

The `luatexbase` package

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Abstract

This convenience package loads all of the (stable) packages in the `luatexbase` bundle.

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1 Documentation

The `luatexbase` package loads the following packages:

`luatexbase-compat`: compatibility helpers for `\directlua`, primitive names and version information from Lua.

`luatexbase-loader`: extension of Lua_{TeX}'s Lua module loader (since version 0.60.0, this is more of a compatibility layer for older versions than a real extension).

`luatexbase-regs`: extended allocation scheme for registers and the like, *à la* `etex`.

`luatexbase-cctb`: catcode table allocation.

`luatexbase-attr`: attribute allocation.

These packages are almost stable: it is unlikely that backward-incompatible changes will be made in the future (other than necessary for merging with `luatex.sty`, which strongly overlaps with the above). If they happen, such changes will be announced on lualatex-dev@tug.org before they are pushed to the master branch and then CTAN.

Other packages included in the bundle, but currently not loaded by the present package, are:

luatexbase-modutils: Lua module declaration, including version checks.

luatexbase-mcb: callbacks extensions allowing to register many functions in a single callback, and declare new callbacks for packages.

All packages in this bundle are supposed to work with LuaTeX 0.25.4 to 0.60.x, with formats based on Plain TeX or L^ATeX, as included in TeX Live 2008, 2009, and 2010.

2 Implementation

1 `<*texpackage>`

2.1 Preliminaries

Reload protection, especially for Plain TeX.

```
2           \csname lltxb@core@loaded\endcsname
3 \expandafter\let\csname lltxb@core@loaded\endcsname\endinput

Catcode defenses.

4 \begingroup
5   \catcode123 1 % {
6   \catcode125 2 % }
7   \catcode 35 6 % #
8   \toks0{}%
9   \def\x{}%
10  \def\y#1 #2 {%
11    \toks0\expandafter{\the\toks0 \catcode#1 \the\catcode#1}%
12    \edef\x{\x \catcode#1 #2}}%
13  \y 123 1 % {
14  \y 125 2 % }
15  \y 35 6 % #
16  \y 10 12 % ^^J
17  \y 34 12 % "
18  \y 36 3 % $ $
19  \y 39 12 % '
20  \y 40 12 % (
21  \y 41 12 % )
22  \y 42 12 % *
23  \y 43 12 % +
24  \y 44 12 % ,
25  \y 45 12 % -
26  \y 46 12 % .
27  \y 47 12 % /
28  \y 60 12 % <
29  \y 61 12 % =
30  \y 64 11 % @ (letter)
31  \y 62 12 % >
32  \y 95 12 % _ (other)
33  \y 96 12 % '
34  \edef\y#1{\endgroup\edef#1{\the\toks0\relax}\x}%
35 \expandafter\y\csname lltxb@core@AtEnd\endcsname
```

Package declaration.

```
36 \begingroup
37 \expandafter\ifx\csname ProvidesPackage\endcsname\relax
38 \def\x#1[#2]{\immediate\write16{Package: #1 #2}}
39 \else
40 \let\x\ProvidesPackage
41 \fi
42 \expandafter\endgroup
43 \x{luatexbase}[2010/05/27 v0.2a Module utilities for LuaTeX]
```

Make sure Lua_T_EX is used.

```
44 \begingroup\expandafter\expandafter\expandafter\endgroup
45 \expandafter\ifx\csname RequirePackage\endcsname\relax
46 \input ifluatex.sty
47 \else
48 \RequirePackage{ifluatex}
49 \fi
50 \ifluatex\else
51 \begingroup
52 \expandafter\ifx\csname PackageWarningNoLine\endcsname\relax
53 \def\x#1#2{\begingroup\newlinechar10
54 \immediate\write16{Package #1 warning: #2}\endgroup}
55 \else
56 \let\x\PackageWarningNoLine
57 \fi
58 \expandafter\endgroup
59 \x{luatexbase}{LuaTeX is required for this package. Aborting.}
60 \lltxb@core@AtEnd
61 \expandafter\endinput
62 \fi
```

2.2 Packages loading

```
63 \begingroup\expandafter\expandafter\expandafter\endgroup
64 \expandafter\ifx\csname RequirePackage\endcsname\relax
65 \input luatexbase-compat.sty
66 \input luatexbase-loader.sty
67 \input luatexbase-regs.sty
68 \input luatexbase-attr.sty
69 \input luatexbase-cctb.sty
70 \else
71 \RequirePackage{luatexbase-compat}
72 \RequirePackage{luatexbase-loader}
73 \RequirePackage{luatexbase-regs}
74 \RequirePackage{luatexbase-attr}
75 \RequirePackage{luatexbase-cctb}
76 \fi
```

This is the end, my friend... the end.

```
77 \lltxb@core@AtEnd
```

```
78 </texpackage>
```

3 Test file

Very minimal, just check that the package correctly loads.

```
79 <testplain>\input luatexbase.sty
80 <testlatex>\RequirePackage{luatexbase}
81 <testplain>\bye
82 <testlatex>\stop
```