**Continue**: Continuation marks on (by default odd) pages*

Peter Wilson† with Donald Arseneau and Merciadri Luca
Herries Press
2018/12/09

**Abstract**

The `continue` package provides for a variety of continuation indicators on pages in a twosided document when the text continues on the following page. The default is to only mark odd pages but all pages can be marked or marking can be stopped or started at any point.

**Contents**

1 Introduction 1

2 The `continue` package 2
   2.1 Options ................................................. 2
   2.2 Macros ................................................. 3

3 An example document 4

4 The `continue` code 5

1 Introduction

In some types of documents it is customary or convenient to indicate at the bottom of a page that the text continues on the following page. For example, when a two page exam sheet is printed twosided it could be advantageous for the student to have an indication on the first page that there are further questions on the back of the page. Another instance is when documents are printed in the expectation that they will be read by someone in front of an audience, so in order to minimise any hesitation as a page is turned over, the first word on the following page is printed at the bottom of the preceeding page.

---

*This file (continue.dtx) has version number v0.2, last revised 2018/12/09.
†herries dot press at earthlink dot net
2 The continue package

This manual is typeset according to the conventions of the \texttt{\LaTeX} \texttt{docstrip} utility which enables the automatic extraction of the \texttt{\LaTeX} macro source files [GMS94].

Section 2 describes the usage of the package. Commented package code may be in later sections.

2 The continue package

The \texttt{continue} package is an amalgam of modified versions of two packages — \texttt{fwlw} (First Word, Last Word) by Donald Arseneau [Ars95] which among other things gets the first word on the next page and \texttt{turnpageetex} by Merciadri Luca [Luc15] for placing something at the bottom of the text block.

The \texttt{fwlw} package includes the following statement:

Copyright (C) 1993,1995 by Donald Arseneau Vancouver, Canada, email asnd@triumf.ca This software package may be freely used, transmitted, reproduced, or modified provided that this notice is left intact.

In this instance I have modified the original package as allowed above.

With respect to the \texttt{turnpageetex} package this was released under the \LaTeX{} Project Public License and I have taken the liberty of extending its functionality slightly, as allowed.

2.1 Options

There are three options that can be used when calling the package denoting the kind and position of the continuation marker.

- \texttt{margin} With this option the continuation marker is placed in the margin aligned with the bottom of the text block. If the option is not used then the continuation marker is placed below the text text block ending at the outer margin.

- \texttt{word} With this option the package attempts to use the first ‘word’ on the following verso page as the continuation marker. If the option is not used then a user specified marker is employed.

- \texttt{allpages} With this option the package tries to provide a marker on each page, whether odd or even. The default is to only provide markers on odd pages.

The relevant portions of the introduction to the \texttt{fwlw} package are:

The \texttt{fwlw} package provides a mechanism to determine ... the first word on the next page. The ‘words’ you see may not be real words, but any unbreakable object.

... labelling does not make much sense when \texttt{\chapter} generates a page break, so the last page before a \texttt{\chapter} (or any \texttt{\clearpage}) gets a blank "next word" ...

Note that ‘words’ may unfortunately be things like:

- two words
2. The continue package

- [ ]Word ( [ ] represents a parindent box)
- a whole displayed equation
- the first column of an aligned equation
- anomalously blank, if there are \writes or split footnotes etc.
- partial words like par- or -tial due to hyphenation.

In essence, the ‘word’ might not be what you might expect, but for most documents the results are good. However, page 3 of the example file trycontinue.tex prints a blank word as the continuation marker because the first line on the following page is the start of a paragraph which starts with a space.

2.2 Macros

When the word option is not used the following macros are available:

\flagcont
  This command defines the continuation mark. Its default specification is:
  \newcommand*{\flagcont}{Continued}
  It can be changed in the document’s preamble, perhaps:
  \renewcommand*{\flagcont}{---$>$}
  to print a right pointing arrow.

\flagend
  This command defines the continuation mark when the last odd page is the
  final page (i.e. when there is no following recto page). Its default specification is:
  \newcommand*{\flagend}{End}
  but it can be changed in the document’s preamble.

    When the word option is used the following macros are available:

\flagword
  This command specifies how the continuation word is formatted. Its definition
  is:
  \newcommand*{\flagword}{\preflagword\usebox\NextWordBox\postflagword}
  where \NextWordBox holds the first word on the next recto page (empty if there
  is no next recto page).

