

About p^{LA}T_EX 2_ε

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p^{LA}T_EX is a Japanese L^AT_EX format, which is adjusted/extended to be more suitable for writing Japanese documents. It requires pT_EX¹, a T_EX 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 pT_EX” and “ASCII p^{LA}T_EX” respectively.

In 2010, ASCII pT_EX was incorporated into the world-wide T_EX distribution, T_EX Live. Since then, pT_EX has been maintained/improved/changed along with T_EX Live sources. In recent versions of T_EX Live and W32T_EX (around 2011), the default engine of p^{LA}T_EX changed from original pT_EX to ε -pT_EX (pT_EX with ε -T_EX extension). Also, the original L^AT_EX itself is also frequently updated. On the other hand, p^{LA}T_EX remained unchanged since 2006, which resulted in some incompatibility and limitations.

To follow these upstream changes, we (Japanese T_EX Development Community³) decided to fork ASCII p^{LA}T_EX 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 T_EX Development Community, using GitHub Issue system.

This document (platex-en.pdf) is a brief explanation of the p^{LA}T_EX 2_ε community edition. It is somewhat of a historical document now, since p^{LA}T_EX 2_ε came into existence in 1995 (although the English translation has been done by Japanese T_EX Development Community since 2017).

¹The pT_EX website: <https://asciidwango.github.io/ptex/> (in Japanese)

²There is another old implementation of Japanese L^AT_EX by NTT Electrical Communications Laboratories, named J^AT_EX (unavailable in T_EX Live). Also, MiK^TE_X has another program platex for Polish, but it has nothing to do with our Japanese p^{LA}T_EX!

³<https://texjp.org>

⁴<https://github.com/texjporg/platex>

1 Introduction to this document

This document briefly describes p^LA^TE_X 2_ε, but is not a manual of p^LA^TE_X 2_ε. For the basic functions of p^LA^TE_X 2_ε, see [1] (in Japanese). For extensions of some commands for vertical writing (which were first described in [2] in Japanese), see `plexit.dtx` section in `pldoc-en.pdf`.

For Japanese typesetting, please refer to the documentation of pT_EX (or “Japanese T_EX”; the preliminary version of pT_EX), [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^LA^TE_X 2_ε. Also describes the standard classes and packages.

Section 3 The compatibility note for users of the old version of p^LA^TE_X 2_ε or those of the original L^AT_EX 2_ε.

Appendix A Describes DOCSTRIP Options for this document.

Appendix B Description of ‘pldoc.tex’ (counterpart for ‘source2e.tex’ in L^AT_EX 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^LA^TE_X 2_ε

The structure of p^LA^TE_X 2_ε is similar to that of L^AT_EX 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^LA^TE_X, process “`platex.ltx`” with INI mode of ε-pT_EX.⁵ A handy command ‘`fmtutil-sys`’ (or ‘`fmtutil`’) for this purpose is available in T_EX Live. The following command generates `platex fmt`.

```
fmtutil-sys --byfmt platex
```

⁵Formerly both pT_EX and ε-pT_EX can make the format file for p^LA^TE_X, however, it’s not true anymore because L^AT_EX requires ε-T_EX 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 <*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. Some code may be executed after loading.

```

12 \InputIfFileExists{pldefs.cfg}
13     \typeout{*****^~J%
14         * Local config file pldefs.cfg used^~J%
15         *****}%
16     {\input{pldefs.ltx}}
17 \ifx\code@after@pldefs@undefined\else \code@after@pldefs \fi

```

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.

```
18 \%the\everyjob
```

Load `platex.cfg` if it exists at runtime.

```

19 \everyjob\expandafter{%
20   \the\everyjob
21   \IfFileExists{platex.cfg}{%
22     \typeout{*****^~J%
23       * Loading platex.cfg.^~J%
24       *****}%
25     \input{platex.cfg}}{}%
26 }

```

Dump to the format file.

```
27 \let\dump\orgdump
```

```

28 \let\orgdump\@undefined
29 \makeatother
30 \dump
31 %\endinput
32 </plcore>

```

The file `plcore.ltx`, which provides modifications/extensions to make p^LA^TE_X 2_ε, is a concatenation of stripped files below using DOCSTRIP program.

- `plvers.dtx` defines the format version of p^LA^TE_X 2_ε.
- `plfonts.dtx` extends NFSS2 for Japanese font selection.
- `plcore.dtx` defines other modifications to L^AT_EX 2_ε.

