

The manuals

Welcome to the suite of ConTeXt manuals. These manuals not only cover the macro package itself, but also the tools that come with it. In this suite you will also find manuals on how to use ConTeXt for processing xml. Fonts and METAPOST graphic are discussed in dedicated manuals. On the following pages, the main manuals are shown large, while their screen companions are shown in the bottom right corner of a page. Clicking on a picture brings you to the document at hand. Some manuals come in more than one language, in which case small pictures of the title pages are shown. The next pages show overviews of manuals that are specific for MkII and MkIV as well as obsolete manuals.



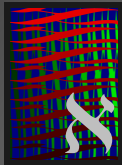
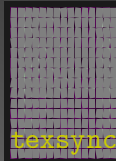
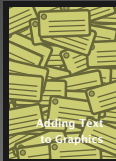
MkIV manuals

Here you will find the manuals that *describe* MkIV functionality and/or features not present in MkII.



MkII manuals

Although MkII and MkIV are rather compatible, there are some differences. Also, as MkII is frozen new features will only show up in MkIV.



Obsolete manuals

We keep some of the old manuals around for historic reasons. Some of what is described might still float around in the distribution but is likely replaced by more modern and hit variants.

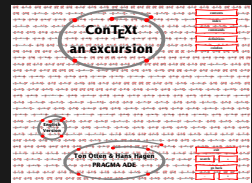
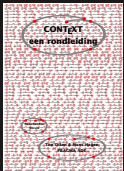
Getting started

Although meant for beginners, these manuals shows already a lot of what ConTExT can do for you. They also demonstrate that T_EX documents can be colorful and can contain lots of graphics.

ConTExT an excursion

English
Version

Tor Otten & Hans Hagen
PRAGMA ADE





Read Me First

Read Me

It's in the name: you should read this file. Not so much because the content should bother you, but more because it gives you an idea about what we have in mind with making ConT_EXt available for everyone. ConT_EXt is completely free software, which does not mean that there are no restrictions on redistributing and changing the files. When you want to redistribute (changed) source code, please read this licence first.



When one uses `TeX`, `fpTeX`, `gwTeX`, `MikTeX` or `TeX Live`, installation of `ConTeXt` is a breeze. Nevertheless, in this manual, we provide some information on installing `ConTeXt`.

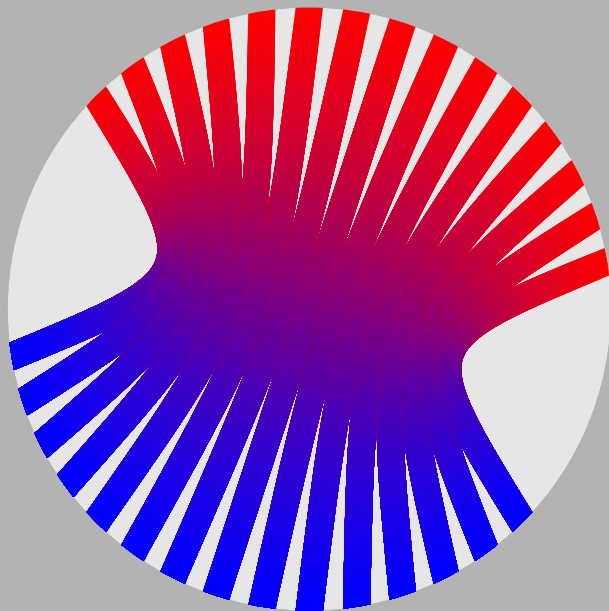




$\text{T}_{\text{E}}\text{X}_{\text{EXEC}}$ explained

$\text{T}_{\text{E}}\text{X}_{\text{EXEC}}$

Traditional $\text{T}_{\text{E}}\text{X}$ is hard to control on the commandline. This is why $\text{ConT}_{\text{E}}\text{Xt}$ comes with $\text{T}_{\text{E}}\text{X}_{\text{EXEC}}$, a Perl script that makes document processing more convenient. This script also helps you to postprocess pdf files, typeset $\text{ConT}_{\text{E}}\text{Xt}$ documentation, arrange pages, and manage files.



TEXUTIL explained

TeXutil

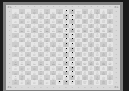
The TeXutil Perl script deals with files, especially the ConTeXt second pass data file. It moves information around and sorts indexes and lists. This script is the natural companion of TeXexec.

