

# Marking up differences between latex files with *latexdiff*

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September 8, 2004

## Preamble

*latexdiff* is a Perl script, which compares two latex files and marks up significant differences between them. Various options are available for visual markup using standard latex packages such as *color.sty*. Changes not directly affecting visible text, for example in formatting commands, are still marked in the latex source. A rudimentary revision facility is provided by another Perl script, *latexrevise*, which accepts or rejects all changes. Manual editing of the difference file can be used to override this default behaviour and accept or reject selected changes only.

There is no explicit support for annotations as these are trivial to implement. For example, I include the following command definition in the preamble

```
\newcommand{\remark}[1]{\bf [ \footnotesize #1 ]}
```

and mark up annotations as follows

```
... The roadrunner is the fastest running bird \remark{Check this  
again with a zoologist!}. The most famous roadrunner ...
```

Alternatively, instead of a command like `\remark` in the example just given, an equivalent annotation environment could be defined. *latexrevise* can remove such comments or environments from the text body.

It is planned that the revision capabilities of this system will be further expanded, dependent on the amount of feedback received.

On the following pages you find the *man* pages for *latexdiff* and *latexrevise* and a simple example.

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## 1 NAME

latexdiff - determine and markup differences between two latex files

## 2 SYNOPSIS

latexdiff [ OPTIONS ] *old.tex new.tex > diff.tex*

## 3 DESCRIPTION

Briefly, *latexdiff* is a utility program to aid in the management of revisions of latex documents. It compares two valid latex files, here called `old.tex` and `new.tex`, finds significant differences between them (i.e., ignoring the number of white spaces and position of line breaks), and adds special commands to highlight the differences. Where visual highlighting is not possible, e.g. for changes in the formatting, the differences are nevertheless marked up in the source.

The program treats the preamble differently from the main document. Differences between the preambles are found using line-based differencing (similarly to the Unix diff command, but ignoring white spaces). A comment, "%DIF >" is appended to each added line, i.e. a line present in `new.tex` but not in `old.tex`. Discarded lines are deactivated by prepending "%DIF <". Changed blocks are preceded by comment lines giving information about line numbers in the original files. Where there are insignificant differences, the resulting file `diff.tex` will be similar to `new.tex`. At the end of the preamble, the definitions for *latexdiff* markup commands are inserted. In differencing the main body of the text, *latexdiff* attempts to satisfy the following guidelines (in order of priority):

- 1

If both `old.tex` and `new.tex` are valid LaTeX, then the resulting `diff.tex` should also be valid LaTeX. (NB If a few plain TeX commands are used within `old.tex` or `new.tex` then `diff.tex` is not guaranteed to work but usually will).

- 2

Significant differences are determined on the level of individual words. All significant differences, including differences between comments should be clearly marked in the resulting source code `diff.tex`.

- 3

If a changed passage contains text or text-producing commands, then running `diff.tex` through LaTeX should produce output where added and discarded passages are highlighted.

#### 4. 4

Where there are insignificant differences, e.g. in the positioning of line breaks, `diff.tex` should follow the formatting of `new.tex`

For differencing the same algorithm as *diff* is used but words instead of lines words are compared. An attempt is made to recognize blocks which are completely changed such that they can be marked up as unit (otherwise readability is reduced because common words such as "the" and "and" which can be found both in the discarded and added block are considered to be identical text parts and thus not marked up, and added and discarded text parts are interspersed between these common words). Comments are differenced line by line but the number of spaces within comments is ignored. Commands including all their arguments are generally compared as one unit, i.e., no mark-up is inserted into the arguments of commands. However, for a selected number of commands (for example, `\caption` and all sectioning commands) the last argument is known to be text. This text is split into words and differenced just as ordinary text (use options to show and change the list of text commands, see below). As the algorithm has no detailed knowledge of LaTeX, it assumes all pairs of curly braces immediately following a command (i.e. a sequence of letters beginning with a backslash) are arguments for that command. As a restriction to condition 1 above it is thus necessary to surround all arguments with curly braces, and to not insert extraneous spaces. For example, write

```
\section{\textem{This is an emphasized section title}}
```

and not

```
\section {\textem{This is an emphasized section title}}
```

or

```
\section\textem{This is an emphasized section title}
```

even though all varieties are the same to LaTeX.