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

Attention:

You can customize p^LA^TE_X 2_ε 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 “2020-10-01”) and the format name (“pLaTeX2e”) of p^LA^TE_X 2_ε are defined in `plvers.dtx`.

2.1.2 NFSS2 Commands

L^AT_EX 2_ε uses NFSS2 as a font selection scheme, however, it supports only alphabetic fonts. p^LA^TE_X 2_ε 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 L^AT_EX 2_ε.

⁶ ASCII p^LA^TE_X loaded `pldefs.ltx` inside `plcore.ltx`; however, p^LA^TE_X community edition newer than 2018 loads `pldefs.ltx` inside `plateax.ltx`.

2.1.3 Output Routine and Floats

`plcore.dtx` modifies and extends some L^AT_EX 2 _{ε} 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 pL^AT_EX 2 _{ε} are based on those in original L^AT_EX 2 _{ε} , with some Japanese localization.

pL^AT_EX 2 _{ε} 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`.

pL^AT_EX 2 _{ε} packages:

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

- `ptrace.sty`
`pLATEX 2 ε` version of `tracefnt.sty`; the package `tracefnt.sty` overwrites `pLATEX 2 ε` -style NFSS2 commands, so `ptrace.sty` provides redefinitions to recover `pLATEX 2 ε` extensions. Stripped from `plfonts.dtx`.
- `pfltrace.sty`
`pLATEX 2 ε` version of `fltrace.sty` (introduced in `LATEX 2 ε` 2014/05/01); stripped from `plcore.dtx`.
- `oldpfont.sty`
Provides `pLATEX 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 `pLATEX 2 ε` and older versions or original `LATEX 2 ε` .

3.1 Compatibility with `LATEX 2 ε`

`pLATEX 2 ε` is in most part upward compatible with `LATEX 2 ε` , 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 ε` and `pLATEX 2 ε` .

We hope that most classes and packages meant for `LATEX 2 ε` works also for `pLATEX 2 ε` without any modification. However for example, if a class or a package redefines a command which is already modified by `pLATEX 2 ε` , it might cause an error at the worst case. We cannot tell whether a class or a package works fine with `pLATEX 2 ε` 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 `pLATEX`. For those packages, `pLATEX`-specific patches might be available. Please refer to the documentation of the `plautopatch` package (by Hironobu Yamashita).

3.2 Compatibility with p^AT_EX 2.09

p^AT_EX 2_E has ‘p^AT_EX 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^AT_EX provides ‘`platexrelease`’ package, which is based on ‘`latexrelease`’ package (introduced in L^AT_EX <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>
<code>plcore</code>	Generates a fragment of format sources
<code>pldoc</code>	Generates ‘ <code>pldoc.tex</code> ’ for typesetting p ^A T _E X 2 _E sources
<code>shprog</code>	Generates a shell script to process ‘ <code>pldoc.tex</code> ’
<code>plprog</code>	Generates a tiny perl program to check DOCSTRIP guards nesting
<code>Xins</code>	Generates a DOCSTRIP batch file ‘ <code>Xins.ins</code> ’ for generating the above shell/perl scripts

B Documentation of p^AT_EX 2_E sources

The contents of ‘`pldoc.tex`’ for typesetting p^AT_EX 2_E 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^AT_EX 2_E sources is written in Japanese. If you need English version, first save

```
\newif\ifJAPANESE
```

as `platex.cfg`, and process `pldoc.tex` (p^AT_EX 2_E 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`).

```
33 <*pldoc>
34 \begin{filecontents}{pldoc.dic}
35 西暦    せいれき
36 和暦    われき
37 \end{filecontents}
```

We use `jltxdoc` class; we also require `plext` package, since `plext.dtx` contains several examples of partial vertical writing.

```
38 \documentclass{jltxdoc}
39 \usepackage{plext}
40 \listfiles
41
```

