The manuals Welcome to the suite of 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 for processing . Fonts and 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 and as well as obsolete manuals.

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

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

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 hip variants.

Getting started Although meant for beginners, these manuals shows already a lot of what can do for you. They also demonstrate that documents can be colorful and can contain lots of graphics. , an excursion general/manuals/mp-cb-en general/manuals/ms-cb-en , een rondleiding general/manuals/mp-cb-nl general/manuals/ms-cb-nl

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 available for everyone. 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. general/manuals/mreadme general/manuals/tiptrick

MetaFun If you like graphics, you may like , a collection of macros. The manual covers most of , as well as the interface between this graphical environment and . 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 . general/manuals/metafun-p general/manuals/metafun-s

The Manual This is the big reference manual, the one that is supposed to cover the whole of . However, some more detailed aspects are covered in specialized manuals. This manual is written for but a lot of it still applies to . Especially fonts, encodings and languages are different in . For most commands the user interface hasn't changed, so don't be fooled by the fact that this manual is old. general/manuals/cont-enp general/manuals/cont-eni general/manuals/cont-nlp general/manuals/cont-nli general/manuals/enattab

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. general/qrcs/setup-en general/qrcs/setup-nl general/qrcs/setup-de general/qrcs/setup-cz general/qrcs/setup-fr general/qrcs/setup-it general/qrcs/setup-ro

Chemistry 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. general/manuals/mp-ch-en general/manuals/ep-pchtex general/manuals/mp-ch-nl general/manuals/mp-ch-de general/faqs/fs-ch-en general/faqs/fs-ch-nl general/faqs/fs-ch-de

MathML is a way of coding math in the syntax. This manual not only covers both presentational and content in detail, but also provides many examples and demonstrates ways to fine tune the typeset representation. In addition to the examples documents we also provide some examples of general/manuals/mmlprime general/manuals/mmoexamp general/manuals/mmlexamp

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

Stepcharts Stepcharts are a specific kind of tabular charts. They are a combination of graphics and code. There is a as well as implementation. general/manuals/xsteps-p general/manuals/xsteps-s

MathML support This (short) manual explains how to invoke support in . It can be seen as an addendum to the manual. general/manuals/xmathml-p general/manuals/xmathml-s

PhysML support Support for physical units is build on top of the engine. The method used is derived from the units module that comes with . general/manuals/xphysml-p general/manuals/xphysml-s

ChemML support Chemical formulas have their own typographic needs. This module provides a way to code atoms, ions, molecules, and a sequence of reactions. general/manuals/xchemml-p general/manuals/xchemml-s

Widgets Widgets are interative 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. This manual will be replaced by the manual on interaction. general/manuals/mwidget-p general/manuals/mwidget-s

Interaction Producing interactive documents have always been an integral part of . This manual describes how to configure hyperlinks, comments, attachments, forms and also how to add navigational elements to a document designed for display. general/manuals/interaction

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

SciTE in is an editor and these manuals describes how to configure it for use with and . Beware, the mscite manuals are the old ones, still valid for traditional lexing, while the readme version descibes the latest greatest lexers. general/manuals/scite-context-readme general/manuals/mscite-p general/manuals/mscite-s

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

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 and will be completed when we have time or reason. general/manuals/style

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

MkII - MkIV, the history of LuaTeX This document keeps track of the development history of both (mkiv) as well as . It is also one of our torture tests for both (rather related) systems. general/manuals/mk

MkIV hybrid technology This document keeps track of the development history of both (mkiv) as well as 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. general/manuals/hybrid

Libraries in LuaTeX The interface provides a way to use external (binary) libraries. Recent versions of use this model. general/manuals/libraries-mkiv

SwigLib basics The swiglib project provides a framework for using additional libraries in . Although supports this, it will not depend on external libraries for typesetting. general/manuals/swiglib-mkiv

Columnsets Column sets can be used for quite complex but nice looking layouts. They are used for magazine like layouts and mix well with explicitly placed graphics. The version is a bit different from the version but uses teh same principles. general/manuals/columnsets

Math This a preliminary manual about some aspects of math typesetting. It is not a replacement for the Knuthian references. general/manuals/math-mkiv

Spacing This a work-in-progress manual about aspects of spacing in . general/manuals/spacing-mkiv

Workflows The ecosystem is of course centered around typesetting but in addition comes with all kind of tools and subsystems for managing the process. Here we collect some tips. general/manuals/workflows-mkiv

Publications In we support the format for handling references. The subsystem for dealing is flexible enough to deal with many situations and is extensible as well. It does not depend on external tools and is driven by on the one hand and setups on the other general/manuals/mkiv-publications

