# About pLATEX $2\varepsilon$

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plateX is a Japanese lateX format, which is adjusted/extended to be more suitable for writing Japanese documents. It requires pteX¹, a TeX engine with extensions for Japanese typesetting, which is designed for high-quality Japanese book "p"ublishing.² Both of them were developed by ASCII Corporation (and its successor ASCII Media Works), so they are often referred to as "ASCII pteX" and "ASCII plateX" respectively.

In 2010, ASCII pT<sub>E</sub>X was incorporated into the world-wide T<sub>E</sub>X distribution, T<sub>E</sub>X Live. Since then, pT<sub>E</sub>X has been maintained/improved/changed along with T<sub>E</sub>X Live sources. In recent versions of T<sub>E</sub>X Live and W32T<sub>E</sub>X (around 2011), the default engine of pI<sup>A</sup>T<sub>E</sub>X changed from original pT<sub>E</sub>X to  $\varepsilon$ -pT<sub>E</sub>X (pT<sub>E</sub>X with  $\varepsilon$ -T<sub>E</sub>X extension). Also, the original I<sup>A</sup>T<sub>E</sub>X itself is also frequently updated. On the other hand, pI<sup>A</sup>T<sub>E</sub>X remained unchanged since 2006, which resulted in some incompatibility and limitations.

To follow these upstream changes, we (Japanese TEX Development Community<sup>3</sup>) decided to fork ASCII plaTeX and distribute the "community edition." The development version is available from GitHub repository<sup>4</sup>. The forked community edition is different from the original ASCII edition, so any bug reports and requests should be sent to Japanese TeX Development Community, using GitHub Issue system.

This document (platex-en.pdf) is a brief explanation of the pLATEX  $2_{\varepsilon}$  community edition. It is somewhat of a historical document now, since pLATEX  $2_{\varepsilon}$  came into existence in 1995 (although the English translation has been done by Japanese TeX Development Community since 2017).

 $<sup>^1{\</sup>rm The~pT}_{\rm E\!X}$  website: https://asciidwango.github.io/ptex/ (in Japanese)

<sup>&</sup>lt;sup>2</sup>There is another old implementation of Japanese LATEX by NTT Electrical Communications Laboratories, named JLATEX (unavailable in TEX Live). Also, MiKTEX has another program platex for Polish, but it has nothing to do with our Japanese pLATEX!

 $<sup>^3 {\</sup>tt https://texjp.org}$ 

 $<sup>^4</sup>$ https://github.com/texjporg/platex

# 1 Introduction to this document

This document briefly describes  $pL^AT_EX 2_{\varepsilon}$ , but is not a manual of  $pL^AT_EX 2_{\varepsilon}$ . For the basic functions of  $pL^AT_EX 2_{\varepsilon}$ , see [1] (in Japanese). For extensions of some commands for vertical writing (which were first described in [2] in Japanese), see plext.dtx section in pldoc-en.pdf.

For Japanese typesetting, please refer to the documentation of pTEX (or "Japanese TEX"; the preliminary version of pTEX), [3] (in Japanese), [4] (in English) and [5] (in English).

This document consists of following parts:

- Section 1 This section; describes this document itself.
- Section 2 Brief explanation of extensions in pLATEX  $2_{\varepsilon}$ . Also describes the standard classes and packages.
- Section 3 The compatibility note for users of the old version of pIATEX  $2_{\varepsilon}$  or those of the original IATEX  $2_{\varepsilon}$ .
- **Appendix A** Describes DOCSTRIP Options for this document.
- **Appendix B** Description of 'pldoc.tex' (counterpart for 'source2e.tex' in  $\LaTeX 2_{\varepsilon}$ ).
- **Appendix C** Description of a shell script to process 'pldoc.tex', and a tiny perl program to check DOCSTRIP guards, etc.

# 2 About Functions of pLATEX $2\varepsilon$

The structure of pIAT<sub>E</sub>X  $2_{\varepsilon}$  is similar to that of IAT<sub>E</sub>X  $2_{\varepsilon}$ ; it consists of 3 types of files: a format (platex.ltx), classes and packages.

