,group,separate

author: Hans Hagen

source: ntg-context@ntg.nl

Question: how to divide footnotes in separate groups?

See next example that makes footnotes in three groups, each separately numbered:

```
\definote[NoteA]
\definote[NoteB]
\definote[NoteC]
Text A\NoteA{footnote A.} B\NoteB{footnote B.} C\NoteC{footnote C.}
```

subject: Suppressing overlays and background on a page

category: TeX/ConTeXt

date: 19-2-2015

key: page,blank,layer,background,suppress

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: how to disable backgrounds and layers on a specific page?

Answer: use `\page[yes,blank,right]` to move to a new right page; the `blank` keyword disables backgrounds and layers that are placed as a background.

subject: Coloring the background of text areas

category: TeX/ConTeXt

date: 26-2-2015

key: background,text,area,color

author: Hans Hagen

source: ntg-context@ntg.nl

Question: how to differentiate text areas by backgroundcolor?

Example code:

```
\definetextbackground[en][frame=off,backgroundcolor=yellow]
\definetextbackground[nl][frame=off,backgroundcolor=green]
\setnewconstant\kindofpagetextareas 1% low level
\starttextbackground[en] ... text ... \stoptextbackground
\starttextbackground[nl] ... text ... \stoptextbackground
```

Example:

But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people with many different viewpoints undertake their own experiments.

But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people with many different viewpoints undertake their own experiments.

onderwerp: Betekenis van macro thetexttext

categorie: TeX/Metapost

datum: 23-5-2016

sleutel: texttext,label

auteur: Hans Hagen

bron: Email

Metapost macro thetexttext kan een positie meekrijgen zoals bijvoorbeeld in thetexttext.llft.
Vergelijkbaar met label en thelabel.

subject: Single and doublesided pages

category: TeX/ConTeXt

date: 4-3-2015

key: page,singlesided,doublesided

author: Wolfgang Schuster

source: ntg-context@ntg.nl

By default context produces only singlesided documents where commands which force left or right page are ignored. When you want a doublesided document you can choose between two options:

The first option uses a different (mirrored) layout for left and right pages and is enabled with

```
\setuppagenumbering[alternative=doublesided]
```

The second option uses the same layout for left and right pages (i.e. the left and right margins on each page are the same) and is enabled with

```
\setuppagenumbering[alternative={singlesided,doublesided}]
```

subject: Runtime tree search in ConTeXt
category: TeX/ConTeXt
date: 6-3-2015
key: path,tree,search
author: Hans Hagen
source: ntg-context@ntg.nl
remark: See also the manual "Workflow Support in Context".

We have a runtime tree search with

```
context --path=tree://e:/tmp/whatever/**/ --global somefile.tex
```

which is quite ok for jobs that involve not that many files.

And a cached-across-jobs search with

```
context --path=dirfile://e:/tmp/whatever --global somefile.tex
```

Note that in that case you need to delete `dirlist.tuc` in the given path when you add or remove files. This second form is useful in automated runs on servers where books are generated from thousands of small files sitting on an nfs share; it speeds up the search. The `-global` flag bypasses the check for a valid file.

subject: Testting if on left or right page
category: TeX/ConTeXt
date: 15-3-2015
key: page,left,right,test
author: Wolfgang Schuster
source: ntg-context@ntg.nl
Question: how to test for a left or right page?
Answer: use `\doifrightpageelse`.

subject: Changing the ?? for an unknown reference

category: TeX/ConTeXt

date: 27-3-2015

key: reference,unknown,change

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: how to change the mark ?? for an unknown reference?

Answer: in the next example defined as red, monospace and in the margin

```
\def\dummyreference{\inmargin[style=\tttf,color=red]{??}}
```

subject: Formatting date

category: TeX/ConTeXt

date: 3-4-2016

key: date,format

author: Hans Hagen

source: ntg-context@ntg.nl

remark: The macro adapts to the language setting.

