

About p \LaTeX 2 ϵ

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This document provides a brief description of p \LaTeX 2 ϵ , the Japanese extended version of \LaTeX 2 ϵ . Current maintainer of p \LaTeX 2 ϵ is Japanese \TeX Development Community.

p \LaTeX is a Japanese \LaTeX format, which is adjusted/extended to be more suitable for writing Japanese documents. It requires p \TeX , a \TeX engine with extensions for Japanese typesetting, which is designed for high-quality Japanese book “p”ublishing.¹ The development of both p \TeX and p \LaTeX was done by ASCII Corporation (and its successor ASCII Media Works²), so they are often referred to as “ASCII p \TeX ” and “ASCII p \LaTeX ” respectively.

In 2010, ASCII p \TeX was incorporated into the world-wide \TeX distribution, \TeX Live. Since then, p \TeX has been maintained/improved/changed along with \TeX Live sources. In recent versions of \TeX Live and W32 \TeX (around 2011), the default engine of p \LaTeX changed from original p \TeX to ϵ -p \TeX (p \TeX with ϵ - \TeX extension). Also, the original \LaTeX itself is also frequently updated. On the other hand, p \LaTeX remained unchanged since 2006, which resulted in some incompatibility and limitations.

To follow these upstream changes, we (Japanese \TeX Development Community³) decided to fork ASCII p \LaTeX and distribute the “community edition.” The development version is available from GitHub repository⁴. 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.

¹There is another old implementation of Japanese \LaTeX , called j \LaTeX (not available in \TeX Live). Also, MiK \TeX has another program `platex`, but it has nothing to do with our Japanese p \LaTeX !

²The p \TeX website: <http://ascii.asciimw.jp/pb/ptex/> (closed in 2016).

³<https://texjp.org>

⁴<https://github.com/texjporg/platex>

This document (platex-en.pdf) is a brief explanation of the pL^AT_EX 2_ε community edition. It is somewhat of a historical document now, since pL^AT_EX 2_ε came into existence in 1995 (although the English translation has been done by Japanese T_EX Development Community since 2017). The detail of source codes are described separately in pldoc-en.pdf.

1 Introduction to this document

This document briefly describes p \LaTeX 2 ϵ , but is not a manual of p \LaTeX 2 ϵ . For the basic functions of p \LaTeX 2 ϵ , see [1] (in Japanese). For extensions of some commands for vertical writing (which were first described in [2] in Japanese), see `plex.ttx` section in `pldoc-en.pdf`.

For Japanese typesetting, please refer to the documentation of p \TeX (or “Japanese \TeX ”; the preliminary version of p \TeX), [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 p \LaTeX 2 ϵ . Also describes the standard classes and packages.

Section 3 The compatibility note for users of the old version of p \LaTeX 2 ϵ or those of the original \LaTeX 2 ϵ .

Appendix A Describes DOCSTRIP Options for this document.

Appendix B Description of ‘`pldoc.tex`’ (counterpart for ‘`source2e.tex`’ in \LaTeX 2 ϵ).

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 p \LaTeX 2 ϵ

The structure of p \LaTeX 2 ϵ is similar to that of \LaTeX 2 ϵ ; it consists of 3 types of files: a format (`platex.ltx`), classes and packages.

2.1 About the Format

To make a format for p \LaTeX , process “`platex.ltx`” with INI mode of ϵ -p \TeX .⁵ 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
```

⁵Formerly both p \TeX and ϵ -p \TeX can make the format file for p \LaTeX , however, it’s not true anymore because \LaTeX requires ϵ - \TeX since 2017.

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

```

1 <{*plcore}

   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.
5 \typeout{*****^J%
6         *^J%
7         * making pLATEX format^J%
8         *^J%
9         *****}
10 \makeatletter
11 \input plcore.ltx

```

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

```

12 \InputIfFileExists{pldefs.cfg}
13     {\typeout{*****^J%
14             * Local config file pldefs.cfg used^J%
15             *****}}%
16     {\input{pldefs.ltx}}

```

In the previous version, we displayed pL^AT_EX 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.
18 \everyjob\expandafter{%
19   \the\everyjob
20   \IfFileExists{platex.cfg}{%
21     \typeout{*****^J%
22             * Loading platex.cfg.^J%
23             *****}%
24     \input{platex.cfg}}{%
25 }

```

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 $\text{p}\text{L}\text{A}\text{T}\text{E}\text{X } 2_{\varepsilon}$, is a concatenation of stripped files below using `DOCSTRIP` program.