Fonts in ConTeXt

Hans Hagen
November 2005

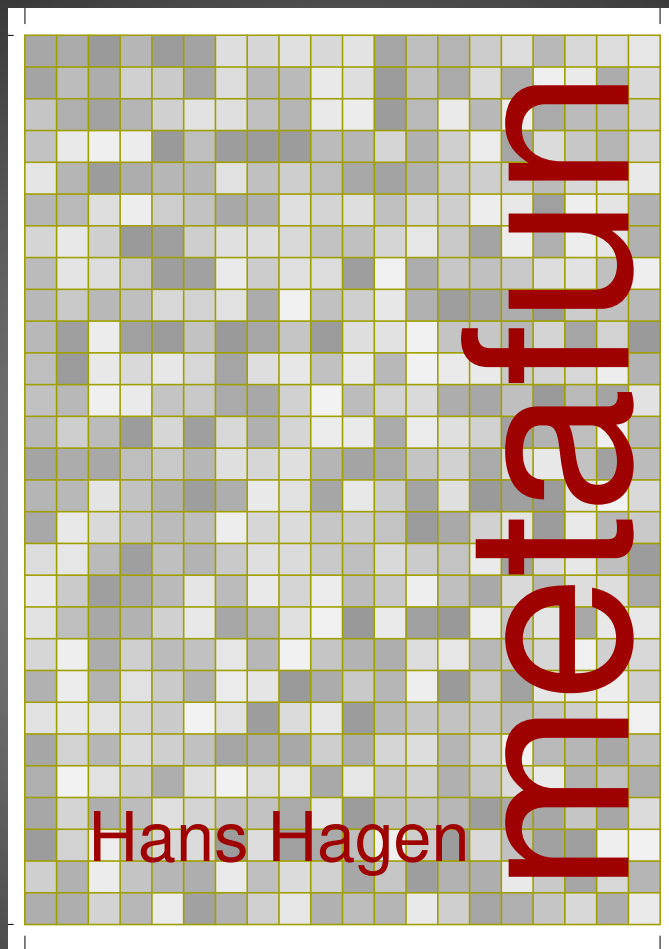
Fonts

Although installation of $\text{T}_{\text{E}}\text{X}$ and friends has become relatively easy, fonts always will be a special case. This is a result from the flexibility of $\text{T}_{\text{E}}\text{X}$, as well as the fact that $\text{T}_{\text{E}}\text{X}$ can typeset virtually any language. The font manual covers the installation of fonts in Con $\text{T}_{\text{E}}\text{X}$ t and describes in detail how to define typescripts, how to achieve special effects, like hanging punctuation, and how to set up math fonts.



Fonts in
Con $\text{T}_{\text{E}}\text{X}$ t
Examples Of Using Typescripts

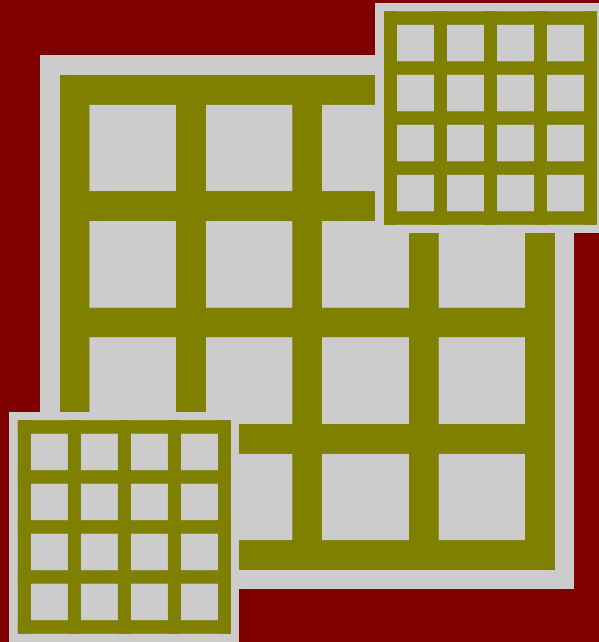
www.pragma-ade.com



MetaFun

If you like graphics, you may like MetaFun, a collection of METAPOST macros. The manual covers most of METAPOST, as well as the interface between this graphical environment and ConT_EXt. There are numerous examples, that give you an impression about the power of this graphical system as well as the strength of the combination with T_EX.

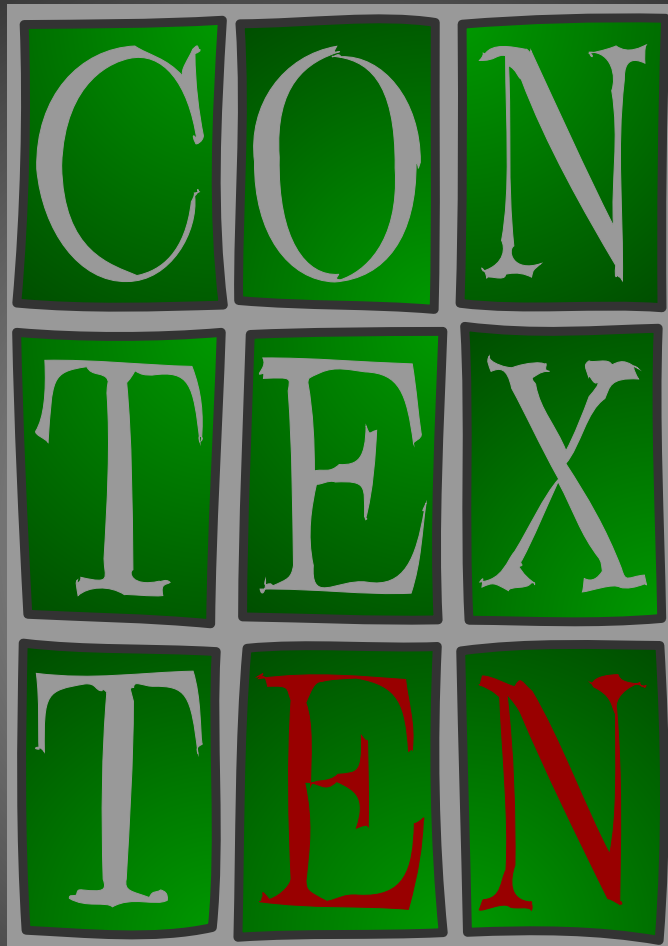




T_EXFONT explained

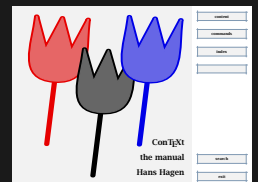
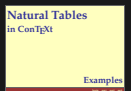
Fonts

Installing fonts is one of the nasty parts of using T_EX. This is why ConT_EXt comes with a Perl script called T_EXfont. You can use T_EXfont to generate font metric files in specified encodings, manipulate fonts, creating instances of multiple master fonts, build map files, etc. The script runs on top of afm2tfm and the mminstance tools.