Various date formats:

```
\date[d=1,m=3,y=2000] => March 1,2000
```

```
\date[d=1,m=3,y=2000][d,~,m,~,y] => 1 March 2000
```

```
\date[d=1,m=3,y=2000][d,-,mm,-,y] => 1-03-2000
```

```
\date[d=1,m=3,y=2000][d,~,month,~,y] => 1 March 2000
```

```
\date[d=1,m=3,y=2000][d,~,month:mnem,~,y] => 1 mar 2000
```

subject: Customizing footnote placement after chapter
category: TeX/ConTeXt
date: 12-3-2015
key: footnote,custom,chapter
author: Hans Hagen
source: ntg-context@ntg.nl
remark: Also shows the hookup of setups in the chapter code.

Question: how to put footnotes at the end of a chapter and vary for zero, one or more footnotes?

Answer: see the following code

```

\startsetups chapter:after
  \ifcase\rawcountervalue[footnote]\relax
  \or \startsubject[title=Footnote]
    \placefootnotes
    \stopsubject
  \else \startsubject[title=Footnotes]
    \placefootnotes
    \stopsubject
  \fi
\stopsetups
\setupnotes[location=none]\setupnotation[way=bychapter]
\setuphead[chapter][aftersection=\setups{chapter:after}]

```

subject: Show where cross references are invoked

category: TeX/ConTeXt

date: 14-4-2015

key: reference,cross,show

author: Otared Kavian

source: ntg-context@ntg.nl

remark: Coded by Hans Hagen, of course.

Macro to show where cross references are invoked: `\showreferences`

subject: Pausing the ConTeXt run
category: TeX/ConTeXt
date: 25-4-2015
key: pause,wait,run
author: Hans Hagen
source: ntg-context@ntg.nl

Pause ConTeXt run until a key is pressed, for example to view a message in the log.
Use: `\wait`

subject: Passing Metapost values to ConTeXt
category: TeX/Metapost
date: 27-5-2015
key: value,pass,export,calculation
author: Hans Hagen
source: ntg-context@ntg.nl
remark: Also shows variables PaperHeight and Paperwidth.

Question: how to pass values calculated in Metapost to ConTeXt?

Answer: use `passvariable` on the Metapost side and `\MPrunvar` in ConTeXt.

Example:

```
\startMPcalculation
  path p, q; h := PaperHeight; w := PaperWidth;
  p = (0, 0) -- (w, .5h); q = (0, h) -- (w, 0);
  z0 = p intersectionpoint q;
  passvariable("z",ypart z0) ;
\stopMPcalculation
\setuplayout [topspace=0pt,header=0pt, height=\MPrunvar{z}bp]
\starttext xyz:\MPrunvar{z} \stoptext
```

subject: Coloring elements of footnote

category: TeX/ConTeXt

date: 6-9-2015

key: footnote,color

author: Wolfgang Schuster,Hans van der Meer

source: ntg-context@ntg.nl

Color the *footnotemark in the text* with:

```
\setupnote[footnote][textcolor=color]
```

Color the *footnotemark in the footnote* with:

```
\setupnotation[footnote][headcolor=color]
```

Color the *text of the footnote* with:

```
\setupnotation[footnote][color=color]
```

An alternative for the footnotemark in the footnote that allows more freedom (`\high` is needed to keep the mark in a high position):

```
\def\myfootnotemark#1{\color[color]{\high{#1}}}  
\setupnotation[footnote][numbercommand=\myfootnotemark]
```

subject: Drawing text in outline

category: TeX/Metapost

date: 15-6-2015

key: text,outline

author: Hans Hagen

source: ntg-context@ntg.nl

New features in Metapost for drawing text automatically in outline. The variants are:

- `outlinetext.p (text);`
- `outlinetext.d (text) (draw options) transformations;`
- `outlinetext.f (text) (fill options) transformations;`
- `outlinetext.b (text) (draw options) (fill options) transformations;`
- `outlinetext.r (text) (fill options) (draw options) transformations;`

The example has been done with:

```
picture p ; p := outlinetext.p("HvdM") ;  
for i within p : draw i withcolor red withpen pencircle scaled 1 ; endfor ;
```

Example: 

subject: Separately save figure then reload
category: TeX/ConTeXt
date: 2-5-2013
key: graphic,figure,extract,pdf
author: Wolfgang Schuster
source: ntg-context@ntg.nl
remark: This looks a very clever piece of ConTeXt.

