

# ConT<sub>E</sub>Xt

## Updating

The ConT<sub>E</sub>Xt distribution consists of several zipped archives. You need to unpack these in the appropriate directory of your file system. When using `unzip` on UNIX, you should say:

```
unzip -L -a archive.zip
```

The next files make up the official ConT<sub>E</sub>Xt distribution:

```
cont-tmf.zip  the all including ConTEXt distribution
cont-ppc.zip  PPCHTEX when no ConTEXt is installed
cont-uti.zip  TEXUTIL only
```

For processing documentation, you will need

```
cont-doc.zip  documentation styles
```

but this file is not yet documented and therefore not yet public.

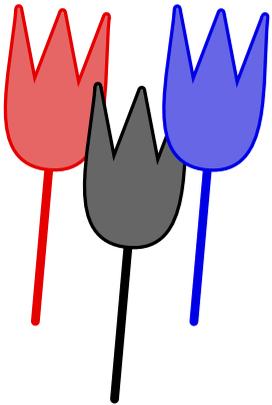
When you are using `teTEX` or derived distributions, you can stick to the usual `teTEX` updates. That way no duplicate copies will be present on your system. If you want to update anyway, you can `unzip cont-tmf.zip` from within the `texmf` directory.

The PPCH<sub>T</sub>E<sub>X</sub> only archive is for users who maintain their own files and only want to install this package. The T<sub>E</sub>XUTIL archive is for those who want to use this script, but don't want to install ConT<sub>E</sub>Xt. Both archives are *not* needed in `teTEX`.

Currently ConT<sub>E</sub>Xt and PPCH<sub>T</sub>E<sub>X</sub> are rather stable, so updating is not so much an issue. In practice this means that `LATEX` users never need to update, while ConT<sub>E</sub>Xt users can stick to the `tmf` archive.

To prevent duplicate entries, we strongly advise to obey the path as coded in the archives. Among those are:

```
texmf/tex/context/base    all ConTEXt core files, modules
texmf/tex/context/local   user specific files
texmf/tex/context/<third>  third party extensions to ConTEXt
texmf/tex/generic/context the non ConTEXt specific files
texmf/metapost/context    the METAPOST modules
```



<somewhere>/bin

the PERL scripts

On UNIX, the PERL scripts should be installed without the `.pl` extension, because these scripts and possibly other programs rely on these names. They should be moved to search path for commands.

The initialization files for  $\text{T}_{\text{E}}\text{X}_{\text{E}}\text{X}_{\text{E}}\text{C}$  go into `texmf/context` ( $\text{t}_{\text{e}}\text{T}_{\text{E}}\text{X}$ ) or into the same directory as the binaries. When setting up  $\text{t}_{\text{e}}\text{T}_{\text{E}}\text{X}$ , make sure you enable generation of the format files, using:

```
fmtutil --edit
```

The fonts go to the corresponding places in the fonts tree, again organized under the subpaths.

```
texmf/fonts/hoekwater/context/tfm    the files with suffix tfm
texmf/fonts/hoekwater/context/afm    the files with suffix afm
texmf/fonts/hoekwater/context/type1  the files with suffix pfb
```

## Format generation

$\text{C}_{\text{O}}\text{N}_{\text{T}}\text{E}_{\text{X}}\text{T}$  is a full featured macro package, written in the typographic language  $\text{T}_{\text{E}}\text{X}$ .  $\text{C}_{\text{O}}\text{N}_{\text{T}}\text{E}_{\text{X}}\text{T}$  is parameter driven and has a multi-lingual interface. Currently there are three such interfaces: dutch, english and german. Therefore there are several ways to generate a format.

```
to get a the dutch interface, compile cont-nl.tex
to get a the dutch interface, compile cont-en.tex
to get a the dutch interface, compile cont-de.tex
```

and

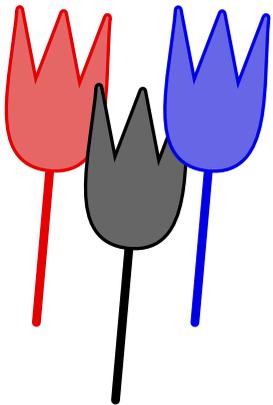
```
to get a mixed interface, compile context.tex
```