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

```
42 \DoNotIndex{\def, \long, \edef, \xdef, \gdef, \let, \global}
43 \DoNotIndex{\if, \ifnum, \ifdim, \ifcat, \ifmmode, \ifvmode, \ifhmode, %
44           \iftrue, \iffalse, \ifvoid, \ifx, \ifeof, \ifcase, \else, \or, \fi}
45 \DoNotIndex{\box, \copy, \setbox, \unvbox, \unhbox, \hbox, %
46           \vbox, \vtop, \vcenter}
47 \DoNotIndex{\@empty, \immediate, \write}
48 \DoNotIndex{\egroup, \bgroup, \expandafter, \begingroup, \endgroup}
49 \DoNotIndex{\divide, \advance, \multiply, \count, \dimen}
50 \DoNotIndex{\relax, \space, \string}
51 \DoNotIndex{\csname, \endcsname, \@spaces, \openin, \openout, %
52           \closein, \closeout}
53 \DoNotIndex{\catcode, \endinput}
54 \DoNotIndex{\jobname, \message, \read, \the, \m@ne, \noexpand}
55 \DoNotIndex{\hsize, \vsize, \hskip, \vskip, \kern, \hfil, \hfill, \hss, \vss, \unskip}
56 \DoNotIndex{\m@ne, \z@, \z@skip, \@ne, \tw@, \p@, \c@minus, \c@plus}
57 \DoNotIndex{\dp, \wd, \ht, \setlength, \addtolength}
58 \DoNotIndex{\newcommand, \renewcommand}
59
```

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

```
60 \ifJAPANESE
61 \IndexPrologue{\part*{索引}%
62           \markboth{索引}{索引}%
63           \addcontentsline{toc}{part}{索引}%
64 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。
65 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。
66 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。}
67 \else
68 \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.

```

69          \markboth{Index}{Index}%
70          \addcontentsline{toc}{part}{Index}%
71 The italic numbers denote the pages where the corresponding entry
72 is described, numbers underlined point to the definition,
73 all others indicate the places where it is used.}
74 \fi
75 %
76 \ifJAPANESE
77 \GlossaryPrologue{\part*{变更履歴}%
78          \markboth{变更履歴}{变更履歴}%
79          \addcontentsline{toc}{part}{变更履歴}}
80 \else
81 \GlossaryPrologue{\part*{Change History}%
82          \markboth{Change History}{Change History}%
83          \addcontentsline{toc}{part}{Change History}}
84 \fi
85

```

Modify the standard \changes command slightly, to better cope with this multiple file document.

```

86 \makeatletter
87 \def\changes@#1#2#3{%
88   \let\protect\@unexpandable@protect
89   \edef\@tempa{\noexpand\glossary{#2\space
90           \currentfile\space#1\levelchar
91           \ifx\saved@macroname\@empty
92           \space\actualchar\generalname
93       \else
94           \expandafter\gobble
95           \saved@macroname\actualchar
96           \string\verb\quotechar*%
97           \verbatimchar\saved@macroname
98           \verbatimchar
99       \fi
100      :\levelchar #3}}%
101 \@tempa\endgroup\@esphack}

```

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

```

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

```

Section numbers now reach eg 19.12 which need more space.

```

108 \renewcommand*\l@subsection{\@dottedtocline{2}{1.5em}{2.8em}}
109 \renewcommand*\l@subsubsection{\@dottedtocline{3}{3.8em}{3.4em}}
110 \makeatother

```

Produce a Change Log and (2 column) Index.

```
111 \RecordChanges
112 \CodelineIndex
113 \EnableCrossrefs
114 \setcounter{IndexColumns}{2}
115 \settowidth\MacroIndent{\ttfamily\scriptsize 000\ }

Set the title, authors and the date for this 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\xpatchdate\xpatch\else
131 % number is assumed
132 \ifnum\xpatchdate>0
133   \edef@\date{\@date\space Patch level\space\xpatchdate}
134 \else
135   \edef@\date{\@date\space Pre-Release\xpatchdate}
136 \fi\fi
137
138 % Add the last update info, in case format date unchanged
139 % Note: \@ifl@t@r can be used only in preamble.
140 \def\lastupd@te{0000/00/00}
141 \begingroup
142   \def\ProvidesFile#1[#2 #3]{%
143     \def@\tempd@te{#2}\endinput
144     \@ifl@t@r{\@tempd@te}{\lastupd@te}{%
145       \global\let\lastupd@te\@tempd@te
146     }{}}
147   \let\ProvidesClass\ProvidesFile
148   \let\ProvidesPackage\ProvidesFile
149   \input{plvers.dtx}
150   \input{plexpl3.dtx}
151   \input{plfonts.dtx}
152   \input{plcore.dtx}
153   \input{plexit.dtx}
154   \input{pl209.dtx}
155   \input{kinsoku.dtx}
156   \input{jclasses.dtx}
157   \input{jltxdoc.cls}
```

```

158 \endgroup
159 \@ifl@t@r{\lastupd@te}{\pfmtversion}{%
160   \edef\@date{\@date\break (last updated: \lastupd@te)}%
161 }{}%
162 \makeatother

```

Here starts the document body.