Graphic is put into a separate pdf with `\typesetfile` and then placed as `\externalfigure`.
The code inside the `\startplacefigure` grabs the graphic in a buffer and writes the result to a pdf file.

```

\startbuffer[extract:before] \startTEXpage \stopbuffer
\startbuffer[extract:after] \stopTEXpage \stopbuffer
\def\startextract {\dosingleempty\dostartextract}
\def\dostartextract[#1]{\edef\extractfilename{#1}%
  \grabbufferdata[extract:content][startextract][stopextract]}
\def\stopextract {\doifsomething\extractfilename
  {%
    \savebuffer[list={extract:before,extract:content,extract:after},
      file=\extractfilename.pdf,prefix=no]%
    \typesetfile[\extractfilename][]%
  }
}
\startplacefigure[title={External file loaded}]
  \startextract[name-of-file] ... \stopextract
\stopplacefigure

```


subject: Customize chapter head with Metapost graphics

category: TeX/ConTeXt

date: 2-5-2013

key: custom,chapter,head,metapost,graphic

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Customize the chapter heading with graphics from Metapost. In this case by placing the heading inside a frame showing an orange colored bottom.

```
\define[2]\ChapterCommand{\startframed[%
  frame=off,bottomframe=on,framecolor=orange,width=fit]
  #1\hspace[medium]#2\stopframed}
\setuphead[chapter][command=\ChapterCommand]
```

subject: Customize pagenumber with Metapost graphics

category: TeX/ConTeXt

date: 2-5-2013

key: custom,pagenumber,metapost,graphic

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Customize the pagenumber with graphics from Metapost. In this case a blue colored oval put into an overlay that is coupled to a framed:

```
\startuseMPgraphic{pagenumber}
  draw fullcircle xyscaled(OverlayWidth,OverlayHeight) withcolor blue;
\stopuseMPgraphic
\defineoverlay[pagenumber][\useMPgraphic{pagenumber}]
\define[1]\PagenumberCommand
  {\framed[frame=off,background=pagenumber]{#1}}
\setuppagenumbering[command=\PagenumberCommand]
```

subject: Switch of fontsize inside margin text

category: TeX/ConTeXt

date: 24-5-2016

key: font,size,switch,margin

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Defining a macro to be put into the chapter title:

```
\def\Mark{\inmargin{\swichtobodyfont[9pt]}
```

did not produce the effect wanted. The reason is that when the margin text is flushed, the current fontsize of the chapter head (for example `\tfa`) is prefixed. Thus a different size is typeset. The remedy is to force a reset with the font switch, two possibilities:

```
\def\Mark{\inmargin{\setupbodyfont[reset,9pt]}
```

```
\def\Mark{\inmargin{\swichtobodyfont[reset,9pt]}
```

subject: Extract page by number from pdf

category: TeX/ConTeXt

date: 9-12-2013

key: extract,page,pdf,file

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Extracting a specific page by number from an existing pdf file can be done with:

```
\startTEXpage
```

```
  \externalfigure[<filename>][page=<pagenumber>]
```

```
\stopTEXpage
```

subject: Enable oldstyle characters in font
 category: TeX/ConTeXt
 date: 3-8-2014
 key: font,oldstyle,os
 author: Wolfgang Schuster
 source: ntg-context@ntg.nl

When oldstyle characters do not show up try the following. Enable the *onum* feature *before* setting the font with `\setupbodyfont`:

```
\definefontfeature[default][default][onum=yes]
```