For environments whose content does not conform to standard LaTeX or where graphical markup does not make sense all markup commands can be removed by setting the `PICTUREENV` configuration variable (set by default to `picture` environments; (see `-config` option).

It is also possible to difference files which do not have a preamble. In this case, the file is processed in the main document mode, but the definitions of the markup commands are not inserted.

All markup commands inserted by *latexdiff* begin with "`\DIF`". Added blocks containing words, commands or comments which are in `new.tex` but not in `old.tex` are marked by `\DIFaddbegin` and `\DIFaddend`. Discarded blocks are marked by `\DIFdelbegin` and `\DIFdelend`. Within added blocks all text is highlighted with `\DIFadd` like this: `\DIFadd{Added text block}` Selected 'safe' commands can be contained in these text blocks as well (use options to show

and change the list of safe commands, see below). All other commands as well as braces “{” and ”}” are never put within the scope of `\DIFadd`. Added comments are marked by prepending “%DIF >”.

Within deleted blocks text is highlighted with `\DIFdel`. Deleted comments are marked by prepending “%DIF <”. Non-safe command and curly braces within deleted blocks are commented out with “%DIFDELCMD <”.

## 4 OPTIONS

### Preamble

The following options determine the visual markup style by adding the appropriate command definitions to the preamble. See the end of this section for a description of available styles.

#### **`-type=markupstyle` or `-t markupstyle`**

Add code to preamble for selected markup style. This option defines `\DIFadd` and `\DIFdel` commands. Available styles:

```
UNDERLINE CTRADITIONAL TRADITIONAL CFONT INVISIBLE CHANGEBAR CCHANGEBAR
CULINECHBAR CFONTCBHBAR
[ Default: UNDERLINE ]
```

#### **`-subtype=markstyle` or `-s markstyle`**

Add code to preamble for selected style for bracketing commands (e.g. to mark changes in margin). This option defines `\DIFaddbegin`, `\DIFaddend`, `\DIFdelbegin` and `\DIFdelend` commands. Available styles: `SAFE MARGINAL DVIPSCOL`

[ Default: `SAFE` ]

#### **`-floatype=markstyle` or `-f markstyle`**

Add code to preamble for selected style which replace standard marking and markup commands within floats (e.g., marginal remarks cause an error within floats so marginal marking can be disabled thus). This option defines all `\DIF...FL` commands. Available styles: `FLOATSAFE IDENTICAL`

[ Default: `FLOATSAFE` ]

#### **`-encoding=enc` or `-e enc`**

Specify encoding of `old.tex` and `new.tex`. Typical encodings are `ascii`, `utf8`, `latin1`, `latin9`. A list of available encodings can be obtained by executing

```
perl -MEncode -e 'print join ("\n",Encode-encodings("all"));' >
[Default encoding is utf8 unless the first few lines of the preamble contain
an invocation \usepackage[...]{inputenc} in which case the encoding
chosen by this command is assumed. Note that ASCII (standard latex)
is a subset of utf8]
```

**-preamble=file or -p file**

Insert file at end of preamble instead of generating preamble. The preamble must define the following commands `\DIFaddbegin`, `\DIFaddend`, `\DIFadd{. .}`, `\DIFdelbegin`, `\DIFdelend`, `\DIFdel{. .}`, and varieties for use within floats `\DIFaddbeginFL`, `\DIFaddendFL`, `\DIFaddFL{. .}`, `\DIFdelbeginFL`, `\DIFdelendFL`, `\DIFdelFL{. .}` (If this option is set `-t`, `-s`, and `-f` options are ignored.)

**-show-preamble**

Print generated or included preamble commands to stdout.

