

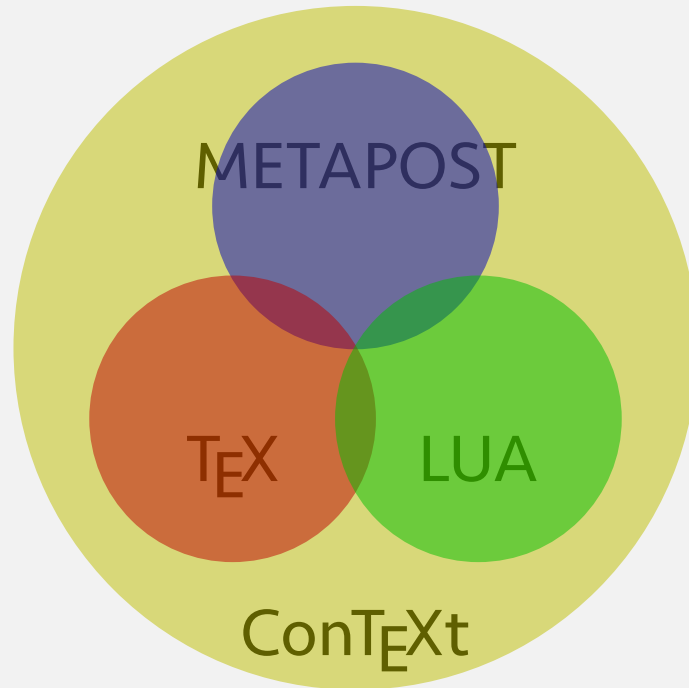
ConT_EXt for beginners

Willi Egger

Bachotex, april 29th to may 3rd 2017



ConT_EXt



Characteristics of ConT_EXt

■ Monolithic

Development in the hands of PRAGMA ie. Hans Hagen

Development originally for typesetting schoolbooks incl. math

■ Structured elements

```
\startchapter ... \stopchapter
```

```
\startplacefigure ... \stopplacefigure
```

■ Standard values

Out of the box reasonable standard values



Characteristics of ConT_EXt cont.

■ Configurable

Almost everything is configurable

Many commands come with a `\setup-command`

```
\setupframedtext [] []
```

```
\setupplayer [] []
```

■ ConT_EXt is still T_EX

ConT_EXt understands PlainT_EX

■ Export formats

PDF (default), XML, ePub/(X)HTML



Test for a working ConT_EXt installation

```
\starttext
```

```
Dzień dobry at the \CONTEXT\ beginners tutorial!
```

```
\stoptext
```

File: context-works.tex



Tutorial project

During this tutorial we develop the base for an **invoice**.



Laurens D'Hersaer
Lumpen
Santakaplaaf 40
2270 Heksemhout
België

Factuur
Factuurdatum 19 februari 2016
Factuurnummer 05/2016

Levering mechanieken

2 elektronische mechaniek van October, K&L, Rotterdam		0,00
Deze levering betreft een intracommerciële levering. BTW van Lumpen: 002.629.600.000		0,00
Subtotaal		00,00
BTW 0,0%		0,00
Totaal		00,00

Betalbaar binnen 14 dagen na ontvangst rekening.

Alle prijzen zijn in EUR, tenzij anders aangegeven. Op alle offertes, overeenkomsten en diensten zijn, tenzij uitdrukkelijk anders bepaald, de algemene leveringsvoorwaarden van toepassing. Deze zijn gedeponeerd bij de Rechtbank 's Hertogenbosch. Het afschrift daarvan wordt u op verzoek kosteloos toegezonden.

Bedankt voor de opdracht.



BOEDE
Bouwen aan de toekomst

Investment 2
2016 de voorwaarde
100% nettofinanciering

tel
+31-485 072 896
e-mail
info@boede.nl

fab
+31-485 072 896
e-mail
info@boede.nl

fab
+31-485 072 896
e-mail
info@boede.nl

fab
+31-485 072 896
e-mail
info@boede.nl

fab
+31-485 072 896
e-mail
info@boede.nl

fab
+31-485 072 896
e-mail
info@boede.nl

fab
+31-485 072 896
e-mail
info@boede.nl

fab
+31-485 072 896
e-mail
info@boede.nl

fab
+31-485 072 896
e-mail
info@boede.nl



Papersize

```
\setpapersize[A4][A4]
```

```
\setpapersize[A5][A4,landscape]
```

Predefined: ISO-series (standard and enlarged), US formats, envelopes
One can easily define custom paper sizes:

```
\definepapersize[MyPaperSize][width=180mm,height=270mm]
```

We can say now:

```
\setpapersize[MyPaperSize][A4]
```



Page-layout

	left edge	left margin	text text	right margin	right edge
top					
header					
text					
footer					
bottom					

These areas can be configured!