It can be implemented by for example:

```
\definecharacterkerning[tight][factor=-.075]
\let\oldtt=\tt
\def\tt{\setcharacterkerning[tight]\oldtt}
```

onderwerp: Volgorde van executie met `xmlconcat` en `command`
 categorie: TeX/ConTeXt-XML
 datum: 23-8-2015
 sleutel: `concat`,`command`,`execute`
 auteur: Hans Hagen
 bron: ntg-context@ntg.nl

Uitvoeren van

```
\xmlconcat{#1}{\lpath}{xxx}
```

geeft het gewenste resultaat, maar dit is niet het geval met

```
\xmlconcat{#1}{\lpath/command(xmltest:test)}{xxx}
```

De reden is dat `command(...)` wordt toegepast en sterker is dan `concat`. Beter is om `concat(...)` als functie te gebruiken i.p.v. `command`:

```
\xmlall{#1}{\lpath/concat("xxx")}
```

subject: Export XML within given tag
category: TeX/ConTeXt-XML
date: 12-9-2015
key: export,tag,node
author: Hans Hagen
source: ntg-context@ntg.nl

Question: how to export data within a certain XML tag?

Answer in the example:

```
\setupbackend[export=yes]
\starttext
  \startelement[what]
    Content of the tagged node.
  \stopelement
\stoptext
```

Produces an xml-file with a node <what> within a <document> node in a directory named after the calling document.

subject: Formatting of reference links
category: TeX/ConTeXt
date: 16-9-2015
key: reference,style,format,link
author: Wolfgang Schuster
source: ntg-context@ntg.nl

Question: how to keep the current textstyle in reference links as `\at{page}[someref]`?

Answer: use `\setupinteraction[style=]`

subject: Formatting roman chapter but arabic section numbers

category: TeX/ConTeXt

date: 25-9-2015

key: chapter,section,roman,numeral

author: Pablo Rodriguez

source: ntg-context@ntg.nl

Question: how to format chapter numbers as romannumerals but section numbers as arabic numerals?

Answer:

```
\setuphead[chapter][conversion=Romannumerals]
\definestructureconversionset[sectionnumbers][0,R][n]
\setupheads[sectionconversionset=sectionnumbers]
```

subject: Restrict table of contents to chapters only

category: TeX/ConTeXt

date: 28-9-2015

key: content,table,TOC,chapter,restrict

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: how to restrict the table of contents to chapters only?

Answer: use `\placelist[chapter]`

subject: Typesetting version of LuaTeX
 category: TeX/LuaTeX
 date: 6-10-2015
 key: version
 author: Hans Hagen
 source: ntg-context@ntg.nl
 remark: The version of ConTeXt is obtained with `\contextversion`
 The version of current LuaTeX can be typeset with the following macros:

```

\the\luatexversion
\luatexrevision
\luatexbanner
  
```

Example: this is LuaTeX version 0.100.0.

subject: Give chapter specific chapternumber
 category: TeX/ConTeXt
 date: 8-10-2015
 key: chapter,number
 author: Wolfgang Schuster
 source: ntg-context@ntg.nl
 Question: how to set a specific chapternumber?
 Answer: use `\startchapter[title=...,ownnumber=NUMBER]`

subject: Itemize with given text items
 category: TeX/ConTeXt
 date: 26-10-2015
 key: itemize,item,text
 author: Wolfgang Schuster
 source: ntg-context@ntg.nl
 Question: how to give each item in a list a specific item text?
 Answer: use `\startitemize \txt{TEXT} ... \stopitemize`

subject: Hiding with starteffect ... stopeffect environment

category: TeX/ConTeXt

date: 22-11-2015

key: effect,hidden,stretch

author: Hans Hagen,Hans van der Meer

source: ntg-context@ntg.nl

remark: Defined in attr-eff.mkiv, not everything is clear.