\preflagword
  This command is printed before the word continuation marker. Its default
  definition is:
  \newcommand*{\preflagword}{\{\}
  but can be redefined in the document preamble to put, perhaps, an opening brace
  before the word like:
  \renewcommand*{\preflagword}{\{\}

\postflagword
  Similar to \preflagword except that it is printed after the marker. Its default
  definition is:
  \newcommand*{\postflagword}{\}

\contsep
\contdrop
  When the margin option is used the continuation marker is set a distance \contsep to the right of the textblock. When margin is not used then the marker
  is set a distance \contdrop below the textblock. Their default values are set by:
  \setlength{\contsep}{\marginparsep} and \setlength{\contdrop}{0.5\footskip}
3 An example document

You can use the document trycontinue.tex to experiment with the options. It may take two (pdf)LaTeX runs for the continuation marks to settle down to their final values and positions.

\documentclass[\twoside,\a6paper]{memoir}
\usepackage{continue}
\usepackage{lipsum}
\begin{document}

First\footnote{Foot 1} \lipsum[1]

Second\footnote{Foot 2} \lipsum[2]

Third\footnote{Foot 3} \lipsum[3]

\contstop % stop marking

Fourth\footnote{Foot 4} \lipsum[4]

Fifth\footnote{Foot 5} \lipsum[5]

\contgo % start marking
\end{document}
4 The continue code

Announce the name and version of the package, which requires \TeX{} and the atbegshi, picture, zref-abspage and zref-lastpage packages and has options margin, word and allpages (added allpages 2018/11/30).

\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{continue}[2018/12/09 v0.2 Continues on the following page]
\PackageInfo{continue}{This is continue using \eTeX{.}}

\ifcontmargin
\ifcontword
\needsif{ifcontmargin}{contmarginfalse}{contmargintrue}
\needsif{ifcontword}{contwordfalse}{contwordtrue}
\needsif{ifcontallpages}{contallpagesfalse}{contallpagestrue}
\DeclareOption{margin}{contmargintrue}
\DeclareOption{word}{contwordtrue}
\DeclareOption{allpages}{contallpagestrue}
\ProcessOptions
\ifc@go
\contgo
\contstop
Continuation marks will stop after \contstop but will continue after \contgo (the default)
\needsif{ifc@go}{c@gotrue}{c@gofalse}
\newcommand{\contgo}{c@gotrue}
\newcommand{\contstop}{c@gofalse}

And the required packages needed by the original turnpageetex package.
\needsif{ifc@go}{c@gotrue}{c@gofalse}
\newcommand{\contgo}{c@gotrue}
\newcommand{\contstop}{c@gofalse}

The next chunk of code is a revised version of the fww package. I don’t really understand it but I have a feeling that certain parts are irrelevant to the purposes at hand.
\LWCopen Declare a unique penalty flag as a value.

\FirstWordBox Allocate box registers
\NextWordBox
\LastWordBox
\LWC@box
\LWC@saved

\FWLWCnormal@L@output Shell around old output routine. Gets first word from next page by letting \TeX continue with \vsize=0 to get a look at the next line. Values of \outputpenalty for \specialoutput ( -10001 to -19999 ) are simply run through the output routine. \supereject and \clearpage give a blank "next word". When called after making a stub-page the stub is returned to the vertical list, the previous page is restored and shipped out normally, but knowing what the next word will be.

\edef\FWLWCnorm@L@output{\the\output}

\output{\@tempswafalse
\ifnum \outputpenalty>-\@MM \ifnum\outputpenalty<\@M \@tempswatrue\fi\fi
\if@tempswa % special (float) output
% \message{Float handler: penalty=\the\outputpenalty}%
\FWLWCnorm@L@output
\else
\ifvoid\LWC@saved % end of real page
% \message{End of real page}%
\global\setbox\LWC@saved\copy\@cclv % save page
%\begin{comment}
\setbox\@tempboxa\vbox{\unvbox\@cclv \unskip\unkern\unpenalty%
\unskip\unkern\unpenalty \unskip\unkern\unpenalty
\setbox\@tempboxa\lastbox
\LWC@getlast@word\@tempboxa\LastWordBox
%\end{comment}
\ifnum\outputpenalty>-\@MM % not \supereject
\xdef\LWC@vsize{\global\vsize\the\vsize}
\global\holdinginserts\the\holdinginserts
\global\vsize\z@ \global\holdinginserts\@ne
\else % \supereject, just output, don’t look for word on next page
% \message{caused by super-eject.}
\global\setbox\LWC@saved\box\@cclv
\global\setbox\NextWordBox\hbox{}
\FWLWCnorm@L@output
\global\setbox\FirstWordBox\box\NextWordBox
\fi
\else % saved page => just did tiny page to get next word
% \message{Just got next line:}{\tracingall\showboxdepth2 \showbox\@cclv}%
\setbox\@tempboxa\vbox{\penalty\LWCopen\unvcopy\@cclv \LWC@getall@boxes
\iffbox\LWC@box\penalty\LWCopen\unvcopy\@cclv \LWC@getall@boxes\fi
The next chunk of code is a revised version of the original `turnpageetex` package.