The most convenient way of generating a format is using the PERL bases command line interface to  $\text{C}_{\text{O}}\text{N}_{\text{T}}\text{E}_{\text{X}}\text{T}$ :

```
texexec --make en de nl
```

## User settings

The hyphenation pattern are sort of hard coded in a format file and cannot be loaded at run time. When other patterns are requested than the ones loaded by default, one should adapt the file `cont-usr.tex`. This



file is loaded at format generation time. When for instance italian patterns are to be used, given that these are available in the file `lang-it.pat`, one must uncomment the line:

```
\installlanguage [\s!it] [\c!status=\v!start] % italian
```

The funny `\s!` and `\c!` things are needed in order to support multiple interfaces. Don't touch these! If you use a context format with the name `cont-...`, you probably don't have to edit this file.

The more run time specific settings, like certain special drivers, can be added to `cont-sys.tex`. This file is loaded at run time. This file for instance can contain the line:

```
\setupoutput[pdftex]
```

This commands tells `CONTEXT` to support `PDFTEX`. For Y&Y and Acrobat support, you just say:

```
\setupoutput[dviwindo,acrobat]
```

Of course one can also load location specific layout settings in this file. It is not that bad an idea to save copies of both files.

We *strongly recommend* to use `PDF-E-TEX`. By default, `CONTEXT` generates DVI output for `DVIPS`, unless the output is specified otherwise. We already mentioned the `\setupoutput` command. A second way of achieving this is:

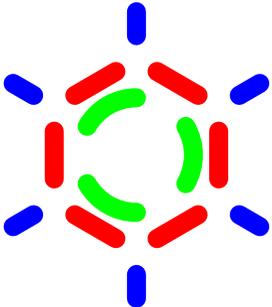
```
texexec --pdf filename
```

And yet another way (when using `TEXEXEC`) is adding a comment line in the document source, like:

```
% interface=en output=pdf tex=pdftex
```

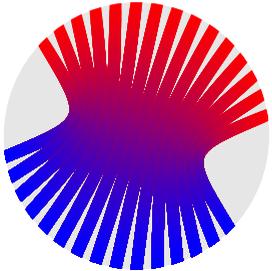
Normally `TEXEXEC` is able to sort out the interface itself. Defaults can be set in the file `texexec.ini`.

When using `WEB2C`, in `texmf.cnf` some `CONTEXT` specific memory settings take place. When directly generating a format —i.e. when you're not using the `teTEX` initialization script or `TEXEXEC`— make sure you supply the program name: `-progrname=context`



## ppchT<sub>E</sub>X

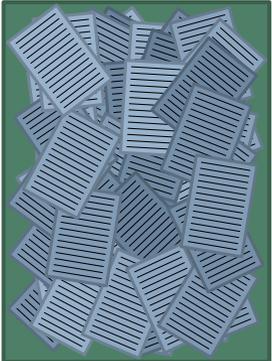
The chemical module PPCHT<sub>E</sub>X can, although primary written for CONT<sub>E</sub>X<sub>T</sub>, also be used in other packages. All the information needed to use this package can be found in the documentation.



## TEXUTIL

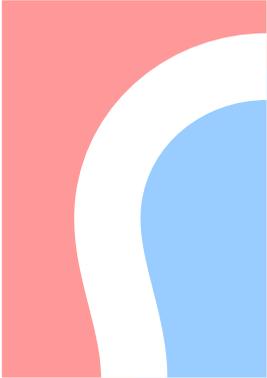
Originally written in Modula 2, TEXUTIL now is a Perl script. TEXUTIL is needed by CONTEXT for translating the CONTEXT generated utility file with the extension `tui` into one suffixed `tuo`. This utility takes care of sorting lists as well as registers, of which there can be many. The utility file is also used to store all kind of tables of contents, floats and whatever as well as two pass optimization data.

Like CONTEXT, TEXUTIL has a multi-lingual interface. Just invoke the script without arguments and you'll be told what to do. Apart from taking care of the utility file, TEXUTIL can be used to generate documentation files, graphic directories, log file excerpts and some more.



## TEXEXEC

We strongly advise you to use TEXEXEC as a command line to CONTEXT. This PERL script takes care of second pass runs, gives you some output options, loads special drivers, etc. Some basic help information is available.