The `\starteffect[...]` ... `\stopeffect` environment has the following values for the parameter:

- `hidden`: typeset the width but do not show
- `inner`: no difference with normal visible
- `outer`: character outlines
- `both`: inner+outer makes bold
- `normal`: no change
- `stretch`: stretch space between characters

`\setupeffect[alternative=...,stretch=NUMBER,rulethickness=DIMENSION]`

Nb. the `hidden` alternative seems the most useful.

subject: Defining a smaller bullet

category: TeX/ConTeXt

date: 29-11-2015

key: font,symbol,bullet,size

author: Hans Hagen

source: ntg-context@ntg.nl

Question: how to define a smaller bullet vertically centered?

Answer:

```
\definesymbol[smallbullet]
  [\raise.1ex\hbox{\mathematics{\scriptstyle\bullet}}]
\symbol[smallbullet]
```

Example: normal bullet = "•" small bullet = "•"

subject: Centering content vertically on the page

category: TeX/ConTeXt

date: 21-12-2015

key: page,center,makeup,vfill

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: vertically centering content with `\null\vfill ... \vfill\null` does not work as before, how to?

Answer: define a makeup for the page as follows:

```
\definemakeup[centered][pagestate=start,headerstate=start]  
\startmakeup[centered] ... \stopmakeup
```


subject: Using definefont to create styles

category: TeX/ConTeXt

date: 14-4-2013

key: definefont

author: Wolfgang Schuster

source: ntg-context@ntg.nl

As an example create a new command `\Test` to load the file *texgyrepagellaregular* at a size of 12pt. With the optional prefix at the front of the font name you can specify the search method. `\ConTeXt` provides three different methods by *file*, by *name* and by *spec* :

```
\definefont[Test][file:texgyrepagellaregular]
\definefont[Test][name:texgyrepagellaregular]
\definefont[Test][spec:texgyrepagella-normal-normal]
```

Instead of a fixed size for the font you can also use a relative size which depends on the bodyfont. Using "sa XX" as argument for the size scales the font when changing the bodyfont in the middle of the document.

```
\definefont[Test][texgyrepagellaregular sa 1]
\Test Font test.
\switchtobodyfont[20pt] \Test Font test.
```

Font test.
Font test.

One problem of the definitions above is that kerning, ligatures etc. aren't activated for the font, because no feature is applied. To apply a *feature set* you must use a different method than the one which is used in a typescript, because `\definefont` has no feature-key. What you then have to do is apply the feature set by appending it after the name separated by an asterisk.

```
\definefont[Test][texgyrepagellaregular*default sa 1]
```

Instead of the real name of a file you can also use a symbolic name from a typescript.

```
\definefont[Test][SansBold sa 1]
```

In this example the bold version of the sans style is used for the `\Test` font. The name of a feature need not be added in this case, because it was already set in the typescript. A more complete example:

```
\definetypface[mainface][rm][specserif][Antykwa Poltawskiego]
\definetypface[mainface][ss][specsans] [Iwona]
\definefont[ChapterStyle][SansBold sa 3]
\setuphead[chapter][style=ChapterStyle]
\setupbodyfont[mainface]
\starttext
\chapter{Knuth}
\input{knuth}
```

subject: Keep footnotes on page

category: TeX/ConTeXt

date: 23-7-2013

key: footnote

author: Hans Hagen

source: ntg-context@ntg.nl

Question: How to keep footnotes on the page where they are called?