The Manual

This is the big reference manual, the one that is supposed to cover the whole of ConT_EXt. However, some more detailed aspects are covered in specialized manuals.



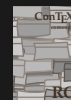
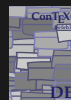
ConTeXt

commands

EN

Quick References

This quick reference manual does not replace the other manuals, but advanced users can benefit from its compactness. The manual can be generated on the user's system, since the style and database that is needed is part of the distribution.



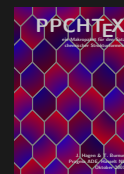
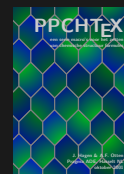
PPCHTEX

a macropackage for typesetting
chemical structure formulas

J. Hagen & A.F. Otten
Pragma ADE, Hasselt NL
October 2001

Chemistry

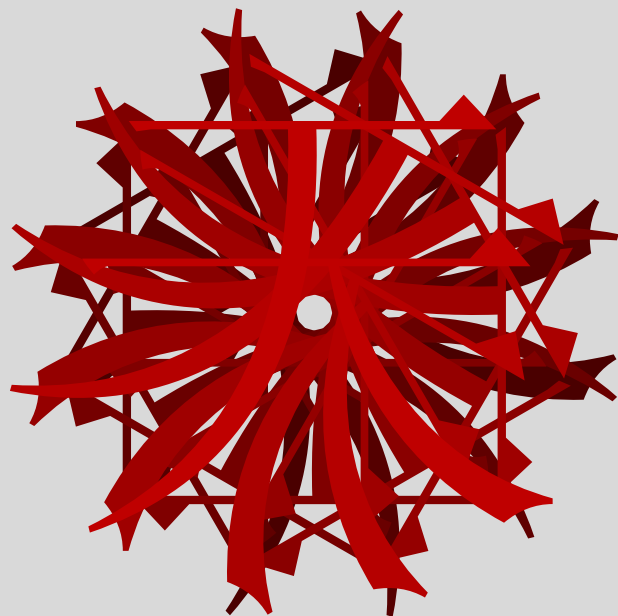
ppchTEX is a relatively independent macro package that can be used to typeset chemical formulas. These manuals show how it's done. There are also some faq's and a suite with many examples.