## Configuration

**-exclude-safecmd=exclude-file or -A exclude-file or -exclude-safecmd="cmd1,cmd2,..."**

**-replace-safecmd=replace-file**

**-append-safecmd=append-file or -a append-file or -append-textcmd="cmd1,cmd2,..."**

Exclude from, replace or append to the list of regular expressions (RegEx) matching commands which are safe to use within the scope of a `\DIFadd` or `\DIFdel` command. The file must contain one Perl-RegEx per line (Comment lines beginning with `#` or `%` are ignored). Note that the RegEx needs to match the whole of the token, i.e., `/^regex$/` is implied and that the initial `"\"` of the command is not included. The **-exclude-safecmd** option can be combined with either of the other two. **-exclude-safecmd** and **-append-safecmd** can also take a comma separated list as input. If a comma for one of the regex is required, escape it thus `"\"`. In most cases it will be necessary to protect the comma-separated list from the shell by putting it in quotation marks.

**-exclude-textcmd=exclude-file or -X exclude-file or -exclude-safecmd="cmd1,cmd2,..."**

**-replace-textcmd=replace-file**

**-append-textcmd=append-file or -x append-file or -append-textcmd="cmd1,cmd2,..."**

Exclude from, replace or append to the list of regular expressions matching commands whose last argument is text. See entry for **-exclude-safecmd** directly above for further details.

**-config var1=val1,var2=val2,... or -c var1=val1,..**

**-c configfile**

Set configuration variables. Available variables (see below for further explanations):

`MINWORDSBLOCK` (integer)

`FLOATENV` (RegEx)

`PICTUREENV` (RegEx)

**–show-safecmd**

Print list of RegEx matching and excluding safe commands.

**–show-textcmd**

Print list of RegEx matching and excluding commands with text argument.

**–show-config**

Show values of configuration variables

NB For all `–show` commands, no `old.tex` or `new.tex` file needs to be specified, and no differencing takes place.

## Miscellaneous

**–verbose or -V**

Output various status information to `stderr` during processing. Default is to work silently.

**–help or -h**

Show help text

**–version**

Show version number

## Predefined styles

### Major types

The major type determine the markup of plain text and some selected latex commands outside floats by defining the markup commands `\DIFadd{...}` and `\DIFdel{...}`.

#### UNDERLINE

Added text is underlined and blue, discarded text is struck out and red (Requires `color` and `ulem` packages).

#### CTRADITIONAL

Added text is blue and set in sans-serif, and a red footnote is created for each discarded piece of text. (Requires `color` package)

#### TRADITIONAL

Like `CTRADITIONAL` but without the use of color.

#### CFONT

Added text is blue and set in sans-serif, and discarded text is red and very small size.

#### CCHANGEBAR

Added text is blue, and discarded text is red. Additionally, the changed text is marked with a bar in the margin (Requires color and changebar packages).

#### CFONTCHBAR

Like CFONT but with additional changebars (Requires color and changebar packages).

#### CULINECHBAR

Like UNDERLINE but with additional changebars (Requires color, ulem and changebar packages).

#### CHANGEBAR

No mark up of text, but mark margins with changebars (Requires changebar package).

#### INVISIBLE

No visible markup (but generic markup commands will still be inserted).

### Subtypes

The subtype defines the commands that are inserted at the begin and end of added or discarded blocks, irrespectively of whether these blocks contain text or commands (Defined commands: `\DIFaddbegin`, `\DIFaddend`, `\DIFdelbegin`, `\DIFdelend`)

#### SAFE

No additional markup (Recommended choice)

#### MARGIN

Mark beginning and end of changed blocks with symbols in the margin nearby (using the standard `\marginpar` command - note that this sometimes moves somewhat from the intended position).

#### DVIPSCOL

An alternative way of marking added passages in blue, and deleted ones in red. Note that DVIPSCOL only works with the dvips converter, e.g. not pdflatex. (it is recommended to use instead the main types to effect colored markup, although in some cases coloring with dvipscol can be more complete).