#### 2.1 About the Format

To make a format for pIATeX, process "platex.ltx" with INI mode of  $\varepsilon$ -pTeX.<sup>5</sup> A handy command 'fmtutil-sys' (or 'fmtutil') for this purpose is available in TeX Live. The following command generates platex.fmt.

fmtutil-sys --byfmt platex

<sup>&</sup>lt;sup>5</sup>Formerly both pTeX and  $\varepsilon$ -pTeX can make the format file for pLATeX, however, it's not true anymore because LATeX requires  $\varepsilon$ -TeX since 2017.

The content of platex.ltx is shown below. In the current version of plateX, first we simply load latex.ltx and modify/extend some definitions by loading plcore.ltx.

```
1 \langle *plcore \rangle
```

Temporarily disable \dump at the end of latex.ltx.

- 2 \let\orgdump\dump
- 3 \let\dump\relax

Load latex.ltx here. Within the standard installation of TeX Live, hyphen.cfg provided by "Babel" package will be used.

```
4 \input latex.ltx
```

Load plcore.ltx.

Load font-related default settings, pldefs.ltx. If a file pldefs.cfg is found, then that file will be used instead.

In the previous version, we displayed pLATEX version on the terminal, so that it can be easily recognized during format creation; however \everyjob can contain any code other than showing a banner, so now disabled.

#### 17 %\the\everyjob

Load platex.cfg if it exists at runtime.

Dump to the format file.

```
26 \let\dump\orgdump
27 \let\orgdump\@undefined
```

- 28 \makeatother
- 29 \dump
- 30 %\endinput
- 31 (/plcore)

The file plcore.ltx, which provides modifications/extensions to make pLATEX  $2_{\varepsilon}$ , is a concatenation of stripped files below using DOCSTRIP program.

- plvers.dtx defines the format version of pIATEX  $2\varepsilon$ .
- plfonts.dtx extends NFSS2 for Japanese font selection.
- plcore.dtx defines other modifications to  $\LaTeX 2_{\varepsilon}$ .

Moreover, default settings of pre-loaded fonts and typesetting parameters are done by loading pldefs.ltx inside platex.ltx.<sup>6</sup> This file pldefs.ltx is also stripped from plfonts.dtx.

#### Attention:

You can customize pLATEX  $2_{\mathcal{E}}$  by tuning these settings. If you need to do that, copy/rename it as pldefs.cfg and edit it, instead of overwriting pldefs.ltx itself. If a file named pldefs.cfg is found at a format creation time, it will be read as a substitute of pldefs.ltx.

#### 2.1.1 Version

The version (like "2019-10-01") and the format name ("pLaTeX2e") of pLATeX2  $\varepsilon$  are defined in plvers.dtx.

#### 2.1.2 NFSS2 Commands

IATEX  $2_{\varepsilon}$  uses NFSS2 as a font selection scheme, however, it supports only alphabetic fonts. pIATEX  $2_{\varepsilon}$  extends NFSS2 to enable selection of Japanese fonts in a consistent manner with the original NFSS2.

Most of the interface commands are defined to be clever enough, so that it can automatically judge whether it is going to change alphpabetic fonts or Japanese fonts. It works almost fine with most of the widely used classes and packages, without any modification.

For the defail of (the original) NFSS2, please refer to fntguide.tex in LaTeX  $2\varepsilon$ .

<sup>&</sup>lt;sup>6</sup>ASCII pLATEX loaded pldefs.ltx inside plcore.ltx; however, pLATEX community edition newer than 2018 loads pldefs.ltx inside platex.ltx.

#### 2.1.3 Output Routine and Floats

plcore.dtx modifies and extends some LATEX  $2_{\mathcal{E}}$  commands for Japanese processing.