Chemical Formulas
in ConTeXt

Examples

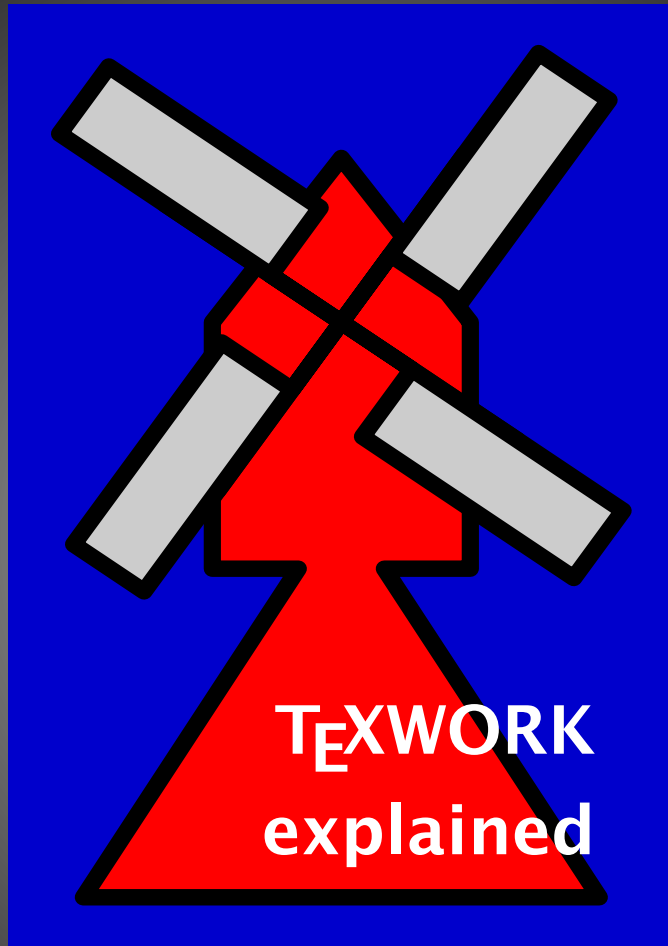
hagen otto otten



Chinese in ConT_EXt

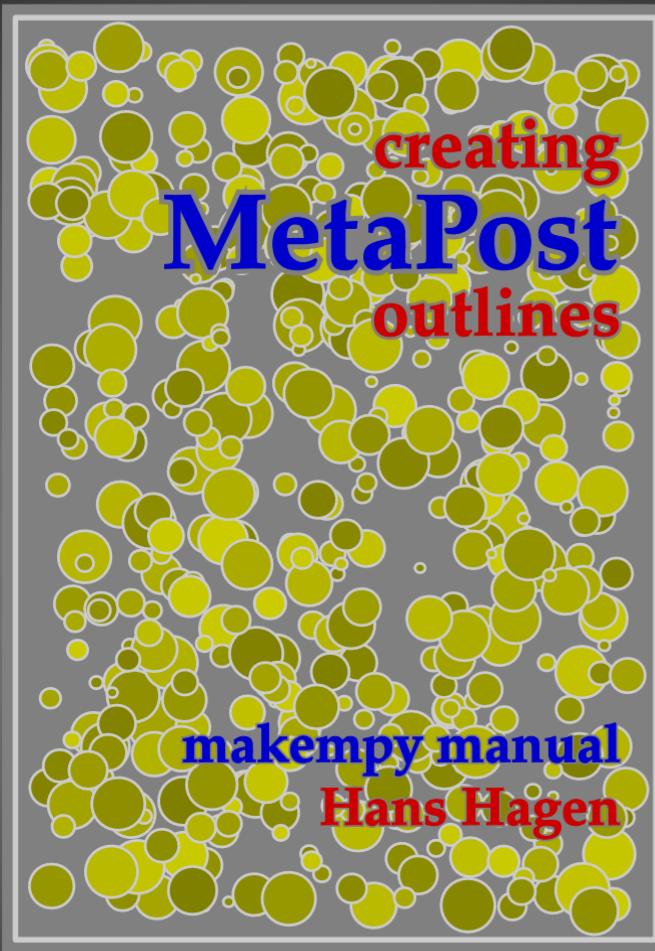
Chinese

In many aspects, typesetting Chinese differs from typesetting Latin languages. Most notably are the pictographic characters, vertical typesetting, multiple numbering systems, and a different way of handling labels. This manual covers the specific font setups, encoding issues, and mixed Latin and Chinese typesetting.



TeXwork

TeXwork is our local editing environment. It is a rewrite of the Modula~2 program TEdit in Perl/Tk.



creating
MetaPost
outlines

makempy manual
Hans Hagen

METAPOST *outlines*

MakeMPY is a Perl script and some macros that make it possible to create outlines from text typeset by \TeX , that can be imported into METAPOST graphics. This toolkit uses pdf \TeX , pdftops, pstoeedit and Ghostscript, and works with any \TeX .

XML in ConT_EXt

introduction
general markup
processing files
defining interfaces
basic workflows
some examples
command reference

PRAGMA ADE | November 9, 2001

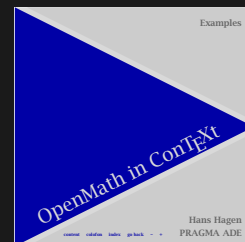
exit begin reference

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XML

Since T_EX can handle ascii input rather well, it will be no surprise that ConT_EXt can handle xml. In this document we describe the interface to xml. We also provide some examples, tips and tricks. This document is still under construction.

MathML



FIGURES

ConT_EXt XML

Pragma ADE / Hasselt NL

Figure Databases

Instead of moving hundreds of graphics around, you can package them in a database. ConT_EXt not only has means to generate such databases, but also can filter the information needed from the corresponding xml files and include graphics by label. Figure bases make it easy to swap high and low resolution graphics.





STEPS

ConT_EXt XML

Pragma ADE / Hasselt NL

Stepcharts

Stepcharts are a specific kind of tabular charts. They are a combination of METAPOST graphics and T_EX code. There is a T_EX as well as xml implementation.



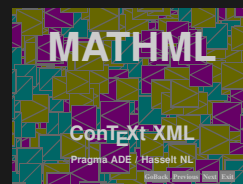
MATHML

ConT_EXt XML

Pragma ADE / Hasselt NL

MathML support

This (short) manual explains how to invoke MathML support in ConT_EXt. It can be seen as an addendum to the MathML manual.





PHYSML

ConT_EXt XML

Pragma ADE / Hasselt NL

PhysML support

Support for physical units is build on top of the MathML engine. The method used is derived from the units module that comes with ConT_EXt.



The background of the slide features a dense, abstract pattern of overlapping squares and rectangles in shades of green, yellow, and red. The word "CHEMML" is prominently displayed in large, white, bold, sans-serif capital letters at the top left of this pattern.

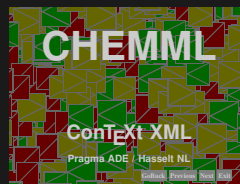
CHEMML

ConT_EXt XML

Pragma ADE / Hasselt NL

ChemML support

Chemical formulas have their own typographic needs. This module provides a way to code atoms, ions, molecules, and a sequence of reactions.





Widgets

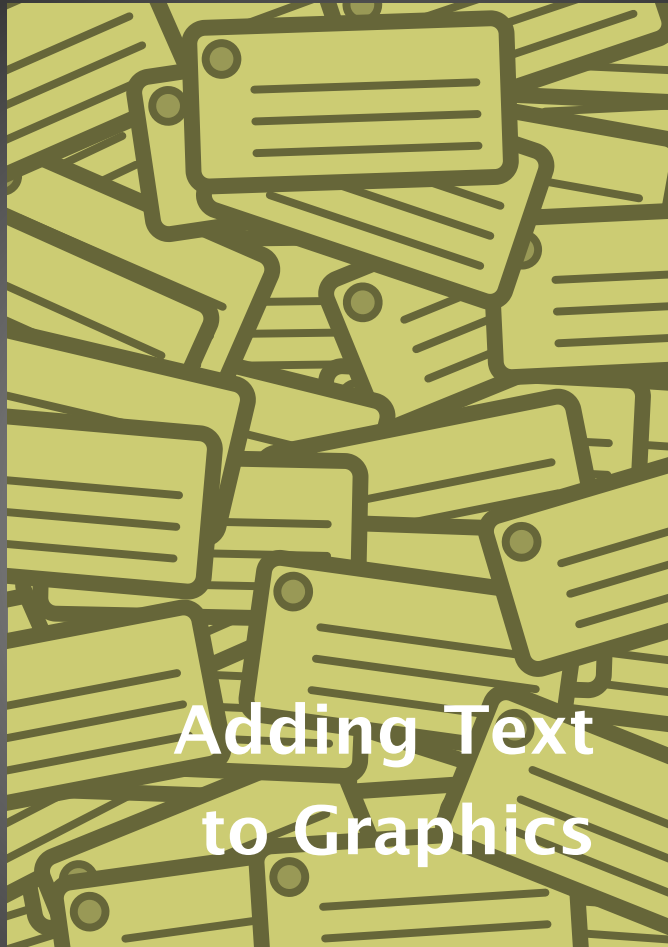
Widgets are interactive elements in (screen based) documents. This manual describes how to use the reference mechanism for advanced hyperlinking, but also discussed how to construct forms. Adding text annotations and page transitions is also discussed.