- `plvers.dtx` defines the format version of $\text{p}\text{L}\text{A}\text{T}\text{E}\text{X } 2_{\varepsilon}$.
- `plfonts.dtx` extends `NFSS2` for Japanese font selection.
- `plcore.dtx` defines other modifications to $\text{L}\text{A}\text{T}\text{E}\text{X } 2_{\varepsilon}$.

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

Attention:

You can customize $\text{p}\text{L}\text{A}\text{T}\text{E}\text{X } 2_{\varepsilon}$ 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 “2018-07-28”) and the format name (“`pLaTeX2e`”) of $\text{p}\text{L}\text{A}\text{T}\text{E}\text{X } 2_{\varepsilon}$ are defined in `plvers.dtx`.

2.1.2 NFSS2 Commands

$\text{L}\text{A}\text{T}\text{E}\text{X } 2_{\varepsilon}$ uses `NFSS2` as a font selection scheme, however, it supports only alphabetic fonts. $\text{p}\text{L}\text{A}\text{T}\text{E}\text{X } 2_{\varepsilon}$ 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 alphabetic fonts or Japanese fonts. It works almost fine with most of the widely used classes and packages, without any modification.

For the detail of (the original) `NFSS2`, please refer to `fntguide.tex` in $\text{L}\text{A}\text{T}\text{E}\text{X } 2_{\varepsilon}$.

⁶ASCII $\text{p}\text{L}\text{A}\text{T}\text{E}\text{X}$ loaded `pldefs.ltx` inside `plcore.ltx`; however, $\text{p}\text{L}\text{A}\text{T}\text{E}\text{X}$ community edition newer than 2018 loads `pldefs.ltx` inside `platex.ltx`.

2.1.3 Output Routine and Floats

`plcore.dtx` modifies and extends some $\text{\LaTeX 2}_{\epsilon}$ 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 $\text{\LaTeX 2}_{\epsilon}$ are based on those in original $\text{\LaTeX 2}_{\epsilon}$, with some Japanese localization.

$\text{\LaTeX 2}_{\epsilon}$ 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`.

$\text{\LaTeX 2}_{\epsilon}$ packages:

- `plext.sty`
Useful macros and extensions for vertical writing; stripped from `plext.dtx`.

- `ptrace.sty`
 $\text{p}\text{\LaTeX} 2_{\epsilon}$ version of `tracefmt.sty`; the package `tracefmt.sty` overwrites $\text{p}\text{\LaTeX} 2_{\epsilon}$ -style NFSS2 commands, so `ptrace.sty` provides redefinitions to recover $\text{p}\text{\LaTeX} 2_{\epsilon}$ extensions. Stripped from `plfonts.dtx`.
- `pfltrace.sty`
 $\text{p}\text{\LaTeX} 2_{\epsilon}$ version of `fltrace.sty` (introduced in $\text{\LaTeX} 2_{\epsilon}$ 2014/05/01); stripped from `plcore.dtx`.
- `oldpfont.sty`
Provides $\text{p}\text{\LaTeX} 2.09$ font commands; stripped from `pl209.dtx`.

The packages “`ascmac.sty`” and “`nidanfloat.sty`”, which had been included in previous versions of $\text{p}\text{\LaTeX}$, 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 $\text{p}\text{\LaTeX} 2_{\epsilon}$ and older versions or original $\text{\LaTeX} 2_{\epsilon}$.

3.1 Compatibility with $\text{\LaTeX} 2_{\epsilon}$

$\text{p}\text{\LaTeX} 2_{\epsilon}$ is in most part upper compatible with $\text{\LaTeX} 2_{\epsilon}$, 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 $\text{\LaTeX} 2_{\epsilon}$ and $\text{p}\text{\LaTeX} 2_{\epsilon}$.

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

Some \LaTeX packages are known to be incompatible with $\text{p}\text{\LaTeX}$. For those packages, $\text{p}\text{\LaTeX}$ -specific patches might be available. Please refer to the documentation of the `plautopatch` package (by Hironobu Yamashita).

3.2 Compatibility with p \LaTeX 2.09

p \LaTeX 2 ϵ has ‘p \LaTeX 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’

p \LaTeX provides ‘latexrelease’ 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:

<i>Option</i>	<i>Function</i>
plcore	Generates a fragment of format sources
pldoc	Generates ‘pldoc.tex’ for typesetting p \LaTeX 2 ϵ 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 p \LaTeX 2 ϵ sources

The contents of ‘pldoc.tex’ for typesetting p \LaTeX 2 ϵ 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 p \LaTeX 2 ϵ sources is written in Japanese. If you need English version, first save

```
\newif\ifJAPANESE
```

as `platex.cfg`, and process `pldoc.tex` (p \LaTeX 2 ϵ Community Edition newer than July 2016 is required).