## Float Types

Some of the markup used in the main text might cause problems when used within floats (e.g. figures or tables). For this reason alternative versions of all markup commands are used within floats. The float type defines these alternative commands.

### FLOATSAFE

Use identical markup for text as in the main body, but set all commands marking the begin and end of changed blocks to null-commands. You have to choose this float type if your subtype is MARGIN as `\marginpar` does not work properly within floats.

### IDENTICAL

Make no difference between the main text and floats.

## Configuration Variables

### MINWORDSBLOCK

Minimum number of tokens required to form an independent block. This value is used in the algorithm to detect changes of complete blocks by merging identical text parts of less than MINWORDSBLOCK to the preceding added and discarded parts.

[ Default: 3 ]

### FLOATENV

Environments whose name matches the regular expression in FLOATENV are considered floats. Within these environments, the *latexdiff* markup commands are replaced by their FL variaties.

[ Default: `(figure|table|plate)[\w\d*@]*` ]

### PICTUREENV

Within environments whose name matches the regular expression in PICTUREENV all latexdiff markup is removed (in pathologic cases this might lead to inconsistent markup but this condition should be rare).

[ Default: `picture[\w\d*@]*` ]

## 5 BUGS

UTF-8 support requires a relatively new version of perl (5.8.0 is sufficient but 5.6.2 up would work OK, too).

The current version is a beta version which has not yet been extensively tested, but worked fine locally. Please send bug reports to [tilmann@esc.cam.ac.uk](mailto:tilmann@esc.cam.ac.uk). Include the serial number of *latexdiff* (from comments at the top of the source



or use **-version**). If you come across latex files that are error-free and conform to the specifications set out above, and whose differencing still does not result in error-free latex, please send me those files, ideally edited to only contain the offending passage as long as that still reproduces the problem.

## 6 SEE ALSO

*latexrevise*

## 7 PORTABILITY

*latexdiff* does not make use of external commands and thus should run on any platform supporting Perl 5.6 or higher. If files with encodings other than ASCII or UTF-8 are processed, Perl 5.8 or higher is required.

The standard version of *latexdiff* requires installation of the Perl package `Algorithm::Diff` (available from [www.cpan.org](http://www.cpan.org) - <http://search.cpan.org/~nedkonz/Algorithm-Diff-1.15>) but a stand-alone version, *latexdiff-so*, which has this package inlined, is available, too.

## 8 AUTHOR

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## 9 NAME

latexrevise - selectively remove markup and text from latexdiff output

## 10 SYNOPSIS

```
latexrevise [ OPTIONS ] [ diff.tex ] > revised.tex
```

## 11 DESCRIPTION

*latexrevise* reads a file `diff.tex` (output of *latexdiff*), and remove the markup commands. If no filename is given the input is read from standard input. The command can be used in *ACCEPT*, *DECLINE*, or *SIMPLIFY* mode, or can be used to remove user-defined latex commands from the input (see **-c**, **-e**, **-m**, and **-n** below). In *ACCEPT* mode, all appended text fragments (or preamble lines) are kept, and all discarded text fragments (or preamble lines) are deleted. In *DECLINE* mode, all discarded text fragments are kept, and all appended text fragments are deleted. If you wish to keep some changes, edit the `diff.tex` file in advance, and manually remove those tokens which would otherwise be deleted. Note that *latexrevise* only pays attention to the `\DIFaddbegin`, `\DIFaddend`, `\DIFdelbegin`, and `\DIFdelend` tokens and corresponding FL varieties. All `\DIFadd` and `\DIFdel` commands (but not their contents) are simply deleted. The commands added by *latexdiff* to the preamble are also removed. In *SIMPLIFY* mode, `\DIFaddbegin`, `\DIFaddend`, `\DIFdelbegin`, `\DIFdelend` tokens and their corresponding FL varieties are kept but all other markup (e.g. `\DIFadd` and `<\DIFdel>`) is removed. The result will not in general be valid latex-code but it will be easier to read and edit in preparation for a subsequent run in *ACCEPT* or *DECLINE* mode. In *SIMPLIFY* mode the preamble is left unmodified.

