



**“Minimal”
ConTeXt
Distribution**

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Specifics of ConTExT

- ▶ **regular updates**
 - ▷ sometimes several times per day
 - ▷ when testing new features,
desirable to get quick feedback from users

Specifics of ConT_EXt

- ▶ **regular updates**
- ▶ **dependency on latest binaries**
 - ▷ pdf_ET_EX renamed to pdfT_EX
 - ▷ some X_ET_EX's additions after T_EX Live 2007
 - ▷ the very latest luaT_EX

Specifics of ConT_EXt

- ▶ **regular updates**
- ▶ **dependency on latest binaries**
- ▶ **dependency on latest fonts**
 - ▷ recent name changes of Latin Modern
 - ▷ ready to replace URW by T_EX Gyre

Specifics of ConTEXt

- ▶ regular updates
- ▶ dependency on latest binaries
- ▶ dependency on latest fonts
- ▶ test bed for fonts & new engine features
- ▶ own format generation, map files, hyphenation patterns, kpathsea replacement, ...

Existing Distributions

▶ MikTeX

- ▷ great package management
- ▷ difficult/impossible to update binaries
- ▷ only for Windows
- ▷ no luaTeX (yet)
- ▷ ConTeXt only updated at major changes

Existing Distributions

- ▶ **MikTeX**
- ▶ **TeX Live**
 - ▷ multi-platform
 - ▷ possible to update binaries (compatible libraries)
 - ▷ updated only once per 1.5 years – almost obsolete :-)

Existing Distributions

- ▶ **MikTeX**
- ▶ **TeX Live**
- ▶ **W32TeX**
 - ▷ regularly updated – latest ConTeXt & luaTeX
 - ▷ needs to be updated manually
 - ▷ only for windows

Existing Distributions

- ▶ MikTeX
 - ▶ TeX Live
 - ▶ W32TeX
- ==> highly L^ATeX-oriented

Why a new distribution?

- ▶ installing/updating Con \TeX t/lu \TeX too complicated
 - ▷ compile the latest lu \TeX or download from W32 \TeX
 - ▷ copy it to the proper place
 - ▷ download latest Con \TeX t, put it to the proper place
 - ▷ update the scripts in binary folder
 - ▷ update kpathsea & lu \TeX file database
 - ▷ regenerate all the formats

Why a new distribution?

- ▶ installing/updating ConTeXt/luatEX too complicated

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Why a new distribution?

- ▶ installing/updating ConTeXt/luatEX too complicated
- ▶ inspired by Hans's distribution
 - ▷ standard & great, no installation needed
 - ▷ no L^AT_EX
 - ▷ reasonably small when compared to other distros
 - ▷ still large for regular updates of the whole distribution
 - ▷ takes some time to generate them – not the most favourite Hans's task (last update in August)
 - ▷ minimal change → download everything
 - ▷ either fresh install or no files deleted

On the user side

- ▶ **rsync is used to download & update**
 - ▷ less traffic: only new files transferred
 - ▷ old files deleted automatically
- ▶ **no installation needed**
 - ▷ a script sets environmental variables when needed
in my `.bash_profile`:
 - ▷ `source context/tex/setuptex context/tex`
- ▶ **modularized**
 - ▷ users (should be able to) choose what to download

Rsync example

```
rsync -av --delete --exclude '*.zip' --exclude '*/tex/latex' \  
  rsync://www.ctan.org'/FONTS/lm FONTS/tex-gyre FONTS/antt FONTS/iwona FONTS/kurier' \  
 \  
  local-fonts-folder
```

On the server side

► binaries

- ▷ (latest) pdf \TeX & METAPOST
- ▷ latest X \TeX
- ▷ latest lua \TeX with mplib
- ▷ some other essential binaries (Bib \TeX , kpathsea, ...)
- ▷ no \TeX , METAFONT, \aleph , Ω , ...

On the server side

- ▶ **binaries**
- ▶ **base files**
 - ▷ plain $\text{T}_{\text{E}}\text{X}$ & METAPOST
 - ▷ mapping files for $\text{X}_{\text{E}}\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$

On the server side

- ▶ **binaries**
- ▶ **base files**
- ▶ **fonts**
 - ▷ Latin Modern
 - ▷ Iwona, Kurier, Antykwa Toruńska (waiting for Półtawskiego), T_EX Gyre
 - ▷ basic AMS fonts
 - ▷ txfonts, pxfonts (waiting for T_EX Gyre math)
 - ▷ ... *others on request* ...
 - ▷ no CMR & URW
 - ▷ no L^AT_EX-specific files (.fd etc.)

On the server side

- ▶ **binaries**
- ▶ **base files**
- ▶ **fonts**
- ▶ **ConT_EXt**
 - ▷ current, beta & experimental (`--context=beta`)
 - ▷ dated versions (`--context=2008.04.30`)
 - ▷ documentation
 - ▷ modules from the garden

On the server side

- ▶ **binaries**
- ▶ **base files**
- ▶ **fonts**
- ▶ **ConT_EXt**
- ▶ **miscellaneous**
 - ▷ rsync for Windows
 - ▷ SciTE, ruby, perl, xml tools, ... for Windows

More about Fonts

- ▶ it would help if CTAN had fonts so well organised as the Polish fonts are (apart from Antykwa Półtawskiego)
- ▶ remove all L^AT_EX-specific files
- ▶ remove unneeded map, enc, tfm, afm files
- ▶ split files in several groups:
 - ▷ OpenType files (for lua_TE_X & X_YL_AT_EX)
 - ▷ common files needed for math (shared between engines)
 - ▷ old tfm, enc, map, pfb, ... (for pdf_TE_X)
- ▶ one can decide to only install lua_TE_X or X_YL_AT_EX: no need to download the whole font mess

Supported Platforms

- ▶ Windows
- ▶ Linux & 64-bit Linux
- ▶ Mac OS X Intel & PowerPC
- ▶ FreeBSD
- ▶ Sparc Solaris
- ▶ ... *others on request* ...

Sources

► binaries

- ▷ Windows: W32T_EX
- ▷ basic programs (kpathsea, BibT_EX, ...): T_EX Live
- ▷ pdfT_EX, X_YT_EX, luaT_EX, METAPOST
compiled from sources
(Mojca, Arthur, Peter Münster, Yue Wang, ...)
virtual machine(?)

Sources

- ▶ **binaries**
- ▶ **base files**
 - ▷ T_EX Live

Sources

- ▶ **binaries**
- ▶ **base files**
- ▶ **fonts**
 - ▷ CTAN
 - ▷ switch to GUST at new releases
 - ▷ automatic daily updates

Sources

- ▶ **binaries**
- ▶ **base files**
- ▶ **fonts**
- ▶ **ConT_EXt**
 - ▷ pragma-ade.com
 - ▷ modules from the garden
 - ▷ TikZ from SVN (reshuffled to meet TDS)
 - ▷ automatic hourly updates

Sources

- ▶ **binaries**
- ▶ **base files**
- ▶ **fonts**
- ▶ **ConT_EXt**
- ▶ **miscellaneous**
 - ▷ binaries for Windows updated manually from various sources

Installation

Linux

```
mkdir context && cd context  
rsync -ptv rsync://contextgarden.net/minimals/setup/first-setup.sh .  
./first-setup.sh --context=current
```

Windows

- ▶ <http://minimals.contextgarden.net/setup/context-setup-mswin.zip>
- ▶ GUI by Vyatcheslav Yatskowsky