Languages The ability to deal with many languages is an important property of systems. Here we cover aspects like hyphenation and language dependent labels. general/manuals/languages-mkiv

Colors Color support is like fonts and languages a core mechanism. This manual is part of the more technical description of features like that. general/manuals/colors-mkiv

About and This is the third document in the series about the development of and . This one goes under the name about as one might wonder what all this development is about. After all we've now reached a state where we can think about future applications instead of improving older features as that process is ongoing. As we're a bit beyond experimenting now, the focus will be on practical usage and of course we target on applications that the and combination makes possible, either new or in a renewed form. general/manuals/about

Dealing with XML This manual explains how to define styles for tree based processing of files. This variant showed up in . The manual also contains examples of filtering content. general/manuals/xml-mkiv

ConTeXt Lua Documents This manual describes how to generate documents (structure as well as content) using exclusively. Of course you can also embed such code in your normal documents but usign has some advantages when you deal with for instance database output. general/manuals/cld-mkiv general/manuals/cld-base

Luatools, Mtxrun & Context Here we discuss the main tools on the suite of programs. We focus on the tree handler, the script manager and the process management tool . general/manuals/tools-mkiv

Extreme Tables This is a short introduction to yet another table mechanism built in . It is a variant of the so called natural tables but it has a different configuration. These tables are faster to process and can span lots of pages. general/manuals/xtables-mkiv

What is ConTeXt Occasionally I run into a description of that contains observations that are somewhat off. This document provides some insight in why this macro package looks the way it looks. What started out as a only system evolved via adding to the current hybrid system that also uses . general/manuals/what-is-context

Units As part of physics support the core provides a mechanism for typesetting units. This manual describes the basics as well as explains how additional units can be added and extra variants of the command can be configured. The manual also introduces the related digits mechanism. The built in support for units should not be confused with the older (incompatible but conceptually similar) units module. general/manuals/units-mkiv

Simple Spreadsheets This module provides an easy way to add calculations to a document in a tabular form. It is not a replacement for a decent spreadsheet program but fits well into regular document processing as done by . general/manuals/spreadsheets-mkiv

LMX templates Templates as described here can be used to construct documents using a more programmatic approach. The method discussed wil stay but might get extended. This mechanism also introduces two new dialects: and . general/manuals/templates-mkiv

Lua libraries This manual describes how to use generic modules outside . The helper functions themselves are discussed in the manuals. general/manuals/lua-mkiv

SQL in context The infrastructure can be quite handy to process output. This manual describes how integrate mysql support into your styles. The libraries can also be used independent from but fit into the package. general/manuals/sql-mkiv

Fonts out of context In and therefore in fonts play an important role. This document describes some of the characteristics of the font system. It is not a manual about using fonts, although some details can be found only here. general/manuals/fonts-mkiv specials/fonts/math-repertoire-modern specials/fonts/math-repertoire-pagella specials/fonts/math-repertoire-termes specials/fonts/math-repertoire-bonum specials/fonts/math-repertoire-xits specials/fonts/math-repertoire-cambria specials/fonts/math-repertoire-lucidanova

Math This manual describes a few aspects of typesetting mathematics in and will evolve over time. general/manuals/math-mkiv

Epub The export option in can produce a basic set of and epub files that can be either used directly (using a css) or enhanced for usage otherwise. This manual gives an overview of the process. general/manuals/epub-mkiv

LuaTeX The version of uses the engine. This engine is an ongoing development and happens in the scope of development. This manual descibes the current version and is offered here for convenience. general/manuals/luatex

Flowcharts The flowchart module is an old one that has been around for a while. It got updated to and wil stay around. general/manuals/charts-mkiv

On and on This is yet another document in the series about the development of and . This time we use the tag onandon to indicate that we never seem to stop moving forwards. The content lags a bit behind in the sense that some chapters are first published in user group journals. general/manuals/onandon

Rules In this manual we cover some aspects of drawing (ornamental) rules in using native rule operators as well as . general/manuals/rules-mkiv

Bidi Right to left typesetting involves directives, fonts, heuristics, and a sometimes dedicated layout. In some mechanism are direction aware. Here we discuss some details. general/manuals/bidi

Musings In this manual we collect articles that don't fit into another manual or collection. Some relate to talks, other to experiences or observations. They are often opinions. general/manuals/musings

Nodes This manual is about a rather neat set of macros to produce node related drawings in and like charts and trees. It also presents some tricks that can be applied elsewhere. general/manuals/nodes

Graphics This manual explains how to insert images into a document. general/manuals/graphics

Still This is the fourth document describing the history of . Most of the development is done, but we keep on playing with the possibilities it offers for . We finally arrive at version 1.0 too. general/manuals/still

