Lua\TeX\ for dummies

(so you can still leave)

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The TeX perspective

• it started out as pdftex
• then got merged with Alph
• but we left out the ugly bits of both
• it exclusively utf-8
• its math machinery got extended with OpenType like features
• there are no fundamental extensions as it is impossible to agree in them
The LUA perspective
• it just a Lua engine
• it has some extra libraries onboard
• you don't even have to use TEX
• but there are hooks into the TEX machinery
• and we can go further by loading libraries
The hybrid perspective
• we can extend TeX using Lua
• eventually everything will be opened up
• users never have to see any of that
• they can simply use Lua for scripting and print results to TeX
• but developers can go deep into the TeX internals and mess around
• the average user will just depend on what a macro package will provide
The complications
• normally one wants a bit of infrastructure (management)
• and maybe a special users space, hidden from core extensions
• but history has taught that users can be controlled that way
• so we stick to just providing the mechanisms
The future
• there are a couple of generic modules (derived from ConTeXt)
• in principle I can make more generic modules
• that after all the idea behind the (to be) MetaTeX variant
• but does it really make sense as one still needs substantial subsystems
This workshop

• just using Lua: it's what most users will do
• showing the hooks: it's what developers want to use
• answering questions: it's probably the most I can do
Just plain

We need to make a format, like:
luatex --ini plain \dump

and then run files with:
luatex --fmt=plain somefile.tex

This is another way:
mtxrun --script plain --make --texformat=plain

with:
mtxrun --script plain --texformat=plain somefile.tex
In order to profit from OpenType fonts:

mtxrun --script plain --make

with:

mtxrun --script plain somefile.tex

On Windows you can copy mtxrun.exe to plain.exe and stick to:

plain --make

with:

plain somefile.tex
Hardly plain

If you can live with a bit less plain:

context yourfile.tex