# Welcome

This is a follow up on the LuaTEX project by Hartmut Henkel, Taco Hoekwater, Hans Hagen en Luigi Scarso and friends, a project related to the ConTEXt macro package. The LuaTEX functionality became stable around version 1.10 and because the engine is also used outside ConTEXt, a follow up happens in another namespace. This version is a stripped down variant and is mostly meant for ConTEXt. Some interfaces have been adapted a bit and the expectation is that we will polish things more.

The source code is part of the ConTEXt distribution and compilation is driven by `cmake` instead of `autotools`. By keeping the code with ConTEXt code, consistency is guaranteed: one can always generate the binary that relates to the functionality expected. There are no dependencies on other code: all is self contained.

The work name of this follow up is LuaMetaTEX which can be seen as LuaTEX 2.0 or higher. Of course ConTEXt runs on top of LuaTEX, but a variant, tagged lmtx runs on LuaMetaTEX. One of the main ideas behind this project is that it guarantees the integrity of ConTEXt and the used engine and that we stick to the principles of a lean and mean engine.

If you install a new binary for ConTEXt the following is the intended use:

```
tex/texmf-platform/bin/luametatex[.exe]
tex/texmf-platform/bin/mtxrun           -> luametatex[.exe]
tex/texmf-platform/bin/context          -> luametatex[.exe]
tex/texmf-platform/bin/mtxrun.lua
tex/texmf-platform/bin/context.lua
```

The binary is rather small so having a few copies (or links) is no problem. The `mtxrun` and `context` stubs will launch LuaMetaTEX. No extra programs are needed.

The files in this source tree cannot be dropped into the LuaTEX source tree: they are different in many aspects. Although much has been done the codebase will be stepwise cleaned up further and more documentation will be added. Background information on how we came to this can be found in the ConTEXt distribution, for instance in the `followingup.pdf` document.

In addition to the names mentioned above I want to stress that other ConTEXt developers are involved. For instance Mojca Miklavec manages compilation on the build farm and deals with the installer at the `contextgarden`. Without Alan Braslau and Wolfgang Schuster as conceptual sparing partners there would be no LuaMetaTEX. Torture testing by users like Thomas Schmitz and Aditya Mahajan who mix TEX, xml, Lua, pdf, and other functionality is instrumental. I can mention more names, but it must be clear that what keeps me going in doing this comes from the ConTEXt community.

The work is far from finished. It's a stepwise process of going lean and mean, reshuffling code, checking things out. Take into account that we want to remain compatible as much as possible with stock TEX, which includes the original documentation (and therefore naming of variables). It will always be a mix of "What we started with.", `How it became.` and `How it should be now.`: a rather hybrid evolution of one of the oldest public programs out there.

As mentioned the code is part of the ConTEXt distribution. We'll try to prevent pollution and bloating of the code base as much as possible, also because that way we get independent snapshots.

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