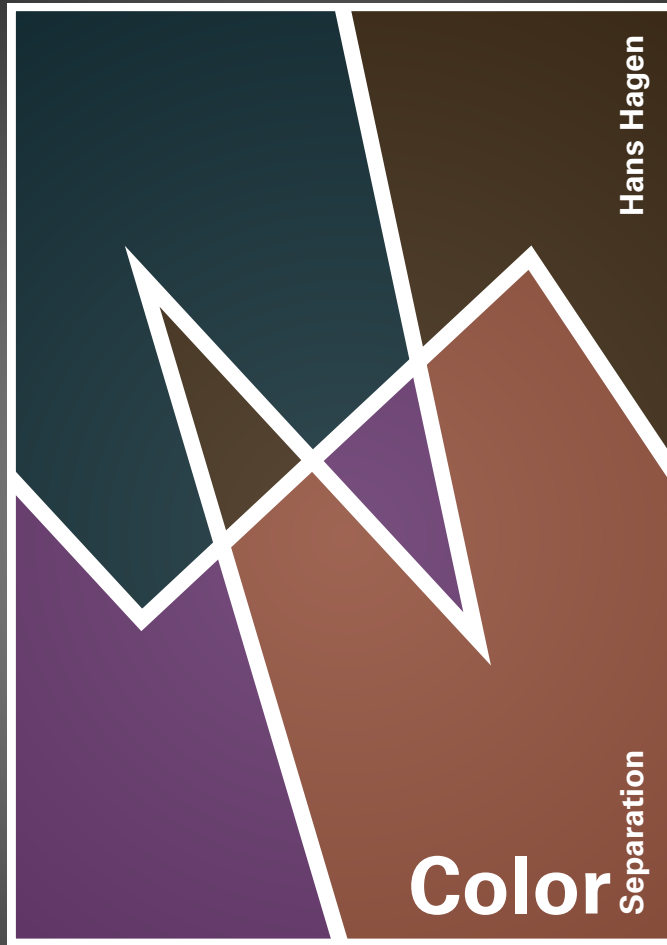
Charts

The flow chart module is an example of combining the power of \TeX and METAPOST. You can use this module to define charts in a descriptive way such that parts can be used, and or charts can be combined. The advantage of using this integrated approach (opposite to dedicated programmes) is that you have the whole Con \TeX t machinery available, like hyperlinks and embedded graphics. Also, by using this module, you have a proper match of fonts between graphics and text.



Labels

The author of a graphic is not necessarily also its graphic designer. In that case it makes sense to split the design of the graphic elements from the process of adding labels. This document describes how to add text to graphics either or not using the resource (figure) library mechanism.

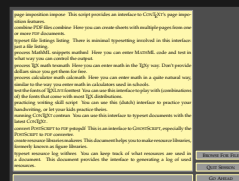


Color separation

This is a manual for those who are forced to deliver their typeset results color separated. The manual describes how to create an instance of a document in a specific color space and channel. Text as well as graphics are covered.

Example GUI

This manual describes how to install a user interface to some of the ConTeXt mechanisms and other programs. In the distribution there are applications for postprocessing documents (page imposition), testing MathML, and converting PostScript files to pdf.