Page-layout cont.

```
\setuplayout  
  [topspace=15mm,  
   backspace=15mm,  
   header=0pt,  
   footer=1.2\bodyfontsize,  
   height=middle,  
   width=middle]
```

```
\showframe
```

Graphical presentation of used and or standard parameters

```
\showlayout
```

Print out of all used parameters



Page-layout cont.

Default values of page parameters

<code>\paperheight</code>	29.7000cm
<code>\paperwidth</code>	21.0000cm
<code>\printpaperheight</code>	29.7000cm
<code>\printpaperwidth</code>	21.0000cm
<code>\topspace</code>	2.4998cm
<code>\backspace</code>	2.5000cm
<code>\makeupheight</code>	25.0000cm
<code>\makeupwidth</code>	14.9999cm
<code>\topheight</code>	0.0000cm
<code>\topdistance</code>	0.0000cm
<code>\headerheight</code>	1.9999cm



\headerdistance	0.0000cm
\textheight	21.0002cm
\footerdistance	0.0000cm
\footerheight	1.9999cm
\bottomdistance	0.0000cm
\bottomheight	0.0000cm
\leftedgewidth	0.0000cm
\leftedgedistance	0.0000cm
\leftmarginwidth	2.6564cm
\leftmargindistance	0.4217cm
\textwidth	14.9999cm
\rightmargindistance	0.4217cm
\rightmarginwidth	2.6564cm



<code>\rightedgedistance</code>	0.0000cm
<code>\rightedgewidth</code>	0.0000pt
<code>\bodyfontsize</code>	10.0000pt
<code>\lineheight</code>	12.5720pt
<code>\strutheightfactor</code>	.72
<code>\strutdepthfactor</code>	.28
<code>\topskipfactor</code>	1.0
<code>\maxdepthfactor</code>	0.4



Page-layout cont.

■ Header and footer

```
\setupheadertexts[a] [b] [c] [d]
```

```
\setupfootertexts[a] [b] [c] [d]
```

- a **text** left on odd pages
- b **text** right on odd pages
- c **text** right on even pages
- d **text** left on even pages

Putting text in the margin in the header area

```
\setupheadertexts[margin] [\userpagenumber] [Document A]
```

File: header-footer.tex



Page-layout cont.

■ Margins

<code>\topspace</code>	2.4998cm
<code>\backspace</code>	2.5000cm
<code>\leftmarginwidth</code>	2.6564cm
<code>\leftmargindistance</code>	0.4217cm
<code>\textwidth</code>	14.9999cm
<code>\rightmargindistance</code>	0.4217cm
<code>\rightmarginwidth</code>	2.6564cm



Tables

■ Tabulate

```
\starttabulate[|l|c|r|p|]  
\NC left \NC center \NC right \NC paragraph \NC\NR  
\stoptabulate
```

Options for column width:

w(d) fixed column width
p(d) fixed paragraph width
p max. width paragraph

Options for style:

B,I,R,S,T bold, italic, roman, slanted, teletype
m, M inline math, display math



Tables cont.

Options for vertical spacing:

<code>\TB[halfline]</code>	Insert a vertical space of half a line
<code>\TB[line]</code>	Insert a vertical space of a whole line
<code>\TB[1cm]</code>	Insert a vertical space of 1 cm

File: tabulate.tex



Tables cont.

■ Natural tables

```
\bTABLE
      \bTR    \bTD a \eTD \bTD x \eTD \bTD y \eTD \eTR
      \bTR    \bTD b \eTD \bTD x \eTD \bTD y \eTD \eTR
      \bTR    \bTD c \eTD \bTD x \eTD \bTD y \eTD \eTR
\eTABLE
```

```
\setupTABLE[row] [number,odd,even,first,last][...]
\setupTABLE[column] [number,odd,even,first,last][...]
```

[...]: frame, style, alignment, background, color ...see Wiki
\setupframed.

File: naturaltable.tex



Layers

■ Defining a Layer

```
\definelayer  
  [Logo]  
  [width=3cm, height=4cm]
```

The layer is by default attached to the left top corner of the typesetting area, if not stated otherwise.