First, create `pldoc.dic`; it serves as a dictionary for ‘mendex’ (Japanese index processor⁷), which is necessary for indexing control sequences containing Japanese characters (`\西暦` and `\和暦`).

```
32 <*pldoc>
33 \begin{filecontents}{pldoc.dic}
34 西暦      せいき
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 \listfiles
40
```

Do not index some TeX primitives, and some common plain TeX commands.

```
41 \DoNotIndex{\def,\long,\edef,\xdef,\gdef,\let,\global}
42 \DoNotIndex{\if,\ifnum,\ifdim,\ifcat,\ifmmode,\ifvmode,\ifhmode,%
43             \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,\@spaces,\openin,\openout,%
51             \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 \DoNotIndex{\m@ne,\z@,\z@skip,\@ne,\tw@,\p@,\@minus,\@plus}
56 \DoNotIndex{\dp,\wd,\ht,\setlength,\addtolength}
57 \DoNotIndex{\newcommand,\renewcommand}
58
```

Set up the Index and Change History to use `\part`.

```
59 \ifJAPANESE
60 \IndexPrologue{\part*{索引}}%
61             \markboth{索引}{索引}%
62             \addcontentsline{toc}{part}{索引}%
63 イタリア体の数字は、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}}%
```

⁷Developed 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}%
69             \addcontentsline{toc}{part}{Index}%
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}}%
77             \markboth{変更履歴}{変更履歴}%
78             \addcontentsline{toc}{part}{変更履歴}}
79 \else
80 \GlossaryPrologue{\part*{Change History}}%
81             \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{%
87   \let\protect\@unexpandable@protect
88   \edef\@tempa{\noexpand\glossary{#2\space
89     \currentfile\space#1\levelchar
90     \ifx\saved@macroname\@empty
91       \space\actualchar\generalname
92     \else
93       \expandafter\@gobble
94       \saved@macroname\actualchar
95       \string\verb\quotechar*%
96       \verbatimchar\saved@macroname
97       \verbatimchar
98     \fi
99     :\levelchar #3}}%
100   \@tempa\endgroup\@esphack}

```

Codelines are allowed to run over a bit without showing up as overfull.

```

101 \renewcommand*\MacroFont{\fontencoding\encodingdefault
102   \fontfamily\ttdefault
103   \fontseries\mddefault
104   \fontshape\updefault
105   \small
106   \hfuzz 6pt\relax}

```

Section numbers now reach eg 19.12 which need more space.

```

107 \renewcommand*\l@section{\@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\ }

Here starts the document body.

115 \begin{document}
116 \title{The \pLaTeXe\ Sources}
117 \author{Ken Nakano \& Japanese \TeX\ Development Community}
118
119 % Get the date and patch level from plvers.dtx
120 \makeatletter
121 \let\patchdate=\@empty
122 \begingroup
123   \def\ProvidesFile#1\pfmtversion#2#3\ppatch@level#4{%
124     \date{#2}\xdef\patchdate{#4}\endinput}
125   \input{plvers.dtx}
126 \endgroup
127
128 % Add the patch version if available.
129 \def\Xpatch{0}
130 \ifx\patchdate\Xpatch\else
131 % number is assumed
132 \ifnum\patchdate>0
133   \edef\@date{\@date\space Patch level\space\patchdate}
134 \else
135   \edef\@date{\@date\space Pre-Release\patchdate}
136 \fi\fi
137 \makeatother
138
139 \pagenumbering{roman}
140 \maketitle
141 \renewcommand\maketitle{}
142 \tableofcontents
143 \clearpage
144 \pagenumbering{arabic}
145
146 \DocInclude{plvers} % pLaTeX version
147
148 \DocInclude{plfonts} % NFSS2 commands
149
150 \DocInclude{plcore} % kernel commands
151
152 \DocInclude{plext} % external commands
153
154 \DocInclude{pl209} % 2.09 compatibility mode commands
155
156 \DocInclude{kinsoku} % kinsoku parameter
```

```

157
158 \DocInclude{jclasses} % Standard class
159
160 \DocInclude{jltxdoc} % dtx documents class
161
    Stop here if ltxdoc.cfg says \AtEndOfClass{\OnlyDescription}.
162 \StopEventually{\end{document}}
163

    Print Change History and Index. Please refer to Appendix C.1 for processing of
    Change History and Index.