- Preamble commands
- Page breaking
- Line breaking
- The order of float objects
- Crop marks ("tombow")
- Footnote macros
- Cross-referencing
- Verbatim

#### 2.2 Classes and Packages

Classes and packages bundled with pLaTeX  $2_{\varepsilon}$  are based on those in original LaTeX  $2_{\varepsilon}$ , with some Japanese localization.

pLATeX  $2_{\mathcal{E}}$  classes:

- jarticle.cls, jbook.cls, jreport.cls
  Standard *yoko-kumi* (horizontal writing) classes; stripped from jclasses.dtx.
- tarticle.cls, tbook.cls, treport.cls
  Standard *tate-kumi* (vertical writing) classes; stripped from jclasses.dtx.
- jltxdoc.cls

  Class for typesetting Japanese .dtx file; stripped from jltxdoc.dtx.

pIATEX  $2\varepsilon$  packages:

• plext.sty

Useful macros and extensions for vertical writing; stripped from  ${\tt plext.dtx}.$ 

#### ptrace.sty

pLATEX  $2_{\varepsilon}$  version of tracefnt.sty; the package tracefnt.sty overwrites pLATEX  $2_{\varepsilon}$ -style NFSS2 commands, so ptrace.sty provides redefinitions to recover pLATEX  $2_{\varepsilon}$  extensions. Stripped from plfonts.dtx.

#### • pfltrace.sty

pIATEX  $2_{\varepsilon}$  version of fltrace.sty (introduced in IATEX  $2_{\varepsilon}$  2014/05/01); stripped from plcore.dtx.

#### • oldpfont.sty

Provides pIATEX 2.09 font commands; stripped from pl209.dtx.

The packages "ascmac.sty" and "nidanfloat.sty", which had been included in previous versions of pLATeX, is now distributed as a separate bundle.

# 3 Compatibility with Other Formats and Older Versions

Here we provide some information about the compatibility between current pIATEX  $2_{\varepsilon}$  and older versions or original IATEX  $2_{\varepsilon}$ .

# 3.1 Compatibility with $\LaTeX 2_{\varepsilon}$

pLaTeX  $2_{\varepsilon}$  is in most part upper compatible with LaTeX  $2_{\varepsilon}$ , but some parameters are adjusted to be suitable for Japanese. Therefore, you should not expect identical output, even though the same source can be processed on both LaTeX  $2_{\varepsilon}$  and pLaTeX  $2_{\varepsilon}$ .

We hope that most classes and packages meant for LaTeX  $2_{\varepsilon}$  works also for pLaTeX  $2_{\varepsilon}$  without any modification. However for example, if a class or a package redefines a command which is already modified by pLaTeX  $2_{\varepsilon}$ , it might cause an error at the worst case. We cannot tell whether a class or a package works fine with pLaTeX  $2_{\varepsilon}$  beforehand; the easiest way is to try to use it. If it fails, please refer to the log file or a package manual.

Some IATEX packages are known to be incompatible with pIATEX. For those packages, pIATEX-specific patches might be available. Please refer to the documentation of the plautopatch package (by Hironobu Yamashita).

# 3.2 Compatibility with pLATEX 2.09

pLATEX  $2_{\varepsilon}$  has 'pLATEX 2.09 compatibility mode'; use \documentstyle to enter it, but the support might be limited. Note that the 2.09 compatibility mode is provided solely to allow you to process very old documents, which were written for a very old system.

# 3.3 Support for Package 'latexrelease'

pLATEX provides 'platexrelease' package, which is based on 'latexrelease' package (introduced in LATEX <2015/01/01>). It may be used to ensure stability where needed, by emulating the specified format date without regenerating the format file. For more detail, please refer to its documentation.

# A DOCSTRIP Options

By processing platex.dtx with DOCSTRIP program, different files can be generated. Here are the DOCSTRIP options for this document:

Option	Function	
plcore	Generates a fragment of format sources	
$\operatorname{pldoc}$	Generates 'pldoc.tex' for type setting pLATEX $2_{\varepsilon}$ sources	
shprog	Generates a shell script to process 'pldoc.tex'	
plprog	Generates a tiny perl program to check DOCSTRIP guards nesting	
Xins	Generates a DOCSTRIP batch file 'Xins.ins' for generating the	
	above shell/perl scripts	

# B Documentation of pLATEX $2_{\varepsilon}$ sources

The contents of 'pldoc.tex' for type setting pIATEX  $2_{\varepsilon}$  sources is described here. Compared to individual processings, batch processing using 'pldoc.tex' prints also changes and an index. The whole document will have about 200 pages.