Answer: `\setupnotes[footnote][split=verystrict,scope=page]`

Note however that this may result in unused whitespace between the text and the footnotes.

subject: Formatting of caption label

category: TeX/ConTeXt

date: 10-10-2016

key: caption,numbering,figure,table,float

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Set the separator (the *prefix*) between the chapter/section-number and the figure/table-number (the *floatnumber*). Note that the level of the chapter or (sub)section must be given, as is done below for a section numbering.

```
\setupcaptions[prefixsegments=section,prefixconnector=:]
```

And add something (the *numberstopper*) after the caption label with

```
\setupfloatcaption[suffix=---]
```

Example:

1 This is a section



Figure 1:1— ":" and "—"

subject: Name of current font

category: TeX/ConTeXt

date: 9-10-2016

key: font,fontname

author: Hans van der Meer

Retrieve source of font with `\truefontname{style}`

Examples:

`\truefontname{Regular}` → name:cambria

`\truefontname{Serif}` → name:cambria

`\truefontname{Sans}` → unknown

`\truefontname{Mono}` → name:dejavusansmono

subject: Font variations, handwriting and calligraphic

category: TeX/ConTeXt

date: 14-1-2016

key: simplefont,handwriting,calligraphic

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: How to set the calligraphic font in the simplefonts module?

Answer: There is no need anymore to load the simplefonts module. Define the fontfamilies as mainface and set mainface as the bodyfont.

```
\definefontfamily [mainface] [rm] [Lucida Bright OT]
\definefontfamily [mainface] [ss] [Lucida Sans OT]
\definefontfamily [mainface] [tt] [Lucida Sans Typewriter OT]
\definefontfamily [mainface] [mm] [Lucida Bright Math OT]
\definefontfamily [mainface] [hw] [Lucida Handwriting OT]
\definefontfamily [mainface] [cg] [Lucida Calligraphy OT]
\setupbodyfont[mainface]
```

Example:

<code>\rm</code>	Roman	<i>Italic</i>	Bold	<i>BoldItalic</i>	SMALLCAPS
<code>\ss</code>	Roman	<i>Italic</i>	Bold	<i>BoldItalic</i>	SmallCaps
<code>\tt</code>	Roman	<i>Italic</i>	Bold	<i>BoldItalic</i>	SmallCaps
<code>\hw</code>	<i>Roman</i>	<i>Italic</i>	<i>Bold</i>	<i>BoldItalic</i>	<i>SmallCaps</i>
<code>\cg</code>	<i>Roman</i>	<i>Italic</i>	<i>Bold</i>	<i>BoldItalic</i>	<i>SmallCaps</i>

subject: Variations in alignment: maxaligned

category: TeX/ConTeXt

date: 9-10-2016

key: alignment,spread

author: Hans van der Meer

Besides `\leftaligned`, `\midaligned` `\rightaligned` there is a new one `\maxaligned`. Below first `\midaligned{a b c d}` and then `\maxaligned{a b c d}`, showing their difference. With `\maxaligned` the words/items are spread out most. It turns out that `\maxaligned` and `\type{\hbox to\hsize}` have the seem effect.

Example:

		a b <code>\midaligned</code> c d		
a	b	<code>\maxaligned</code>	c	d

subject: Suppressing section numbers

category: TeX/ConTeXt

date: 9-2-2016

key: chapter,section,numbering

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Question: For the subdivison of a document the numbering scheme should be

```
chapter (numbered)
  section (numbered)
    subsection (numbered)
      subsubsection (not numbered)
```

Doing this with `\setuphead[subsubsection][number=no]`, fails because the `number=no` on the last `\setuphead` has an unwanted sideeffect: the chapter number is missing on equations, figures and tables. Thus instead of for example "Table 1.4" the result is "Table 4". How can one keep the numbering at 3 levels instead of 4 and still have equations, figures and tables inside subsubsections numbered as "Table 1.4"? Answer: Use `incrementnumber=no` (unnumbered) or `incrementnumber=list` (unnumbered plus list entry).

subject: Testing macro definition in Lua code

category: TeX/ConTeXt

date: 10-10-2016

key: macro,defined,lua

author: Hans Hagen

source: ntg-context@ntg.nl

Testing if a macro is defined and substituting the call when undefined can be effected with some luacode where `\nofoo` is a defined macro.

```
\startluacode
if interfaces.defined("foo") then
  context("foo")
else
  interfaces.setmacro("foo","nofoo")
end
\stoptluacode
```