## 12 OPTIONS

### **-a or -accept**

Run in *ACCEPT* mode (delete all blocks marked by `\DIFdelbegin` and `\DIFdelend`).

### **-d or -decline**

Run in *DECLINE* mode (delete all blocks marked by `\DIFaddbegin` and `\DIFaddend`).

### **-s or -simplify**

Run in *SIMPLIFY* mode (Keep all `\DIFaddbegin`, `\DIFaddend`, `\DIFdelbegin`, `\DIFdelend` tokens, but remove all other *latexdiff* markup from body).

Note that the three mode options are mutually exclusive. If no mode option is given, *latexrevise* simply removes user annotations and markup according to the following four options.

**-c cmd or -comment=cmd**

Remove `\cmd{...}` sequences. `cmd` is supposed to mark some explicit annotations which should be removed from the file before release.

**-e envir or -comment-environment=envir**

Remove explicit annotation environments from the text, i.e. remove

```
\begin{envir}
...
\end{envir}
```

blocks.

**-m cmd or -markup=cmd**

Remove the markup command `\cmd` but leave its argument, i.e. turn `\cmd{abc}` into `abc`.

**-n envir or -markup-environment=envir**

Similarly, remove `\begin{envir}` and `\end{envir}` commands but leave content of the environment in the text.

**-V or -verbose**

Verbose output

**-q or -no-warnings**

Do not warn users about `\DIDadd{..}` or `\DIFdel{..}` statements which should have been removed already.

## 13 BUGS

The current version is a beta version which has not yet been extensively tested, but worked fine locally. Please send bug reports to *tilmann@esc.cam.ac.uk*. Include the serial number of *latexrevise* (from comments at the top of the source). If you come across *latexdiff* output which is not processed correctly by *latexrevise* please include the problem file as well as the old and new files on which it is based, ideally edited to only contain the offending passage as long as that still reproduces the problem.

## 14 SEE ALSO

*latexdiff*

## **15 PORTABILITY**

*latexrevise* does not make use of external commands and thus should run on any platform supporting PERL v5 or higher.

## **16 AUTHOR**

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## 17 A simple example

We start with a draft text, `example-draft.tex`, listed here in full but also included in the distribution (except that the “`verbatim`” environment had to be renamed to “`Verbatim`” for the listing).

```
\documentclass[12pt,a4paper]{article}

\setlength{\topmargin}{-0.2in}
\setlength{\textheight}{9.5in}
\setlength{\oddsidemargin}{0.0in}

\setlength{\textwidth}{6.5in}

\title{latexdiff Example - Draft version}
\author{F Tilmann}

\begin{document}
\maketitle

\section*{Introduction}

This is an extremely simple document that showcases some of latexdiff features.
Type
\begin{Verbatim}
latexdiff -t UNDERLINE example-draft.tex example-rev.tex > example-diff.tex
\end{Verbatim}
to create the difference file. You can inspect this file directly. Then run either
\begin{Verbatim}
pdflatex example-diff.tex
xpdf example-diff.pdf
\end{Verbatim}
or
\begin{Verbatim}
latex example-diff.tex
dvips -o example-diff.ps example-diff.dvi
gv example-diff.ps
\end{Verbatim}
to display the markup.

\section*{Another section title}

A paragraph with a line only in the draft document. More things
could be said were it not for the constraints of time and space.

More things could be said were it not for the constraints of time and space.

And here is a typo.

Here is a table:

\begin{tabular}{ll}
Name & Description \\ \hline
Gandalf & Grey \\
Saruman & White
\end{tabular}

And sometimes a whole paragraph gets completely rewritten. In this
case latexdiff marks up the whole paragraph even if some words in it
are identical.
No change, no markup!
\end{document}
```