164 \clearpage
165 \pagestyle{headings}
166 % Make TeX shut up.
167 \hbadness=10000
168 \newcount\hbadness
169 \hfuzz=\maxdimen
170 %
171 \PrintChanges
172 \clearpage
173 %
174 \begingroup
175   \def\endash{--}
176   \catcode'\- \active
177   \def-{\futurelet\temp\indexdash}
178   \def\indexdash{\ifx\temp-\endash\fi}
179
180   \PrintIndex
181 \endgroup

    Make sure that the index is not printed twice (ltxdoc.cfg might have a second
    command).

182 \let\PrintChanges\relax
183 \let\PrintIndex\relax
184 \end{document}
185 \end{pdoc}

```

C Additional Utility Programs

C.1 Shell Script `mkpdoc.sh`

A shell script to process ‘`pdoc.tex`’ and produce a fully indexed source code description. Run `sh mkpdoc.sh` to use it.

C.1.1 Content of mkpldoc.sh

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

```
186 <shprog>
187 <ja>rm -f pldoc.toc pldoc.idx pldoc.glo
188 <en>rm -f pldoc-en.toc pldoc-en.idx pldoc-en.glo
```

First run: empty the config file ltxdoc.cfg.

```
189 echo "" > ltxdoc.cfg
```

Now process pldoc.tex.

```
190 <ja>platex pldoc.tex
191 <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 L^AT_EX 2_ε.

Option `-o` specifies output index file name.

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

```
192 <ja>mendex -s gind.ist -d pldoc.dic -o pldoc.ind pldoc.idx
193 <en>mendex -s gind.ist -d pldoc.dic -o pldoc-en.ind pldoc-en.idx
194 <ja>mendex -f -s gglo.ist -o pldoc.gls pldoc.glo
195 <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.

```
196 echo "\includeonly{" > ltxdoc.cfg
197 <ja>platex pldoc.tex
198 <en>platex -jobname=pldoc-en pldoc.tex
```

Third and final run: restore the cfg file to put everything together.

```
199 echo "" > ltxdoc.cfg
200 <ja>platex pldoc.tex
201 <en>platex -jobname=pldoc-en pldoc.tex
202 # EOT
203 </shprog>
```

C.2 Perl Script dstcheck.pl

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.

```
204 <*plprog>
205 ##
206 ## DOCSTRIP 文書内の環境や条件の入れ子を調べる perl スクリプト
207 ##

208 push(@dst,"DUMMY"); push(@dst,"000");
209 push(@env,"DUMMY"); push(@env,"000");

210 while (<>) {
211     if (/^%<*(\[>]+\>)/) { # check conditions
212         push(@dst,$1);
213         push(@dst,$.);
214     } elsif (/^%<\/([>]+\>)/) {
215         $linenum = pop(@dst);
216         $conditions = pop(@dst);
217         if ($1 ne $conditions) {
218             if ($conditions eq "DUMMY") {
219                 print "$ARGV: '</$1>' (l.$.) is not started.\n";
220                 push(@dst,"DUMMY");
221                 push(@dst,"000");
222             } else {
223                 print "$ARGV: '<*$conditions>' (l.$linenum) is ended ";
224                 print "by '<*$1>' (l.$.)\n";
225             }
226         }
227     }

228     if (/^% *\\begin\\{verbatim\\}/) { # check environments
229         while(<>) {
230             last if (/^% *\\end\\{verbatim\\}/);
231         }
232     } elsif (/^% *\\begin\\{([~}]++)\\}\\{(.*)\\}/) {
233         push(@env,$1);
234         push(@env,$.);
235     } elsif (/^% *\\begin\\{([~}]++)\\}/) {
236         push(@env,$1);
237         push(@env,$.);
238     } elsif (/^% *\\end\\{([~}]++)\\}/) {
239         $linenum = pop(@env);
240         $environment = pop(@env);
241         if ($1 ne $environment) {
242             if ($environment eq "DUMMY") {
243                 print "$ARGV: '\\end{$1}' (l.$.) is not started.\n";
244                 push(@env,"DUMMY");
245                 push(@env,"000");
246             } else {
247                 print "$ARGV: '\\begin{$environment}' (l.$linenum) is ended ";
248                 print "by '\\end{$1}' (l.$.)\n";
249             }
250         }
251     }
252 }
```

```

250     }
251 }

252 }

253 $linenum = pop(@dst);
254 $conditions = pop(@dst);
255 while ($conditions ne "DUMMY") {
256     print "$ARGV: '<*$conditions>' (1.$linenum) is not ended.\n";
257     $linenum = pop(@dst);
258     $conditions = pop(@dst);
259 }