The function `interfaces.defined(name)` has been implemented in the `\ConTeXt` core

```
\startluacode
function interfaces.defined(name)
  return token.get_cmdname(token.create(name)) ~= "undefined_cs"
end
\stoptluacode
```

Example:

```
foo is undefined: "\foo"
\def\foo{This is foo}
foo is defined: "\foo"
```

```
foo is undefined: "foo does not exist"
foo is defined: "this is foo"
```

subject: Filling and drawing together
category: TeX/Metapost
date: 25-2-2016
key: fill,draw
author: Hans Hagen
source: ntg-context@ntg.nl

Instead of a separate draw (outline) and fill (inside) MetaPost now has a fillup doing both at the same time. It leads to more efficient pdf code.

subject: Footnotemarker before and after text
category: TeX/ConTeXt
date: 13-10-2016
key: footnote,localfootnote,framedtext
author: Hans Hagen
source: ntg-context@ntg.nl

A footnote is usually placed after the text to which it refers. It is however possible to place it at the front using the option `\setupnotes[footnote][anchor=next]`. In effect this interchanges the whitespace before and after the footnotemarker.

Example:

<p style="text-align: center;">footnote follows text¹ — footnote precedes ²text</p> <p>¹ footnote 1 ² footnote 2</p>

subject: Macros to suppress indentation
category: TeX/ConTeXt
date: 4-10-2016
key: noindent,noindentation,indentation
author: Hans Hagen
source: ntg-context@ntg.nl

Question: What is the difference between `\indent` and `\noindentation`?

Answer: `\indent` is a so called primitive operation while `\noindentation` is the normal interface (as often a bit more is needed than `\indent` alone).

subject: Nonlocal footnote inside framedtext

category: TeX/ConTeXt

date: 13-10-2016

key: footnote,framedtext

author: Massifr

source: ntg-context@ntg.nl

Question: How to force footnotes inside a framed text in the page footer?

Answer: Define the footnote text beforehand and only put the marker inside the framed text.

Note that calling `\footnote` inside the framed text does increment the footnote counter and places the marker, but the text of the footnote will disappear; use the mechanism for `localfootnote` instead.

Example:

```
\setnotetext[footnote][fntext]{This is a second footnote}
% this is the same as \footnotetext[fntext]{text}
\startframedtext
... footnote\note[footnote2] ...
... footnote\footnote{Disappearing footnote.} ...
\stopframedtext
```

subject: Font information

category: TeX/ConTeXt

date: 10-10-2016

key: font

author: Wolfgang Schuster

source: ntg-context@ntg.nl

Font information is shown with the following code

```
\usemodule[fonts-tables]
\setupbodyfont[pagella]
\starttext
\showfonttables[title={TeX Gyre Pagella}]
\stoptext
```

subject: Using register values in Lua code
 category: TeX/ConTeXt
 date: 9-10-2016
 key: lua,register,value
 author: Hans Hagen
 source: ntg-context@ntg.nl

In the example the value of a dimen register is written to a file.

```
\startluacode
  io.savedata("tempnotes.txt", "textwidth = " ..
    number.topoints(tex.dimen.textwidth) .. " = " ..
    tostring(math.floor(tex.dimen.textwidth/(65536*2.8452))) .. "mm")
\stopluacode
\typefile{tempnotes.txt}
```

Example: textwidth = 426.78743pt = 150mm

subject: Environment settings with typesetbuffer
 category: TeX/ConTeXt
 date: 16-10-2016
 key: typesetbuffer,font,environment
 author: Wolfgang Schuster
 source: ntg-context@ntg.nl

The command `\typesetbuffer` puts its content in an external file which is then processed as a separate document. It doesn't use the settings from the main document and therefore these should be put inside the buffer. This contrasts with the command `\getbuffer` where typesetting is embedded in the current environment.