We can now edit this text as we would do with any other latex file to create a new revision of the text, `example-rev.tex`. We should run

latex example-rev.tex

and look at the resulting .dvi file to make sure that all changes are valid. An example revision is listed here:

```
\documentclass[12pt,a4paper]{article}

\setlength{\topmargin}{-0.2in}
\setlength{\textheight}{9.5in}
\setlength{\oddsidemargin}{0.0in}

\setlength{\textwidth}{6in}

\title{latexdiff Example - Revised version}
\author{F Tilmann}
% Note how in the preamble visual markup is never used (even
% if some preamble might eventually end up as visible text.)

\begin{document}
\maketitle

\section*{Introduction}

This is an extremely simple document that showcases some of the latexdiff features.
Type
\begin{Verbatim}
latexdiff -t UNDERLINE example-draft.tex example-rev.tex > example-diff.tex
\end{Verbatim}
to create the difference file. You can inspect this file directly. Then run either
\begin{Verbatim}
pdflatex example-diff.tex
xpdf example-diff.pdf
\end{Verbatim}
or
\begin{Verbatim}
latex example-diff.tex
dvips -o example-diff.ps example-diff.dvi
gv example-diff.ps
\end{Verbatim}
to display the markup.

\section*{Yet another section title}

More things could be said were it not for the constraints of time and space.

A paragraph with a line only in the revised document.
More things could be said were it not for the constraints of time and space.

And here is a typo.

Here is a table:

\begin{tabular}{ll}
Name & Description \\ \hline
Gandalf & White \\
Saruman & Evil
\end{tabular}

And now for something completely different, with not a paragraph in sight.
No change,
no markup!
\end{document}
```

To compare both revisions, type

```
latexdiff -t UNDERLINE example-draft.tex example-rev.tex > example-diff.tex
```

This results in the following difference file (a few newlines have been added in this listing for legibility reasons):

```

\documentclass[12pt,a4paper]{article}

\setlength{\topmargin}{-0.2in}
\setlength{\textheight}{9.5in}
\setlength{\oddsidemargin}{0.0in}

%DIF 7c7
%DIF < \setlength{\textwidth}{6.5in}
%DIF -----
\setlength{\textwidth}{6in} %DIF >
%DIF -----

%DIF 9c9
%DIF < \title{latexdiff Example - Draft version}
%DIF -----
\title{latexdiff Example - Revised version} %DIF >
%DIF -----
\author{F Tilmann}
% Note how in the preamble visual markup is never used (even %DIF >
% if some preamble might eventually end up as visible text.) %DIF >
%DIF PREAMBLE EXTENSION ADDED BY LATEXDIFF
%DIF UNDERLINE PREAMBLE %DIF PREAMBLE
\RequirePackage[normalem]{ulem} %DIF PREAMBLE
\RequirePackage{color} %DIF PREAMBLE
\providecommand{\DIFadd}[1]{\color{blue}\uline{#1}} %DIF PREAMBLE
\providecommand{\DIFdel}[1]{\color{red}\sout{#1}} %DIF PREAMBLE
%DIF SAFE PREAMBLE %DIF PREAMBLE
\providecommand{\DIFaddbegin}{} %DIF PREAMBLE
\providecommand{\DIFaddend}{} %DIF PREAMBLE
\providecommand{\DIFdelbegin}{} %DIF PREAMBLE
\providecommand{\DIFdelend}{} %DIF PREAMBLE
%DIF FLOATSAFE PREAMBLE %DIF PREAMBLE
\providecommand{\DIFaddFL}[1]{\DIFadd{#1}} %DIF PREAMBLE
\providecommand{\DIFdelFL}[1]{\DIFdel{#1}} %DIF PREAMBLE
\providecommand{\DIFaddbeginFL}{} %DIF PREAMBLE
\providecommand{\DIFaddendFL}{} %DIF PREAMBLE
\providecommand{\DIFdelbeginFL}{} %DIF PREAMBLE
\providecommand{\DIFdelendFL}{} %DIF PREAMBLE
%DIF END PREAMBLE EXTENSION ADDED BY LATEXDIFF

\begin{document}
\maketitle

\section*{Introduction}

This is an extremely simple document that showcases some of latexdiff features.
Type
\begin{Verbatim}
latexdiff -t UNDERLINE example-draft.tex example-rev.tex > example-diff.tex
\end{Verbatim}
to create the difference file. You can inspect this file directly. Then run either
\begin{Verbatim}
pdflatex example-diff.tex
xpdf example-diff.pdf
\end{Verbatim}
or
\begin{Verbatim}
latex example-diff.tex
dvips -o example-diff.ps example-diff.dvi
gv example-diff.ps
\end{Verbatim}
to display the markup.

\section*{\DIFaddbegin \DIFadd{Yet another } \DIFaddend \DIFdelbegin
\DIFdel{Another } \DIFdelend section title}