By default, the description of pLATEX  $2_{\varepsilon}$  sources is written in Japanese. If you need English version, first save

#### \newif\ifJAPANESE

as platex.cfg, and process pldoc.tex (pLATEX  $2_{\varepsilon}$  Community Edition newer than July 2016 is required).

```
First, create pldoc.dic; it serves as a dictionary for 'mendex' (Japanese index processor<sup>7</sup>), which is necessary for indexing control sequences containing Japanese characters (\ 西曆 and \ 和曆).
```

```
32 (*pldoc)
33 \begin{filecontents}{pldoc.dic}
34 西暦
         せいれき
35 和暦
         われき
36 \end{filecontents}
  We use jltxdoc class; we also require plext package, since plext.dtx contains
several examples of partial vertical writing.
37 \documentclass{jltxdoc}
38 \usepackage{plext}
39 \setminus listfiles
40
Do not index some TFX primitives, and some common plain TFX commands.
41 \DoNotIndex{\def,\long,\edef,\xdef,\gdef,\let,\global}
42 \DoNotIndex{\if,\ifnum,\ifdim,\ifcat,\ifmmode,\ifvmode,\ifhmode,\%
              \iftrue,\iffalse,\ifvoid,\ifx,\ifeof,\ifcase,\else,\or,\fi}
44 \DoNotIndex{\box,\copy,\setbox,\unvbox,\unhbox,\hbox,%
45
              \vbox,\vtop,\vcenter}
46 \DoNotIndex{\@empty,\immediate,\write}
47 \DoNotIndex{\egroup,\bgroup,\expandafter,\begingroup,\endgroup}
48 \DoNotIndex{\divide,\advance,\multiply,\count,\dimen}
49 \DoNotIndex{\relax,\space,\string}
50 \DoNotIndex{\csname,\endcsname,\Ospaces,\openin,\openout,%
              \closein,\closeout}
52 \DoNotIndex{\catcode,\endinput}
53 \DoNotIndex{\jobname,\message,\read,\the,\m@ne,\noexpand}
54 \DoNotIndex{\hsize,\vsize,\hskip,\vskip,\kern,\hfil,\hfill,\hss,\vss,\unskip}
55 \label{localize} $$ \DoNotIndex{\mone,\z0,\z0skip,\one,\tw0,\p0,\cminus,\oplus} $$
56 \DoNotIndex{\dp,\wd,\ht,\setlength,\addtolength}
57 \DoNotIndex{\newcommand, \renewcommand}
Set up the Index and Change History to use \part.
59 \ifJAPANESE
60 \IndexPrologue{\part*{索 引}%
                   \markboth{索 引}{索 引}%
                   \addcontentsline{toc}{part}{索 引}%
63 イタリック体の数字は、その項目が説明されているページを示しています。
64 下線の引かれた数字は、定義されているページを示しています。
65 その他の数字は、その項目が使われているページを示しています。}
66 \else
67 \IndexPrologue{\part*{Index}%
```