Texit Sometimes questions on the mailing list pop up that demand a bit more technical explanation. This manual will collect explanations and insights that don't fit into regular manuals. general/manuals/texit

Publications Like any macro package has to support bibliographies. This manual describes in great detail how to copye with this, and especially databases and finetuning the rendering. We got rid of depdencies of external programs and all happens in . This also opens up access to the data to users for various purposes. general/manuals/mkiv-publications

Page columns There are several column mechanisms and this is one of them. It boils down to treating each column as a page which in turn means that we can do for instance side floats. This manual might also give you an idea about its usability. general/manuals/pagecolumns

Not now This is more an excuse manual: why are some features not supported or limited. general/manuals/notnow

Traditional is hard to control on the commandline. This is why comes with , a script that makes document processing more convenient. This script also helps you to postprocess files, typeset documentation, arrange pages, and manage files. general/manuals/mtexexec

Fonts Although installation of and friends has become relatively easy, fonts always will be a special case. This is a result from the flexibility of , as well as the fact that can typeset virtually any language. The font manual covers the installation of fonts in and describes in detail how to define typescripts, how to achieve special effects, like hanging punctuation, and how to set up math fonts. general/manuals/mfonts general/manuals/showfont general/manuals/showunic

Fonts Installing fonts is one of the nasty parts of using . This is why comes with a script called . You can use 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. general/manuals/mtexfont Chinese In many aspects, typesetting Chinese differs from typesetting Latin languages. Most noticably 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. general/manuals/mchinese

outlines is a script and some macros that make it possible to create outlines from text typeset by , that can be imported into graphics. This toolkit uses , pdftops, pstoedit and , and works with any . general/manuals/mmakempy

XML Since can handle input rather well, it will be no surprise that can handle . In this document we describe the interface to . We also provide some examples, tips and tricks. This document is still under construction. general/manuals/example

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. general/manuals/msplit

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

Charts The flow chart module is an example of combining the power of and . 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 programns) is that you have the whole machinery available, like hyperlinks and embedded graphics. Also, by using this module, you have a proper match of fonts between graphics and text. general/manuals/mchart

Weaving PS into PDF This manual describes the tool that comes with . You can use this tool to convert images into . The program is actually a wrapper around , but applies some additional trickery and filtering. It also supports watched folders and is suited for interfacing to the framework. general/manuals/mpstopdf examplap/gui/pstopdf

texmfstart & ...tools This very short manual demonstrates how you can use to launch scripts and documents located in your tree. The script uses as well as its own (more aggressive) methods for locating the file. The manual describes a program that actually is a (growing) collection of small utilities that operate on related files and trees. The manual describes a similar program, this time a collection of utilities that operate on cq. produce files and trees. Finally, the manual deals with the associated program, that operates on files. This tool is not yet public. general/manuals/mtexmfstart general/manuals/mtextools general/manuals/mxmltools general/manuals/mpdftools

Hyphenation Patterns Although normally users are not supposed to know the dirty details of pattern management, it may be handy to read this manuals 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 program to generate generic pattern files from existing encoding specific files. general/manuals/mpattern

foXet You can see as just another way of processing formatting objects. You may use it to process documents coded in (reasonable) or as (textual) graphics format in documents, a sort of placed . general/manuals/xmlfoe general/manuals/foxet

Correspondence One of the first application at of was in typesetting letters. Over time the only based system moved to a combination of and . This manual roughly describes the components that make up such a system. A graphical user interface is provided as well. general/manuals/xcorresp examplap/gui/letter examplap/gui/envelop

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 and . The definition files are based. general/manuals/xmanipulate

Installation When one uses , , , or Live, installation of is a breeze. Nevertheless, in this manual, we provide some information on installing . general/manuals/minstall general/manuals/tiptrick

The script deals with files, especially the second pass data file. It moves information around and sorts indexes and lists. This script is the natural companion of . general/manuals/mtexutil

is our local editing environment. It is a rewrite of the Modula~2 program in . general/manuals/mtexwork

Labels The author of a graphic is not neccessarily 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. general/manuals/mlabels

Example GUI This manual describes how to install a user interface to some of the mechanisms and other programs. In the distribution there are applications for postprocessing documents (page imposition), testing , and converting files to . general/manuals/ex-gui examplap/gui/examplap

texsync There are several ways to install a system on your machine. Popular platform dependent distributions are , , and , and user groups distribute the nicely packaged collection. At we use for projects a small subset of Live, often with the latest and project specific font trees. The program described in this manual enables you to synchronize with our minimal tree. general/manuals/mtexsync-p general/manuals/mtexsync-s

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