## Nice to know

### Updates

Apart from typographic optimizations, future versions of `CONTEXT` and its related modules will be downward compatible. Some features in the current version are still experimental and therefore not documented. Many of such hidden features can be used without problems, and when in search for some feature that is not or ill documented, one can best ask the authors for more information. The most recent version can be found at the PRAGMA ADE site [www.pragma-ade.nl](http://www.pragma-ade.nl) and at the mirrors mentioned there.

### Bugs

Of course we cannot guarantee that `CONTEXT` is bug free. In the process of documenting the system, as well as translating the underlying macros into english, bugs can be introduced. Such bugs are rather harmless and can be removed rather easy. Just report any error and you'll be rewarded with an update.

### Mailing lists

There are two dedicated mailing lists hosted by the NTG:

the `CONTEXT` mailing list: [ntg-context@ntg.nl](mailto:ntg-context@ntg.nl)

the `ppchTEX` mailing list: [ntg-ppchtex@ntg.nl](mailto:ntg-ppchtex@ntg.nl)

These lists are so called *majordomo* ones, therefore one should send a subscription command to:

[majordomo@let.uu.nl](mailto:majordomo@let.uu.nl)

The subscription command `subscribe ntg-context` goes into the body of the message. Of course one can also directly contact the authors at:

PRAGMA ADE: [pragma@wxs.nl](mailto:pragma@wxs.nl)

# Using ConT<sub>E</sub>Xt

## introduction

[1.1] This document describes the principles behind ConT<sub>E</sub>Xt, a full featured macro package, written in the typographical programming language T<sub>E</sub>X. Here we also describe the conditions for (re)distributing the source code of ConT<sub>E</sub>Xt and accompanying PERL and METAPOST scripts.

[1.2] The name ConT<sub>E</sub>Xt is reserved for the distribution as provided by PRAGMA ADE. This distribution is copyrighted and licenced in the spirit of the GNU general public licence. To prevent problems with distributions and to ease support, we will stress some details of adapting sources and distributions.

[1.3] The graphic logos associated to PRAGMA ADE, ConT<sub>E</sub>Xt, T<sub>E</sub>XUTIL and related programs are copyrighted by PRAGMA ADE and may not be used without permission.

[1.4] Whenever one of the source files of ConT<sub>E</sub>Xt mentions the file being copyrighted by PRAGMA ADE, the conditions mentioned in this document apply.

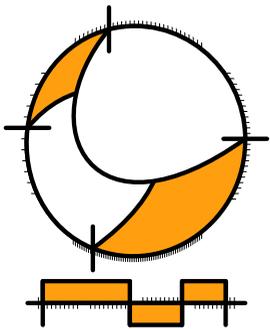
## principles

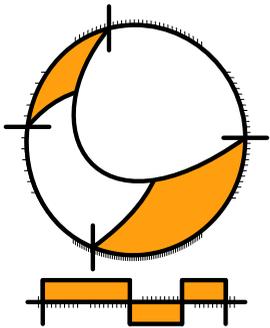
[2.1] PRAGMA ADE originally developed ConT<sub>E</sub>Xt for producing highly inter-related documents as used in educational settings and process industry. Currently ConT<sub>E</sub>Xt is also used for typesetting complex documents like quality assurance manuals and large scale publications of publishing houses, to be distributed on paper as well as electronically. These applications require a stable but flexible system.

[2.2] One of the objectives of ConT<sub>E</sub>Xt is the low entry level, that is, for day-to-day use no special technical (and no in-depth T<sub>E</sub>X) knowledge is needed. This is reflected in the user interface. We don't expect users to be experts on installing T<sub>E</sub>X and adapting macros for local use.

[2.3] Further development of ConT<sub>E</sub>Xt takes place at PRAGMA ADE with the help and input from some active users. All kind of input from users is welcome and will be taken seriously. When we talk about ConT<sub>E</sub>Xt, we refer to the version as distributed by PRAGMA ADE and described in the official reference manual.

[2.4] All general typographic, data abstraction, and manipulative functionality is available in the core system. Domain and task specific modules are (and will become) available on top of this core.





[2.5] Users can write their own extensions using the hooks available in `CONTEXT`. Such hooks make it possible to keep the core and modules intact. More hooks will be provided at request.

[2.6] A stable version of `CONTEXT` is available for free for everyone who want to use it. Experimental, and thereby potentially non-stable, versions as well as certain dedicated modules, will be distributed under different conditions.