<sup>&</sup>lt;sup>7</sup>Developed by ASCII Corporation; the program 'makeindex' cannot handle Japanese characters properly, especially Kanji characters which should be sorted by its readings.

```
68
                     \markboth{Index}{Index}%
                     \addcontentsline{toc}{part}{Index}%
69
70 The italic numbers denote the pages where the corresponding entry
71 is described, numbers underlined point to the definition,
72 all others indicate the places where it is used.}
73 \fi
74 %
75 \ifJAPANESE
76 \GlossaryPrologue{\part*{変更履歴}%
                     \markboth{変更履歴}{変更履歴}%
77
                     \addcontentsline{toc}{part}{変更履歷}}
78
79 \ensuremath{\setminus} else
80 \GlossaryPrologue{\part*{Change History}%
                     \markboth{Change History}{Change History}%
82
                     \addcontentsline{toc}{part}{Change History}}
83 \fi
84
Modify the standard \changes command slightly, to better cope with this multiple
file document.
85 \makeatletter
86 \def\changes@#1#2#3{%
     \let\protect\@unexpandable@protect
87
     \edef\@tempa{\noexpand\glossary{#2\space
88
                   \currentfile\space#1\levelchar
89
90
                   \ifx\saved@macroname\@empty
91
                      \space\actualchar\generalname
92
                   \else
                      \expandafter\@gobble
93
                      \saved@macroname\actualchar
94
                      \string\verb\quotechar*%
95
                      \verbatimchar\saved@macroname
96
97
                      \verbatimchar
                   \fi
98
                   :\levelchar #3}}%
99
     \@tempa\endgroup\@esphack}
100
Codelines are allowed to run over a bit without showing up as overfull.
101 \ensuremath{\mbox{\sc NacroFont{\sc Contencoding\encodingdefault}}}
102
                       \fontfamily\ttdefault
103
                       \fontseries\mddefault
                       \fontshape\updefault
104
105
                       \small
                       \hfuzz 6pt\relax}
106
Section numbers now reach eg 19.12 which need more space.
107 \renewcommand*\l@subsection{\@dottedtocline{2}{1.5em}{2.8em}}
108 \renewcommand*\l@subsubsection{\@dottedtocline{3}{3.8em}{3.4em}}
109 \makeatother
```

```
Produce a Change Log and (2 column) Index.
110 \RecordChanges
111 \CodelineIndex
112 \EnableCrossrefs
113 \setcounter{IndexColumns}{2}
114 \settowidth\MacroIndent{\ttfamily\scriptsize 000\ }
  Set the title, authors and the date for this document.
115 \title{The \pLaTeXe\ Sources}
116 \author{Ken Nakano \& Japanese \TeX\ Development Community}
117
118 % Get the date and patch level from plvers.dtx
119 \makeatletter
120 \let\patchdate=\@empty
121 \begingroup
                \def\ProvidesFile#1\pfmtversion#2#3\ppatch@level#4{%
122
                       \date{#2}\xdef\patchdate{#4}\endinput}
123
124
                \input{plvers.dtx}
125 \endgroup
126
127 % Add the patch version if available.
128 \left( \frac{0}{9} \right)
129 \ifx\patchdate\Xpatch\else
130 % number is assumed
131 \ifnum\patchdate>0
132 \edef\@date{\@date\space Patch level\space\patchdate}
133 \ensuremath{\setminus} else
134 \edef\@date{\@date\space Pre-Release\patchdate}
135 \fi\fi
136
137 \% Add the last update info, in case format date unchanged
138 % Note: \@ifl@t@r can be used only in preamble.
139 \ensuremath{\mbox{\sc loss}}\ensuremath{\mbox{\sc lo
140 \begingroup
               \def\ProvidesFile#1[#2 #3]{%
141
142
                       \def\@tempd@te{#2}\endinput
143
                       \@ifl@t@r{\@tempd@te}{\lastupd@te}{%
144
                               \global\let\lastupd@te\@tempd@te
145
                      }{}}
146
               \let\ProvidesClass\ProvidesFile
147
                \let\ProvidesPackage\ProvidesFile
148
                \input{plvers.dtx}
                \input{plfonts.dtx}
149
                \input{plcore.dtx}
150
                \input{plext.dtx}
151
                \input{pl209.dtx}
152
                \input{kinsoku.dtx}
153
                \input{jclasses.dtx}
154
               \input{jltxdoc.cls}
156 \endgroup
```

```
157 \@ifl@t@r{\lastupd@te}{\pfmtversion}{%
     \edef\@date{\@date\break (last updated: \lastupd@te)}%
159 }{}
160 \makeatother
Here starts the document body.
161 \begin{document}
162 \pagenumbering{roman}
163 \maketitle
164 \renewcommand\maketitle{}
165 \tableofcontents
166 \clearpage
167 \pagenumbering{arabic}
168
169 \setminus DocInclude\{plvers\}
                          % pLaTeX version
170
171 \DocInclude{plfonts} % NFSS2 commands
172
173 \DocInclude{plcore}
                          % kernel commands
175 \DocInclude{plext}
                          % external commands
176
                          \% 2.09 compatibility mode commands
177 \DocInclude{pl209}
178
179 \DocInclude{kinsoku} % kinsoku parameter
180
181 \DocInclude{jclasses} % Standard class
182
183 \DocInclude{jltxdoc} % dtx documents class
184
 Stop here if ltxdoc.cfg says \AtEndOfClass{\OnlyDescription}.
185 \StopEventually{\end{document}}
 Print Change History and Index. Please refer to Appendix C.1 for processing of
 Change History and Index.
187 \clearpage
188 \pagestyle{headings}
189 % Make TeX shut up.
190 hbadness=10000
191 \newcount\hbadness
192 \hfuzz=\maxdimen
193 %
194 \PrintChanges
195 \clearpage
196 %
197 \begingroup
     \def\endash\{--\}
     \catcode'\-\active
```

```
200 \def-{\futurelet\temp\indexdash}
201 \def\indexdash{\ifx\temp-\endash\fi}
202
203 \PrintIndex
204 \endgroup

Make sure that the index is not printed twice (ltxdoc.cfg might have a second command).
205 \let\PrintChanges\relax
206 \let\PrintIndex\relax
207 \end{document}
208 \/pldoc\
```

