

There are several ways to deploy ConT_EXt. Most common is to let it render a document, in which case you install it on a system and use an editor to input your document and from a console or by clicking some key trigger a run. The input can be structured using T_EX macros but it can also be xml, or some other format that gets converted to ConT_EXt commands before processing.

Instead you can also use ConT_EXt as a more hidden application, for instance in a web service or rendering component in a larger application. In that case the end user is not really aware that T_EX is being used.

No matter how you use ConT_EXt, you need to install it first. You can for instance use T_EXlive or another distribution to pick up ConT_EXt, but you can also install it using the archive (snapshot), in which case you also need to pick up the engine (for instance LuaT_EX) and a basic set of fonts. In order to make installation easy we provide a so called standalone distribution that has all you need.

The standalone ConT_EXt distribution has the following characteristics:

- The installation is self contained. Apart from resources like fonts, the T_EX macros, Lua code and MetaPost helpers are provided in one package.
- There is only one binary involved: LuaMetaT_EX. The source code of this program is integral part of the ConT_EXt distribution (per end 2019). A user should be able to compile the program if needed. There is no dependency on additional libraries other than those that make up the operating system.
- The core system is able to typeset documents in an efficient way. The memory footprint is decent and performance acceptable, also on low power devices and virtual machines. We try not to provide bloatware.
- The official user interface is stable and the implementation of core components will not change fundamentally. When something can be improved it will be. One can use a snapshot for long term stability.
- Support is provided by means of a mailing list, a wiki, documentation, meetings, etc. If needed you can consult (or hire) support. There are enough experienced users out there to get you going.

The first version of ConT_EXt, now tagged MkII, has been around since 1995 and (still) runs on top of pdfT_EX. The development of its successor MkIV started in 2005 as part of the LuaT_EX development and still carries on. The most recent incarnation is lmtx, which is MkIV but tuned for LuaMetaT_EX, the lean and mean successor of LuaT_EX.

The LuaMetaT_EX engine is a follow up on LuaT_EX. It integrates the T_EX text rendering engine, the MetaPost graphic engine and the Lua script interpreter. The development is part of the ConT_EXt macro package development. This macro package tightly integrates the three subsystems. The LuaMetaT_EX code is part of the ConT_EXt distribution.

The LuaMetaT_EX engine is lean and mean. There is for instance no back-end code present. In ConT_EXt this is handled in Lua. Graphic inclusion is also delegated to Lua. The T_EX frontend is a slightly extended version of the LuaT_EX one. System dependencies are minimized. Where possible we stay close to the original T_EX concept because that is a well documented reference. The binary can also be used as stand alone Lua engine.

The MetaPost library also has access to Lua, which means that the language can be enhanced and functionality added on demand. There are several graphic libraries provided in ConT_EXt. This graphical language is efficient in runtime and graphical output. In combination with Lua we get high performance graphical subsystem that can handle a huge amount of data. Additional text (like labels) is typeset at high quality.

The Lua code that comes with ConT_EXt contains a lot of helper code which means that one can set up selfcontained workflows without many extra dependencies. Documents can be encoded in T_EX, Lua, xml or whatever suits. There is support for databases too.

The ConT_EXt code base evolved over time. The basic functionality is quite stable. The move from MkII to MkIV to lmtx has been gradual. The efficiency in terms of code and performance has been improved stepwise. Development continues and beta releases occur on a regular basis. The ConT_EXt user community is quite willing to experiment with betas that can be installed alongside stable snapshots.

The installation is relatively small (fonts make up much of it) and updating is easy. We operate in the T_EX Directory Structure, which is a proven concept.