[2.7] Modules to `CONTEXT` or adapted source code written by `PRAGMA ADE` for third parties as part of a project may not be distributed outside that organization. When decided as such, these modules will become part of the public distribution.

### public version

[3.1] The most recent stable version of `CONTEXT` is available as free software under the conditions of the GNU general public licence.

[3.2] This public version can be considered to be the ‘official public `CONTEXT` distribution’.

[3.3] The official version includes `TEX` macro files as well as some utility programs written in PERL and PERL/TK and some graphic macros written in the `METAPOST` language.

[3.4] The official version may only be redistributed as a whole, including this licence.

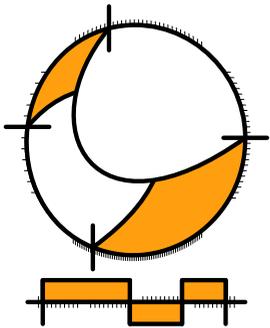
[3.5] This licence does not apply to components of the official version that are provided by third parties.

### third party developments

[4.1] This sections will not introduce limitations in use that conflict with the GNU general public licence. We only want to make sure that the average user will get the `CONTEXT` they expect and that we can continue to support users efficiently.

[4.2] Every user is free —and we even encourage that— to develop modules cq. layout definition files for `CONTEXT`. However, the interface of such modules should fit as much as possible in the general scheme.

[4.3] Special attention must be paid to keywords and command names. Because we want `CONTEXT` to be as consistent as possible, those who write their own modules can best conform to the already defined keywords and make sure that commands will not clash with existing ones. An example of extending the user interface can be seen in the `PPCHTEX` module. The less commands a module introduces, the better!



[4.4] On request, additional keywords and command names can be approved and/or assigned by the `CONTEXT` Task Force and, when accepted, will be added to the validated definition files. The same applies to the names of files and auxiliary variables. When possible, these should conform the naming scheme laid down in the documentation.

[4.5] Third party modules (and layout files) will not automatically become part of the `CONTEXT` distribution, but will be collected and distributed separately. One reason for this is that they fall outside the maintenance responsibility of `PRAGMA ADE`. This also means that for instance in the `texmf` directory structure, the `context/base` location is reserved for the official distribution. Addition should go into `context/<third>` and user specific things into `context/local`.

[4.6] Users may not change the official distribution and redistribute that changed version as being the official one. This ensures that the integrity of `CONTEXT` can be guaranteed. Local settings e.g. bug fixes can be added in the files `cont-sys` and `cont-new`.

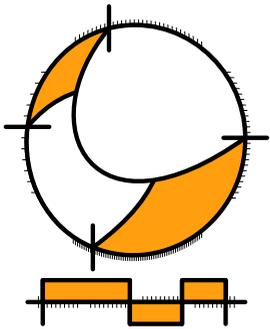
[4.7] When adapted versions of `CONTEXT` are distributed, these versions must contain the original distribution as a separate entity. The runtime versions (format files) must have different names and changed files must issue an additional `\writestatus` message, expressing that something is changed. The rationale behind this is that some modules are generic, and are sometimes distributed on request separately. When distributing self contained modules and styles, a full distribution of originals is not required.

[4.8] Because many `TEX` systems support recursive directory search, those who write extensions or change files, must make sure that the original `CONTEXT` does not suffer from loading the wrong files. We realize that this is not always easy, but please keep in mind that there are many users who cannot sort out these problems. Together we must guarantee that when users want to run original `CONTEXT`, nothing unexpected is loaded, because it makes support nearly impossible.

[4.9] Because `CONTEXT` is a monolithic system, and because hooks are provided, adaptations and extensions can best be put and/or loaded in the file `cont-new` which itself is loaded at run time. That way, users can still benefit from official updates.

[4.10] Changes in the original files must be marked as such and the welcome banner must clearly identify that a changed `CONTEXT` is used.

[4.11] The auxiliary programs may be adapted to local conditions, like operating systems specifics, but as soon as functionality is changed, removed or added, they must identify themselves as being changed. They must also bear different names.



[4.12] The same rules apply for the METAPOST macro files as for the T<sub>E</sub>X macro files.

[4.13] Support of the official public version of CON<sub>T</sub>E<sub>X</sub>T mostly takes place by means of CON<sub>T</sub>E<sub>X</sub>T mailing list, as hosted by the NTG.