```

163 \begin{document}
164 \pagenumbering{roman}
165 \maketitle
166 \renewcommand\maketitle{}
167 \tableofcontents
168 \clearpage
169 \pagenumbering{arabic}
170
171 \DocInclude{plvers} % pLaTeX version
172
173 \DocInclude{plexpl3} % additions to expl3
174
175 \DocInclude{plfonts} % NFSS2 commands
176
177 \DocInclude{plcore} % kernel commands
178
179 \DocInclude{plext} % external commands
180
181 \DocInclude{pl209} % 2.09 compatibility mode commands
182
183 \DocInclude{kinsoku} % kinsoku parameter
184
185 \DocInclude{jclasses} % Standard class
186
187 \DocInclude{jltxdoc} % dtx documents class
188

```

Stop here if `ltxdoc.cfg` says `\AtEndOfClass{\OnlyDescription}`.

```

189 \StopEventually{\end{document}}
190

```

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

```

191 \clearpage
192 \pagestyle{headings}
193 % Make TeX shut up.
194 \hbadness=10000
195 \newcount\hbadness
196 \hfuzz=\maxdimen
197 %
198 \PrintChanges
199 \clearpage
200 %

```

```

201 \begingroup
202   \def\endash{--}
203   \catcode`\-\active
204   \def{\futurelet\tmp\indexdash}
205   \def\indexdash{\ifx\tmp\endash\fi}
206
207   \PrintIndex
208 \endgroup

```

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

```

209 \let\PrintChanges\relax
210 \let\PrintIndex\relax
211 \end{document}
212 </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.

```

213 <*shprog>
214 <ja>rm -f pldoc.toc pldoc.idx pldoc.glo
215 <en>rm -f pldoc-en.toc pldoc-en.idx pldoc-en.glo

```

First run: empty the config file ltxdoc.cfg.

```
216 echo "" > ltxdoc.cfg
```

Now process `pldoc.tex`.

```

217 <ja>platex pldoc.tex
218 <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 upward compatible with ‘makeindex’ and automatically handles readings of Kanji words.

Option `-s` employs a style file for formatting. Here we use `gind.ist` and `g glo.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.)

```

219 ⟨ja⟩mendex -s gind.ist -d pldoc.dic -o pldoc.ind pldoc.idx
220 ⟨en⟩mendex -s gind.ist -d pldoc.dic -o pldoc-en.ind pldoc-en.idx
221 ⟨ja⟩mendex -f -s gglo.ist -o pldoc.gls pldoc.glo
222 ⟨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.

```

223 echo "\includeonly{}" > ltxdoc.cfg
224 ⟨ja⟩platex pldoc.tex
225 ⟨en⟩platex -jobname=pldoc-en pldoc.tex

```

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

```

226 echo "" > ltxdoc.cfg
227 ⟨ja⟩platex pldoc.tex
228 ⟨en⟩platex -jobname=pldoc-en pldoc.tex
229 # EOT
230 ⟨/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.

```

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

```

```

251         print "by '<*$1>' (l.$.)\n";
252     }
253 }
254 }

255 if (/^% *\begin{verbatim}/) { # check environments
256   while(<>) {
257     last if (/^% *\end{verbatim}/);
258   }
259 } elsif (/^% *\begin{(([^{}]+)\{(.*)\})/ {
260   push(@env,$1);
261   push(@env,$.);
262 } elsif (/^% *\begin{(([^{}]+)\})/ {
263   push(@env,$1);
264   push(@env,$.);
265 } elsif (/^% *\end{(([^{}]+)\})/ {
266   $linenum = pop(@env);
267   $environment = pop(@env);
268   if ($1 ne $environment) {
269     if ($environment eq "DUMMY") {
270       print "$ARGV: '\end{$1}' (l.$.) is not started.\n";
271       push(@env,"DUMMY");
272       push(@env,"000");
273     } else {
274       print "$ARGV: \begin{$environment} (l.$linenum) is ended ";
275       print "by \end{$1} (l.$.)\n";
276     }
277   }
278 }