# C Additional Utility Programs

# C.1 Shell Script mkpldoc.sh

A shell script to process 'pldoc.tex' and produce a fully indexed source code description. Run sh mkpldoc.sh to use it.

#### C.1.1 Content of mkpldoc.sh

First, delete auxiliary files which might be created in the previous runs.

```
209 (*shprog)
210 (ja)rm -f pldoc.toc pldoc.idx pldoc.glo
211 (en)rm -f pldoc-en.toc pldoc-en.idx pldoc-en.glo
First run: empty the config file ltxdoc.cfg.
212 echo "" > ltxdoc.cfg

Now process pldoc.tex.
213 (ja)platex pldoc.tex
214 (en)platex -jobname=pldoc-en pldoc.tex
```

Make the Change log and Glossary (Change History) using mendex. 'Mendex' is a Japanese index processor, which is mostly upper compatible with 'makeindex' and automatically handles readings of Kanji words.

Option -s employs a style file for formatting. Here we use gind.ist and gglo.ist from  $\LaTeX$   $2\varepsilon$ .

Option -o specifies output index file name.

Option  $\neg f$  forces to output Kanji characters even non-existent in dictionaries. (Makeindex does not have this option.)

```
215 \langle ja \ranglemendex -s gind.ist -d pldoc.dic -o pldoc.ind pldoc.idx 216 \langle en \ranglemendex -s gind.ist -d pldoc.dic -o pldoc-en.ind pldoc-en.idx 217 \langle ja \ranglemendex -f -s gglo.ist -o pldoc.gls pldoc.glo
```

```
218 (en)mendex -f -s gglo.ist -o pldoc-en.gls pldoc-en.glo
```

Second run: append \includeonly{} to ltxdoc.cfg to speed up things. This run is needed only to get changes and index listed in .toc file.

```
219 echo "\includeonly{}" > ltxdoc.cfg
220 \( \ja \)platex pldoc.tex
221 \( \seta \)platex -jobname=pldoc-en pldoc.tex

Third and final run: restore the cfg file to put everything together.
222 echo "" > ltxdoc.cfg
223 \( \ja \)platex pldoc.tex
224 \( \seta \)platex -jobname=pldoc-en pldoc.tex
225 # EOT
```

#### C.2 Perl Script dstcheck.pl

226 (/shprog)