[4.14] Support for commercial use is subjected to different conditions. Parties, other than members of the CON<sub>T</sub>E<sub>X</sub>T task force, that want to use the latest (experimental) versions and direct support, can contact PRAGMA ADE on the specific conditions and the level of support they can get.

## manuals

[5.1] Introduction manuals, reference documentation, module related manuals, quick reference guides, up-to-date documents, faqs, documented sources, and alike are available in paper and/or electronic form at several locations on the WWW. These documents may not be changed and serve as reference to the official version.

[5.2] Users are free to provide additional documentation to users. The official documentation provided by PRAGMA ADE may only be processed by PRAGMA ADE, although for testing purposes on request we sometimes permit local processing.

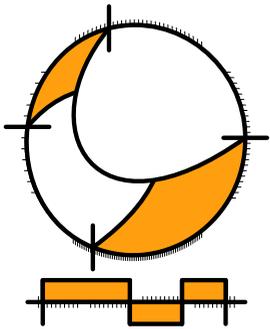
[5.3] Because the manuals provided by PRAGMA ADE are also examples of what can be done by CON<sub>T</sub>E<sub>X</sub>T, their layout is bound to these documents. In large this also applies to the whole CON<sub>T</sub>E<sub>X</sub>T demonstration suite. Additional, third party documentation, therefore may not use the same layout characteristics, like graphics (and tricks), unless permission is granted.

## garantees

[6.1] Given the characteristics of CON<sub>T</sub>E<sub>X</sub>T, PRAGMA ADE cannot guarantee the typographic quality and the functionality of the output. This leaves alone that functionality and quality as provided will remain and even improve.

[6.2] When possible, typographic optimizations will take place and wishes cq. suggestions of users be honoured. Nevertheless, no guarantees are given.

[6.3] When additional functionality is provided, downward compatibility is guaranteed within reasonable bounds.



[6.4] Users of experimental modules should be aware of the fact that due to further optimization and consistency, the functionality will only be stable when explicitly stated. The common user will hardly notice this limitation.

[6.5] The generic modules can be used in other macro packages. Such modules are subjected to optimizations and therefore should be left unchanged.

[6.6] Undocumented macros and functionality are subjected to optimizations and use of them is ill advised.

### distribution

[7.1] The official `CONTEX`T is available at the `PRAGMA ADE` www site, as well as on mirrors of this site, provided by the `NTG` and `CTAN`. The free `TEX` distribution `teTEX` can be considered as a reference to integrating `CONTEX`T into a `TEX` system.

[7.2] `CONTEX`T may be distributed as part of a public distribution in the spirit of free distributions. The authors of `CONTEX`T appreciate being notified on this.

[7.3] Each distribution of `CONTEX`T should include a copy of this text.

### additional junk

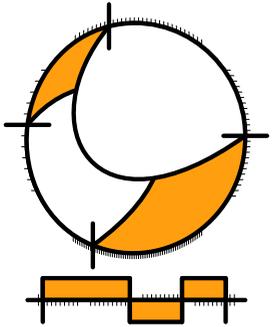
Just to be sure, we include some additional conditions here, especially meant for our USA friends. Forgive us the ugly uppercase typography: it's what people seem to like.

[8.1] BY MODIFYING OR DISTRIBUTING THE PROGRAM (OR ANY WORK BASED ON THE PROGRAM), YOU INDICATE YOUR ACCEPTANCE OF THIS LICENSE TO DO SO, AND ALL ITS TERMS AND CONDITIONS FOR COPYING, DISTRIBUTING OR MODIFYING THE PROGRAM OR WORKS BASED ON IT. NOTHING OTHER THAN THIS LICENSE GRANTS YOU PERMISSION TO MODIFY OR DISTRIBUTE THE PROGRAM OR ITS DERIVATIVE WORKS. THESE ACTIONS ARE PROHIBITED BY LAW. IF YOU DO NOT ACCEPT THESE TERMS AND CONDITIONS, DO NOT MODIFY OR DISTRIBUTE THE PROGRAM.

[8.2] THE PROGRAM IS PROVIDED TO YOU "AS IS", WITHOUT WARRANTY. THERE IS NO WARRANTY FOR THE PROGRAM, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM

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**March 27, 1999**

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