Layers cont.

■ Fill a layer

```
\setlayer  
[Logo]  
[x=-15mm,  
y=-35mm]  
{\externalfigure[cow][width=3cm]}
```



Layer cont.

■ Placing the layer

```
\strut  
\placelayer[Logo]
```

File: layer.tex



Figures

■ Supported File Types

JPG, PNG, PDF, MetaPost

■ Where to Look for Graphics

```
\setupexternalfigures[location={local,default}]
```

or

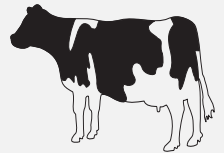
```
\setupexternalfigures  
[location={local,default,global},  
directory={/Users/willi/Documents/TEXdata/lezingenMAPSNTG/Bachotex2017/}]
```



Figures cont.

■ Placing a Figure

```
\startplacefigure  
[title=,number=,reference=,location=right]  
{\externalfigure[cow] [height=.2\textheight]}  
\stopplacefigure
```



Fonts

■ Out of the box fonts

Latin Modern

T_EX-Gyre fonts

Antykwa Torunska

Iwona

Kurier

XITS

■ Downloadable fonts

Gentium (SIL international)

Deja-vu ...



Playing with Fonts

```
\setupbodyfont[pagella,rm, 10pt]
```

serif	rm	pagella
		termes
		schola
		bonum
sansserif	ss	heros
		adventor
teletype	tt	cursor

File: fonts-1.tex



Playing with Fonts cont.

Font selection with Wolfgang Schuster's core module (automatically loaded)

```
\definefontfamily [dejavu] [serif] [DejaVu Serif]
\definefontfamily [dejavu] [sans] [DejaVu Sans]
\definefontfamily [dejavu] [mono] [DejaVu Sans Mono]
\definefontfamily [dejavu] [math] [XITS Math] [scale=1.1]

\definefontfamily [office] [serif] [Times New Roman]
\definefontfamily [office] [sans] [Arial] [scale=0.9]
\definefontfamily [office] [mono] [Courier]
\definefontfamily [office] [math] [TeX Gyre Termes Math]
```



Playing with Fonts cont.

```
\definefontfamily [linux] [serif] [Linux Libertine 0]  
\definefontfamily [linux] [sans] [Linux Biolinum 0]  
\definefontfamily [linux] [mono] [Latin Modern Mono]  
\definefontfamily [linux] [math] [TeX Gyre Pagella Math] [scale=0.9]  
  
\definefontfamily [myfamily] [mono] [TeX Gyre Cursor] [features=none]
```

Examples: file font-sel.mkvi in the distribution / Wiki

File: fonts-2.tex



Playing with Fonts cont.

- Commercial fonts
 - Use Wolfgang's core-module
 - Write typescripts
 - Renew the file database when adding fonts (context -generate)



Playing with Fonts cont.

■ Example

```
\starttypescript [sans] [seravek]
\definefontsynonym [Seravek-Regular] [file:Seravek-Regular] [features=default]
\definefontsynonym [Seravek-Bold] [file:Seravek-Bold] [features=default]
\definefontsynonym
[Seravek-Italic] [file:Seravek-RegularItalic] [features=default]
\definefontsynonym [Seravek-Bold-Italic] [file:Seravek-BoldItalic] [features=default]
\stoptypescript
```

```
\starttypescript [sans] [seravek]
\definefontsynonym [Sans] [Seravek-Regular] [features=default]
\definefontsynonym [SansItalic] [Seravek-Italic] [features=default]
\definefontsynonym [SansBold] [Seravek-Bold] [features=default]
\definefontsynonym [SansBoldItalic] [Seravek-Bold-Italic] [features=default]
\definefontsynonym [SansCaps] [Seravek-Regular] [features=smallcaps]
\definefontsynonym [SansBoldCaps] [Seravek-Bold] [features=smallcaps]
\definefontsynonym [SansItalicCaps] [Seravek-Italic] [features=smallcaps]
\definefontsynonym [SansBoldItalicCaps] [Seravek-Bold-Italic] [features=smallcaps]
\stoptypescript
```



Playing with Fonts cont.

```
\starttypescript [Seravek]  
    \definetypesface [Seravek] [ss] [sans] [seravek] [default]  
    \definetypesface [Seravek] [mm] [math] [palatino] [default]  
\stoptypescript
```



Invoice...

File: invoice.tex

Please play with the template, try to make it look better :-)



Thank You for Your Attention

