$\ensuremath{\mathbb{A}}\ensuremath{\mathrm{T}}_{\ensuremath{\mathrm{E}}}\ensuremath{\mathrm{X}}\ensuremath{\mathrm{3}}$: Using the layers

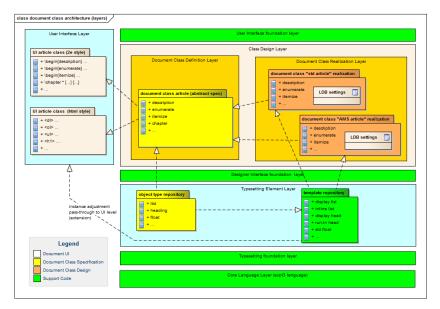


Frank Mittelbach & Joseph Wright

2013-7-23

In this talk we will briefly present the architecture of ${\rm \sc LATE}X3$ with its four conceptual layers

- Document Interface Layer
- Typesetting Element Layer
- Document Design Layer
- Programming Layer



We will then look in some detail at xparse — a $\text{IAT}_{\text{E}}X 2_{\varepsilon}$ -like user interface, as an example of the $\text{IAT}_{\text{E}}X3$ Document Interface Layer, that can already now be used to provide extended functionality for existing $\text{IAT}_{\text{E}}X 2_{\varepsilon}$ documents and packages.

We conclude with a brief detour of expl3 the foundation layer for $\text{ET}_{\text{E}}X3$ that provides the basis for all higher-level modules of $\text{ET}_{\text{E}}X3$ but can also be usefully deployed to develop packages for $\text{ET}_{\text{E}}X2_{\varepsilon}$.

The expl3 language is by now in a stable state and gets more and more traction outside the LATEX3 development work, which can be seen, for example, by its use in a growing number of answers on the question and answer portal http://tex.stackexchange.com and in the appearance of LATEX 2_{ε} packages that use it for programming.