Here we provide a perl script which helps checking the nested DOCSTRIP guards. Usage:

```
perl dstcheck.pl <file-name>
```

The description of this script itself is available only in Japanese.

```
227 (*plprog)
228 ##
229 ## DOCSTRIP 文書内の環境や条件の入れ子を調べる perl スクリプト
231 push(@dst,"DUMMY"); push(@dst,"000");
232 push(@env,"DUMMY"); push(@env,"000");
233 while (<>) {
     if (/^{<}*([^>]+)>/) { # check conditions
234
235
       push(@dst,$1);
236
       push(@dst,$.);
     } elsif (/^%<\/([^>]+)>/) {
237
       $linenum = pop(@dst);
238
       $conditions = pop(@dst);
239
       if ($1 ne $conditions) {
240
         if ($conditions eq "DUMMY") {
241
           print "$ARGV: '</$1>' (1.$.) is not started.\n";
242
           push(@dst,"DUMMY");
243
           push(@dst,"000");
244
         } else {
245
           print "$ARGV: '<*$conditions>' (1.$linenum) is ended ";
246
           print "by '<*$1>' (1.$.)\n";
247
248
249
       }
250
    }
```

```
if (/^% *\\begin\{verbatim\}/) { # check environments
251
       while(<>) {
252
253
           last if (/^% *\\end\{verbatim\}/);
254
     } elsif (/^% *\\begin\{([^{}]+)\}\{(.*)\}/) {
255
       push(@env,$1);
256
       push(@env,$.);
257
     } elsif (/^% *\\begin\{([^{}]+)\}/) {
258
259
       push(@env,$1);
       push(@env,$.);
260
     } elsif (/^% *\\end\{([^{}]+)\\}/) {
261
       $linenum = pop(@env);
262
       $environment = pop(@env);
263
       if ($1 ne $environment) {
264
265
         if ($environment eq "DUMMY") {
           print "$ARGV: '\end{$1}', (1.$.) is not started.\n";
^{266}
           push(@env,"DUMMY");
267
           push(@env,"000");
268
         } else {
269
270
           print "$ARGV: \\begin{$environement} (1.$linenum) is ended ";
271
           print "by \\end{$1} (1.$.)\n";
272
       }
273
     }
274
275 }
276 $linenum = pop(@dst);
277 $conditions = pop(@dst);
278 while ($conditions ne "DUMMY") {
       print "$ARGV: '<*$conditions>' (1.$linenum) is not ended.n";
       $linenum = pop(@dst);
281
       $conditions = pop(@dst);
282 }
283 $linenum = pop(@env);
284 $environment = pop(@env);
285\;\mathrm{while} ($environment ne "DUMMY") {
       print "$ARGV: '\begin{$environment}' (1.$linenum) is not ended.\n";
286
       $linenum = pop(@env);
287
288
       $environment = pop(@env);
289 }
290 exit;
291 (/plprog)
```

# C.3 DOCSTRIP Batch file

Here we introduce a DOCSTRIP batch file 'Xins.ins,' which generates the scripts described in Appendix C.1 and C.2.

```
292 (*Xins)
```

```
293 \setminus input docstrip
294 \keepsilent
295 {\catcode'#=12 \gdef\MetaPrefix{## }}
296 \ensuremath{ \mbox{\class}}
297 \setminus endpreamble
298 \text{\label{locality}} \text{\label{locality}}
299 \verb|\declarepostamble\thispost|
300 \setminus endpostamble
301 \slashed{usepostamble\thispost}
302 \generate{}
303
       \file{dstcheck.pl}{\from{platex.dtx}{plprog}}
       \file{mkpldoc.sh}{\from{platex.dtx}{shprog,ja}}
304
       \file{mkpldoc-en.sh}{\from{platex.dtx}{shprog,en}}
305
307 \setminus endbatchfile
308 \langle /Xins \rangle
```