260 $linenum = pop(@env);
261 $environment = pop(@env);
262 while ($environment ne "DUMMY") {
263     print "$ARGV: '\\begin{$environment}' (1.$linenum) is not ended.\n";
264     $linenum = pop(@env);
265     $environment = pop(@env);
266 }
267 exit;
268 </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.

```

269 <*Xins>
270 \input docstrip
271 \keepsilent

272 {\catcode'#=12 \gdef\MetaPrefix{## }}

273 \declarepreamble\thispre
274 \endpreamble
275 \usepreamble\thispre

276 \declarepostamble\thispost
277 \endpostamble
278 \usepostamble\thispost

279 \generate{
280     \file{dstcheck.pl}{\from{platex.dtx}{plprog}}
281     \file{mkpldoc.sh}{\from{platex.dtx}{shprog,ja}}
282     \file{mkpldoc-en.sh}{\from{platex.dtx}{shprog,en}}
283 }
284 \endbatchfile
285 </Xins>

```

References

- [1] 中野 賢『日本語 L^AT_EX 2_ε 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_EX』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, pT_EX and Japanese Typesetting The Asian Journal of T_EX, Volume 2, No. 1, 2008.
(<http://ajt.ktug.org/2008/0201okumura.pdf>)
- [5] Hisato Hamano, Vertical Typesetting with T_EX. TUGboat issue 11:3, 1990.
(<https://tug.org/TUGboat/tb11-3/tb29hamano.pdf>)
- [6] Donald E. Knuth. “*The T_EXbook*”. Addison-Wesley, 1984. (邦訳：斎藤信男監修, 鷺谷好輝訳, T_EX ブック 改訂新版, アスキー出版局, 1989)
- [7] Laslie Lamport. “*L^AT_EX: A Document Preparation System*”. Addison-Wesley, second edition, 1994.
- [8] Laslie Lamport. “*L^AT_EX: 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 L^AT_EX, アスキー, 1990)
- [9] Michel Goossens, Frank Mittelbach, Alexander Samarin. “*The L^AT_EX 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	2016/05/21 v1.0k
first edition 3	Print also changes. 1
1995/08/25 v1.0a	2016/06/19 v1.0l
Added ‘Compatibility’, ‘Usage of	Get the patch level from
DOCSTRIP’ and ‘References’ . . . 3	plvers.dtx 11
1996/02/01 v1.0b	2016/08/26 v1.0m
Adjusted for the latest DOCSTRIP	Moved loading platex.cfg from
(omake-sh.ins and	plcore.ltx to platex.ltx . . . 4
omake-pl.ins 15	2016/09/14 v1.0n
1997/01/23 v1.0c	Improved banner saving method . . 4
Adjusted for the latest DOCSTRIP. 15	2017/09/24 v1.0o
Don’t copy gind.ist and gglo.ist	Allow negative patch level for
from	pre-release 11
\$TEXMF/tex/latex2e/base	2017/11/11 v1.0p
directory. 13	Moved banner saving code from
1997/01/25 v1.0c	platex.ltx to plcore.ltx . . . 4
Add to filecontents environment	2017/12/02 v1.0r
for pldoc.dic. 8	English references added 3
1997/01/29 v1.0c	2017/12/05 v1.0s
Rename pltpatch.ltx to	Moved loading default settings
plpatch.ltx 11	from plcore.ltx to
2016/01/27 v1.0d	platex.ltx 4
Add -e test before rm command . 13	2018/02/07 v1.0t
Updated descriptions of pL ^A T _Ε X 2 _ε	Moved ascmac package to separate
files 6	bundle 7
2016/02/16 v1.0e	2018/02/18 v1.0u
Add a description of platexrelease 8	Moved nidanfloat package to
2016/04/12 v1.0f	separate bundle 7
Update document. 1	2018/04/06 v1.0v
2016/05/07 v1.0g	Sync with the latest source2e.tex 10
Save L ^A T _Ε X banner 4	2018/04/08 v1.0w
2016/05/08 v1.0h	Stop showing banner during
Exclude plpatch.ltx from the	format generation for safety . . . 4
document 11	2018/09/03 v1.0x
2016/05/12 v1.0i	Mention platexcheat (Japanese
Undefine temporary command	only). 3
\orgdump in the end. 4	Mention plautopatch. 7
2016/05/20 v1.0j	Update document. 1
Add description of ‘pfltrace’ 6	