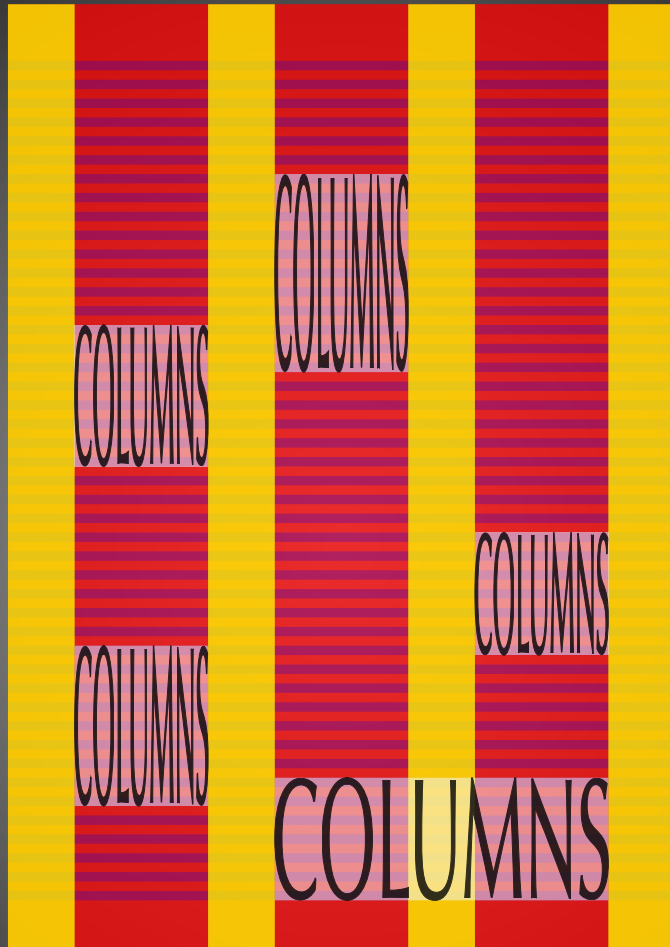


IT'S IN THE DETAILS

HANS HAGEN
PRAGMA ADE
HASSELT NL

It's in the details

This manual is meant for users who want to divert from the more or less traditional looking T_EX documents. There is a strong focus on elements that determine the look and feel of a document, like graphics. (This manual is unfinished)



Extreme

Column sets can be used for quite complex but nice looking layouts. (Behind the screens) this mechanism goes to the extremes of what we can do with T_EX's output routines. With `columnsets` we try to bridge between sequential makeup and semi automated desk top publishing.

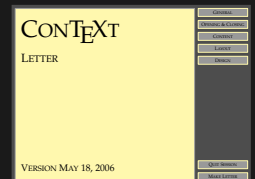


CORRESPONDENCE

Hans Hagen

Correspondence

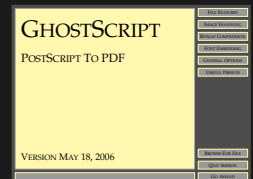
One of the first application at Pragma ADEof \TeX was in typesetting letters. Over time the \TeX only based system moved to a combination of xml and \TeX . This manual roughly describes the components that make up such a system. A graphical user interface is provided as well.





Weaving PS into PDF

This manual describes the `pstopdf` tool that comes with `ConTeXt`. You can use this tool to convert PostScript images into pdf. The program is actually a wrapper around Ghostscript, but applies some additional trickery and filtering. It also supports watched folders and is suited for interfacing to the `eXaMPlE` framework.



SciTE in ConT_EXt

SciTE is an editor and this manual describes how to configure it for use with ConT_EXt and MetaFun. The additional configuration files are part of the ConT_EXt distribution.



SciTE
IN CONTEXT



TEXMFSTART

Hans Hagen – 2003/2006

texmfstart & ...tools

This very short manual demonstrates how you can use `texmfstart` to launch scripts and documents located in your $\text{T}_{\text{E}}\text{X}$ tree. The script uses `kpsewhich` as well as its own (more aggressive) methods for locating the file. The $\text{T}_{\text{E}}\text{X}$ tools manual describes a program that actually is a (growing) collection of small utilities that operate on $\text{T}_{\text{E}}\text{X}$ related files and trees. The `xmltools` manual describes a similar program, this time a collection of utilities that operate on `cq`, produce `xml` files and trees. Finally, the `pdftools` manual deals with the associated program, that operates on `pdf` files. This tool is not yet public.





texsync

texsync

There are several ways to install a T_EX system on your machine. Popular platform dependent distributions are f_pT_EX, t_eT_EX, g_wT_EX and M_ikT_EX, and user groups distribute the nicely packaged T_EXLive collection. At Pragma ADE we use for projects a small subset of T_EX Live, often with the latest ConT_EXt and project specific font trees. The program described in this manual enables you to synchronize with our minimal ConT_EXt tree.



texsync

Hans Hagen – Pragma AIDE

This manual describes how to access information about files on your system from within ConT_EXt. The modules described here are accompanied by features in the T_EXtools script. You can use the styles to generate overviews as well as access properties of files.





just an XML FO engine

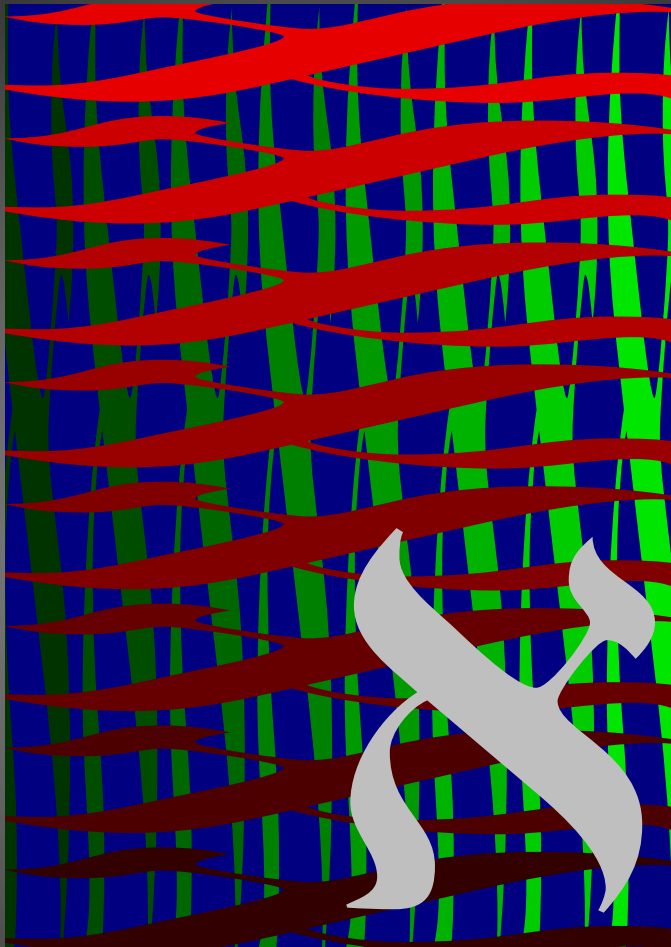
Hans Hagen
PRAGMA ADE

foXet

You can see foXet as just another way of processing xml formatting objects. You may use it to process documents coded in (reasonable) xsl-fo or as (textual) graphics format in ConT_EXt documents, a sort of placed xml.



foXet



Aleph

This document shows a few things that Aleph can do with respect to multidirectional type-setting. This document may change over time and is mostly a testbed and less a manual, although in the end it may evolve into one.