%François Bousquet’s`lastpageetex` package
%------------------------------------------------------------------------
%------------------------------------------------------------------------
The user’s macros

\newcommand{\preflagword}{}
\newcommand{\postflagword}{}
\newcommand{\flagcont}{Continued}
\newcommand{\flagend}{End}
\newcommand{\flagword}{\preflagword\usebox{NextWordBox}\postflagword}
\newlength{\contsep}\setlength{\contsep}{\marginparsep}
\newlength{\contdrop}\setlength{\contdrop}{0.5\footskip}

Adjust \flagcont when the word option is used.

\ifcontword
\let\flagcont=\flagword
\fi

\c@ntoddpagepos calculates the position of the marker on odd pages.
\newcommand{\c@ntoddpagepos}{%}
\dimen1=1in
\advance\dimen1 by \textwidth
\advance\dimen1 by \oddsidemargin
\dimen3=1in
\advance\dimen3 by \topmargin
\advance\dimen3 by \headheight
\advance\dimen3 by \headsep
\ifcontmargin
\advance\dimen1 by \contsep
\else
\advance\dimen3 by \contdrop
\fi
\c@ntevenpagepos calculates the position of the marker on even pages.
\newcommand{\c@ntevenpagepos}{%}
\dimen1=1in
\advance\dimen1 by \textwidth
\advance\dimen1 by \evensidemargin
\dimen3=1in
\advance\dimen3 by \topmargin
\advance\dimen3 by \headheight
\advance\dimen3 by \headsep
\ifcontmargin
\advance\dimen1 by \contsep
\else
\advance\dimen3 by \contdrop
\fi
\c@outcontpage Output continued marked page.
\newcommand{\c@outcontpage}[
\ifnum\zref@extract{LastPage}{abspage} \zref@extract{abspage} \c@abspage
\ifcontmargin
\put(\dimen1, -\dimen3){{\flagcont}}%
\else
\put(\dimen1, -\dimen3){{\llap{\flagcont}}}%
\fi
\else
\ifcontmargin
\put(\dimen1, -\dimen3){{\flagend}}%
\else
\put(\dimen1, -\dimen3){{\llap{\flagend}}}%
\fi
\fi
]}% end of \c@outcontpage
\AtBeginShipout{\AtBeginShipoutUpperLeft{\ifc@go\ifodd\c@page\c@ntoddpagepos \c@outcontpage \else \ifcontallpages \c@ntevenpagepos \c@outcontpage \fi \fi\fi\fi\fi\fi\fi
}% end AtBeginShipoutUpperLeft
\fi
\fi
}% end AtBeginShipout
% ⟨/usc⟩

References


## Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

### Symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>@MM</td>
<td>84, 99, 134</td>
</tr>
<tr>
<td>@cclv</td>
<td>91, 93, 105, 111, 117, 119</td>
</tr>
<tr>
<td>@parboxrestore</td>
<td>124, 131</td>
</tr>
<tr>
<td>@tempa</td>
<td>142, 147</td>
</tr>
<tr>
<td>@parboxrestore</td>
<td>124, 131</td>
</tr>
<tr>
<td>@tempa</td>
<td>142, 147</td>
</tr>
</tbody>
</table>

### A

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>allpages (option)</td>
<td>2</td>
</tr>
<tr>
<td>\AtBeginShipout</td>
<td>210</td>
</tr>
<tr>
<td>\AtBeginShipoutUpperLeft</td>
<td>211</td>
</tr>
</tbody>
</table>

### C

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>\c@abspage</td>
<td>196</td>
</tr>
<tr>
<td>\c@gofalse</td>
<td>66</td>
</tr>
<tr>
<td>\c@getrue</td>
<td>64, 65</td>
</tr>
<tr>
<td>\c@nteoddpagepos</td>
<td>180, 218</td>
</tr>
<tr>
<td>\c@ntevenpagepos</td>
<td>185, 214</td>
</tr>
</tbody>
</table>

### D

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>\dimen</td>
<td>166–173, 175, 177, 181–188, 190, 192, 198, 200, 204, 206</td>
</tr>
</tbody>
</table>

### E

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>\edef</td>
<td>81</td>
</tr>
<tr>
<td>\endgraf</td>
<td>127, 138</td>
</tr>
</tbody>
</table>

