# The lua-visual-debug package (V0.2) 

Patrick Gundlach

February 24, 2012

## 1 About

This package aids debugging your $\mathrm{T}_{\mathrm{E}} \mathrm{X}$ and $\mathrm{EAT}_{\mathrm{E}} \mathrm{X}$ document by drawing rectangles around boxes and rules where glue is inserted. Other items are marked as well: kerns, hyphenation points and penalties.

## 2 How to use

When you load the package lua-visual-debug in your Lualat ${ }_{\mathrm{E}} \mathrm{X}$ document (or use \input lua-visual-debug.sty in plain $\mathrm{T}_{\mathrm{E}} \mathrm{X}$ ), Lua $\mathrm{T}_{\mathrm{E}} \mathrm{X}$ will highlight boxes, penalties, glues and kerns in the PDF. This package requires you to process the document with $\mathrm{LATEX}_{\mathrm{E}}$ (plain and LaTeX formats).

## 3 A $\mathrm{ET}_{\mathrm{E}} \mathrm{X}$ example

```
\documentclass{article}
\usepackage{lua-visual-debug}
\usepackage{lmodern}
\setlength\textwidth{300pt}
\setlength\textheight{10cm}
\begin{document}
\section{A short story}
A wonderful serenity has taken possession of my entire soul, like these sweet
mornings of spring which I enjoy with my whole heart. I am alone, and feel
the charm of existence in this spot, which was created for the bliss of souls
like mine. I am so happy, my dear friend, so absorbed in the exquisite sense
of mere tranquil existence, that I neglect my talents.
\begin{itemize}
    \item one
    \item two
    \item three
\end{itemize}
\bgroup\fontsize{30}{34}\selectfont
```

\centerline\{\TeX\}
\egroup
\vbox\{\strut Hello\} $\backslash$ kern .5 cm \vbox $\{\backslash$ strut World $\}$
$\backslash[$ int_e^x=mc^2 \]

\end\{document\} }
yields
$\square$
A_w.onderful_serenity_has_taken_p.ossession_of_my_entire_soul,_like_these sweet_mornings_of_spring_..which_I_enjoy...with_my_...whole_heart._I_am alone, and feel the_charm_of existence_in_this_sp.ot, which_was_created for_the_bliss_of_souls_like_mine._l_am_so_happ.y,_my_dear_friend,_so absorbed_in_the_..exquisite__sense_.of__mere_tranquil_existence,_that_I neglect_my_talents.

Hello.
World

| $\int_{e x}^{x}=m c^{2}$ |
| :---: |
| 1 |

## 4 A plain $\mathrm{T}_{\mathrm{E}} \mathrm{X}$ example

```
\input lua-visual-debug.sty
\hsize 3in \vsize 3in
\centerline{A centered line with \TeX}
\vskip .5in
```

```
A wonderful serenity has taken possession of my entire soul, like these sweet
mornings of spring which I enjoy with my whole heart. I am alone, and feel
the charm of existence in this spot, which was created for the bliss of souls
like mine. I am so happy, my dear friend, so absorbed in the exquisite sense
of mere tranquil existence, that I neglect my talents.
$$\int_e^x=mc^2$$
\bye
yields
```



A_wonderful_serenity_has_taken_p.ossession_of my_entire_soul,_like_these_sweet_mornings_of_spring which_L_enjoy_with_my_whole_heart._l_am_alone, and_feel_the_charm_of_existence_in_this_sp.ot,_which was created for the bliss of souls like mine. Lam so happy,.my_dear_friend,_so_absorbed_in_the_exquisite sense_of_mere_tranquilexistence,_that_Ineglect_my talents.

$$
\int_{e^{x}}^{x}=m c^{2}
$$


$\square$

## 5 Copying

Copyright 2012 Patrick Gundlach (patrick@gundla.ch), licensed under the MIT license. See the Lua file for details.