Typographic Programming

Designing styles is a mixture of making the right decisions in setting up the layout, finding the right values for the parameters that determine the typographic quality of the paragraph and page, and writing programs that take care of constructing the special elements that make up the page. This document tries to provide some insight in these matters.

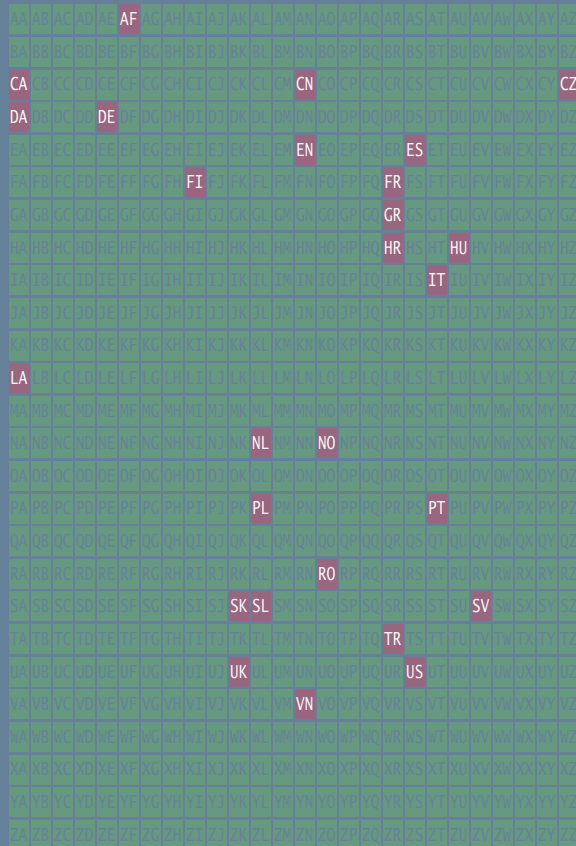
Hans Hagen

Typographic
Programming

Hans Hagen

PATTERNS

HYPHENATION



Hyphenation Patterns

Although normally users are not supposed to know the dirty details of pattern management, it may be handy to read this manual at least once, if only to know what to do when for some reason pattern loading fails on your machine. This manual also describes how to apply the `ctxtools` program to generate generic pattern files from existing encoding specific files.

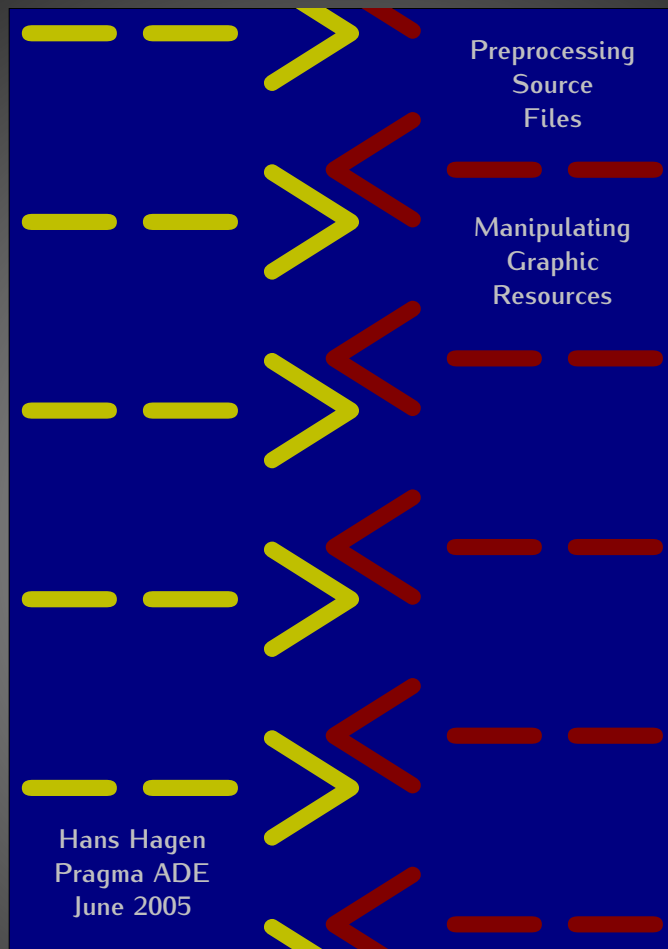
The book cover features a large, stylized yellow 'X' on a blue background. The 'X' is composed of several thick, slightly irregular lines that intersect in the center. The background is a solid blue color. The title 'Modes' is written in a large, bold, yellow sans-serif font at the bottom left. The author's name 'Hans Hagen' is written in a smaller, yellow sans-serif font at the top right.