# References

- [1] 中野 賢『日本語 LATFX  $2\varepsilon$  ブック』 アスキー, 1996.
- [2] インプレス・ラボ監修, アスキー書籍編集部編 『縦組対応 パーソナル日本語  $T_FX$ 』アスキー出版局, 1994
- [3] アスキー出版技術部責任編集 『日本語  $T_{EX}$  テクニカルブック I』 アスキー, 1990.
- [4] Haruhiko Okumura, pTEX and Japanese Typesetting The Asian Journal of TEX, Volume 2, No. 1, 2008. (http://ajt.ktug.org/2008/0201okumura.pdf)
- [5] Hisato Hamano, Vertical Typesetting with TEX. TUGboat issue 11:3, 1990. (https://tug.org/TUGboat/tb11-3/tb29hamano.pdf)
- [6] Donald E. Knuth. "*The T<sub>E</sub>Xbook*". Addison-Wesley, 1984. (邦訳:斎藤信男監修, 鷺谷好輝訳, T<sub>E</sub>X ブック 改訂新版, アスキー出版局, 1989)
- [7] Laslie Lamport. "ATEX: A Document Preparation System". Addison-Wesley, second edition, 1994.
- [8] Laslie Lamport. "*PTEX: A Document Preparation System*". Addison-Wesley, 1986. (邦訳: 倉沢良一監修, 大野俊治・小暮博通・藤浦はる美訳, 文書処理システム IPTEX, アスキー, 1990)
- [9] Michel Goossens, Frank Mittelbach, Alexander Samarin. "The LATEX Companion". Addison-Wesley, 1994.
- [10] 河野 真治『入門 Perl』アスキー出版局, 1994

# Change History

1995/05/08 v1.0	2016/06/19 v1.0l
first edition 2	Get the patch level from
1995/08/25 v1.0a	plvers.dtx 10
Added 'Compatibility', 'Usage of	2016/08/26  v1.0m
DOCSTRIP' and 'References' 2	Moved loading platex.cfg from
1996/02/01 v1.0b	plcore.ltx to platex.ltx 3
Adjusted for the latest DOCSTRIP	2016/09/14 v1.0n
(omake-sh.ins and	Improved banner saving method 3
omake-pl.ins 14	2017/09/24 v1.0o
1997/01/23 v1.0c	Allow negative patch level for
Adjusted for the latest DOCSTRIP. 14	pre-release 10
Don't copy gind.ist and gglo.ist	2017/11/11 v1.0p
from	Moved banner saving code from
\$TEXMF/tex/latex2e/base	platex.ltx to plcore.ltx 3
directory 12	2017/12/02 v1.0r
1997/01/25 v1.0c	English references added 2
Add to filecontents environment	2017/12/05  v1.0s
for pldoc.dic 7	Moved loading default settings
1997/01/29 v1.0c	from plcore.ltx to
Rename pltpatch.ltx to	platex.ltx 3
plpatch.ltx 10	2018/02/07 v1.0t
2016/01/27 v1.0d	Moved ascmac package to separate
Add -e test before rm command . 12	bundle 6
Updated descriptions of pLATEX $2\varepsilon$	2018/02/18 v1.0u
files 5	Moved nidanfloat package to
2016/02/16 v1.0e	separate bundle 6
Add a description of platexrelease 7	2018/04/06 v1.0v
2016/04/12 v1.0f	Sync with the latest source2e.tex 9
Update document 1	2018/04/08 v1.0w
2016/05/07 v1.0g	Stop showing banner during
Save $\LaTeX$ banner 3	format generation for safety 3
2016/05/08 v1.0h	2018/09/03  v1.0x
Exclude plpatch.ltx from the	Mention platexcheat (Japanese
document 10	only) 2
2016/05/12 v1.0i	Mention plautopatch 6
Undefine temporary command	Update document 1
\orgdump in the end 3	2018/09/22  v1.0y
2016/05/20  v1.0j	Show last update info on
Add description of 'pfltrace' 5	pldoc.pdf 10
2016/05/21 v1.0k	2019/09/29 v1.0z
Print also changes 1	Fix typos in document