279 }

280 $linenum = pop(@dst);
281 $conditions = pop(@dst);
282 while ($conditions ne "DUMMY") {
283   print "$ARGV: '<$conditions>' (l.$linenum) is not ended.\n";
284   $linenum = pop(@dst);
285   $conditions = pop(@dst);
286 }

287 $linenum = pop(@env);
288 $environment = pop(@env);
289 while ($environment ne "DUMMY") {
290   print "$ARGV: '\begin{$environment}' (l.$linenum) is not ended.\n";
291   $linenum = pop(@env);
292   $environment = pop(@env);
293 }
294 exit;
295 </p|prog>

```

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.

```
296 <*Xins>
297 \input docstrip
298 \keepsilent
299 {\catcode`#=12 \gdef\MetaPrefix{## } }
300 \declarepreamble\thispre
301 \endpreamble
302 \usepreamble\thispre
303 \declarepostamble\thispost
304 \endpostamble
305 \usepostamble\thispost
306 \generate{
307   \file{dstcheck.pl}{\from{platex.dtx}{plprog}}
308   \file{mkpldoc.sh}{\from{platex.dtx}{shprog,ja}}
309   \file{mkpldoc-en.sh}{\from{platex.dtx}{shprog,en}}
310 }
311 \endbatchfile
312 //Xins
```

References

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Change History

1995/05/08 v1.0		2016/08/26 v1.0m
first edition	2	Moved loading <code>platex.cfg</code> from <code>plcore.ltx</code> to <code>platex.ltx</code> ... 3
1995/08/25 v1.0a		2016/09/14 v1.0n
Added 'Compatibility', 'Usage of DOCSTRIP' and 'References' ...	2	Improved banner saving method ... 3
1996/02/01 v1.0b		2017/09/24 v1.0o
Adjusted for the latest DOCSTRIP (<code>omake-sh.ins</code> and <code>omake-pl.ins</code>)	15	Allow negative patch level for pre-release 10
1997/01/23 v1.0c		2017/11/11 v1.0p
Adjusted for the latest DOCSTRIP.	15	Moved banner saving code from <code>platex.ltx</code> to <code>plcore.ltx</code> ... 3
Don't copy gind.ist and gglo.ist from \$TEXMF/tex/latex2e/base directory.	12	2017/12/02 v1.0r
1997/01/25 v1.0c		English references added 2
Add to filecontents environment for pldoc.dic.	7	2017/12/05 v1.0s
1997/01/29 v1.0c		Moved loading default settings from <code>plcore.ltx</code> to <code>platex.ltx</code> 3
Rename <code>plpatch.ltx</code> to <code>plpatch.ltx</code>	10	2018/02/07 v1.0t
2016/01/27 v1.0d		Moved ascmac package to separate bundle 6
Add -e test before rm command .	12	2018/02/18 v1.0u
Updated descriptions of pLATEX 2ε files	5	Moved nidanfloat package to separate bundle 6
2016/02/16 v1.0e		2018/04/06 v1.0v
Add a description of platexrelease	7	Sync with the latest <code>source2e.tex</code> 9
2016/04/12 v1.0f		2018/04/08 v1.0w
Update document.	1	Stop showing banner during format generation for safety ... 3
2016/05/07 v1.0g		2018/09/03 v1.0x
Save LATEX banner	3	Mention platexcheat (Japanese only). 2
2016/05/08 v1.0h		2019/09/29 v1.0z
Exclude <code>plpatch.ltx</code> from the document	10	Mention plautopatch. 6
2016/05/12 v1.0i		2018/09/22 v1.0y
Undefine temporary command <code>\orgdump</code> in the end.	3	Update document. 1
2016/05/20 v1.0j		2019/09/29 v1.0z
Fix typos in document.	1	Update document. 1
Add description of 'pftrace'	5	2020/03/24 v1.1
2016/05/21 v1.0k		Update document. 1
Print also changes.	1	2020/09/26 v1.1a
2016/06/19 v1.0l		Add <code>plexpl3.dtx</code> 11
Get the patch level from <code>plvers.dtx</code>	10	2020/09/28 v1.1b
		Add hook after loading defs 3