Hans Hagen

Modes

Modes

Modes are a convenient way to create styles that serve multiple purposes. This manual describes how to enable modes and test for their state. The special system modes that ConT_EXt sets itself are also explained.



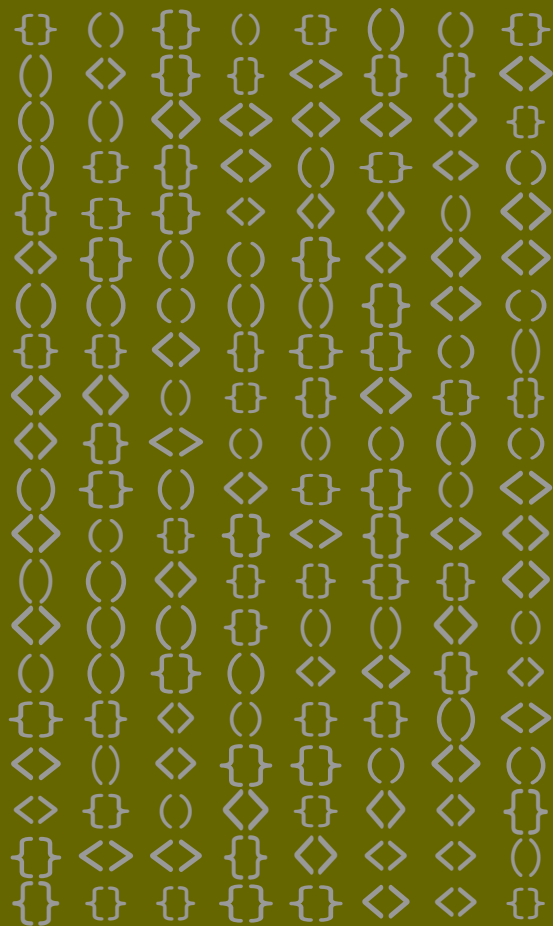
Preprocessing and Manipulating

This manual describes the facilities for automatic preprocessing of source files and manipulation of graphics. These features come in handy in automated typesetting workflows and are handled by \TeX exec and \rlx tools. The definition files are xml based.



ConT_EXt MkII - MkIV, the history of LuaT_EX

This document keeps track of the development history of both ConT_EXt (mkiv) as well as LuaT_EX. It is also one of our torture tests for both (rather related) systems.



MkIV Hybrid Technology

MkIV hybrid technology

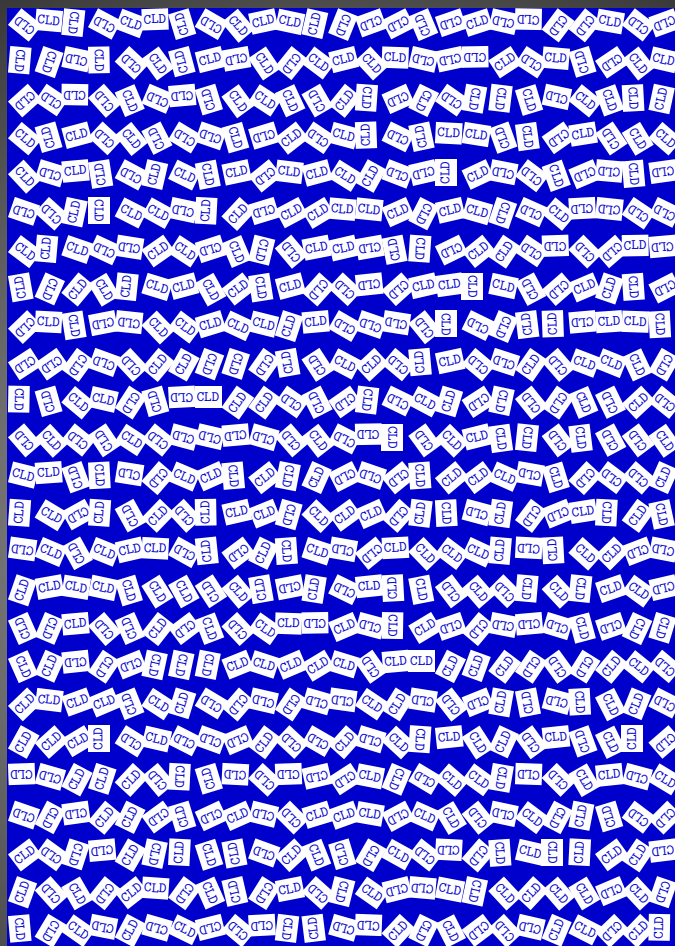
This document keeps track of the development history of both ConT_EXt (mkiv) as well as LuaT_EX from the moment we considered ourselves to be halfway in the project. Like the MK document it is also one of our torture tests. Many of the chapters of MK were first published as articles and the same is true for this document. So, the version published on the web lags behind as we don't want to compete with the user group journals.

How to Deal with XML

ConTExTDealing with XML

This manual explains how to define styles for tree based processing of xml files. This variant showed up in MkIV. The manual also contains examples of filtering content.

DEALING WITH XML IN CONTEXT MkIV



ConTeXt Lua Documents

This short manual describes how to generate documents (structure as well as content) using Lua exclusively. Of course you can also embed such code in your normal \TeX documents but usign Lua has some advantages when you deal with for instance database output.



luatools mtxrun context

Luatools, Mtxrun & Context

Here we discuss the main tools on the ConT_EXt suite of programs. We focus on the luatools tree handler, the mtxrun script manager and the process management tool ConT_EXt.