### F

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>@fill</td>
<td>126</td>
</tr>
<tr>
<td>@FirstWordBox</td>
<td>76, 108, 121</td>
</tr>
<tr>
<td>@flagcont</td>
<td>3, 26, 154, 198, 200</td>
</tr>
<tr>
<td>@flagend</td>
<td>3, 154, 204, 206</td>
</tr>
<tr>
<td>@flagword</td>
<td>3, 154</td>
</tr>
<tr>
<td>@footnote</td>
<td>32, 34, 36, 40, 42, 46</td>
</tr>
<tr>
<td>@footskip</td>
<td>161</td>
</tr>
<tr>
<td>@holdinginserts</td>
<td>101, 102</td>
</tr>
<tr>
<td>@hyphenpenalty</td>
<td>125, 133</td>
</tr>
</tbody>
</table>

### H

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>@hbadness</td>
<td>134</td>
</tr>
<tr>
<td>@headheight</td>
<td>171, 186</td>
</tr>
<tr>
<td>@headsep</td>
<td>172, 187</td>
</tr>
<tr>
<td>@hfuzz</td>
<td>134</td>
</tr>
<tr>
<td>@holdinginserts</td>
<td>101, 102</td>
</tr>
<tr>
<td>@hyphenpenalty</td>
<td>125, 133</td>
</tr>
</tbody>
</table>

### I

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>@ifc@go</td>
<td>64, 212</td>
</tr>
<tr>
<td>@iffantallpages</td>
<td>58, 217</td>
</tr>
<tr>
<td>@ifcontmargin</td>
<td>56</td>
</tr>
<tr>
<td>@ifcontword</td>
<td>56, 162</td>
</tr>
<tr>
<td>@ifbox</td>
<td>135, 149</td>
</tr>
<tr>
<td>@ifodd</td>
<td>213</td>
</tr>
<tr>
<td>@ifvbox</td>
<td>113, 114, 137, 151</td>
</tr>
<tr>
<td>@ifvoid</td>
<td>89, 143</td>
</tr>
</tbody>
</table>

### M

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>@margin</td>
<td>2</td>
</tr>
<tr>
<td>@marginparsep</td>
<td>160</td>
</tr>
<tr>
<td>@mathchardef</td>
<td>75</td>
</tr>
<tr>
<td>@maxdimen</td>
<td>124, 132, 134</td>
</tr>
<tr>
<td>@message</td>
<td>86, 90, 104, 111</td>
</tr>
</tbody>
</table>

### N

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>@newbox</td>
<td>76–80</td>
</tr>
<tr>
<td>@nnewif</td>
<td>56–58, 64</td>
</tr>
<tr>
<td>@NextWordBox</td>
<td>76, 106, 108, 114, 115, 121, 159</td>
</tr>
</tbody>
</table>

### O

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>@oddsidemargin</td>
<td>168</td>
</tr>
<tr>
<td>@overfullrule</td>
<td>134</td>
</tr>
</tbody>
</table>

### Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>allpages</td>
<td>2</td>
</tr>
<tr>
<td>margin</td>
<td>2</td>
</tr>
<tr>
<td>word</td>
<td>2</td>
</tr>
<tr>
<td>@output</td>
<td>81, 83</td>
</tr>
<tr>
<td>@outputpenalty</td>
<td>84, 86, 99, 117</td>
</tr>
</tbody>
</table>

---

Options not listed above are described in the following chapters.
## Index

<table>
<thead>
<tr>
<th>P</th>
<th>T</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>\PackageInfo</td>
<td>\textheight</td>
<td>\unvcopy</td>
</tr>
<tr>
<td>\parshape</td>
<td>\textwidth</td>
<td>\usebox</td>
</tr>
<tr>
<td>\postflagword</td>
<td>\thr@@</td>
<td>\vref@extract</td>
</tr>
<tr>
<td>\preflagword</td>
<td>\topmargin</td>
<td>\scantokens</td>
</tr>
<tr>
<td>\ProvidesPackage</td>
<td>\tracingall</td>
<td>\scantokens</td>
</tr>
<tr>
<td>\put</td>
<td>\unvbox</td>
<td>\word (option)</td>
</tr>
<tr>
<td>R</td>
<td>\unhbox</td>
<td>\widen</td>
</tr>
<tr>
<td>\RequirePackage</td>
<td>\unskip</td>
<td>\xdef</td>
</tr>
<tr>
<td>S</td>
<td>\unvbox</td>
<td>\XrefBox</td>
</tr>
<tr>
<td>\showbox</td>
<td>\unpenalty</td>
<td>\ZrefBox</td>
</tr>
<tr>
<td>\showboxdepth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>\supereject</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Index is a list of keywords and their page numbers, indicating where they are discussed in the text.