```

```

\DIFFdelbegin \DIFFdel{A paragraph with a line only in the draft
document. }\DIFFdelend More things could
be said were it not for the constraints of time and space.

\DIFFaddbegin \DIFFadd{A paragraph with a line only in the revised
document. }\DIFFaddend More things could be said
were it not for the constraints of time and space.

And here is a \DIFFaddbegin \DIFFadd{typo}\DIFFaddend \DIFFdelbegin
\DIFFdel{typo}\DIFFdelend .

```

Here is a table:

```

\begin{tabular}{ll}
Name & Description \\
\hline
Gandalf & \DIFFaddbegin \DIFFadd{White }\DIFFaddend \DIFFdelbegin
\DIFFdel{Grey }\DIFFdelend \\
Saruman & \DIFFaddbegin \DIFFadd{Evil
}\DIFFaddend \DIFFdelbegin \DIFFdel{White
}\DIFFdelend \end{tabular}

```

```

And \DIFFaddbegin \DIFFadd{now for something completely different, with not
a paragraph in sight}\DIFFaddend \DIFFdelbegin \DIFFdel{sometimes a whole
paragraph gets completely rewritten. In this
case latexdiff marks up the whole paragraph even if some words in it
are identical}\DIFFdelend .
No change,
no markup!
\end{document}

```

Type

```

pdflatex example-diff.tex
xpdf example-diff.pdf

```

to make the markup visible. This is what it looks like:



# latexdiff Example - Revised version

F Tilmann

September 8, 2004

## Introduction

This is an extremely simple document that showcases some of [the](#) latexdiff features.  
Type

```
latexdiff -t UNDERLINE example-draft.tex example-rev.tex > example-diff.tex
```

to create the difference file. You can inspect this file directly. Then run either

```
pdflatex example-diff.tex  
xpdf example-diff.pdf
```

or

```
latex example-diff.tex  
dvips -o example-diff.ps example-diff.dvi  
gv example-diff.ps
```

to display the markup.

## Yet another ~~Another~~ section title

~~A paragraph with a line only in the draft document.~~ More things could be said were it not for the constraints of time and space.

[A paragraph with a line only in the revised document.](#) More things could be said were it not for the constraints of time and space.

And here is a ~~typo~~type.

Here is a table:

Name	Description
Gandalf	<u>White</u> <del>Grey</del>
Saruman	<del>Evil</del> <u>White</u>

And ~~now for something completely different, with not a paragraph in sight~~sometimes a whole paragraph gets completely rewritten. In this case latexdiff marks up the whole paragraph even if some words in it are identical. No change, no markup!

If you approve of all the changes in the revision, just continue with `example-rev.tex`

for the next revision. If you like to adopt most but not all changes you can use `latexrevise` in the following manner. Simply remove the `\DIFdelbegin` and `\DIFdelend` tags around the text you would like to keep and simply remove the text between `\DIFaddbegin` and `\DIFaddend` tags, if you do not wish to keep them. Say you are happy with all proposed changes for the example above except in the last paragraph where you prefer the original draft. You have to change

```
...
And \DIFaddbegin \DIFadd{now for something completely different, with not
  a paragraph in sight}\DIFaddend \DIFdelbegin \DIFdel{sometimes a whole
  paragraph gets completely rewritten. In this
case latexdiff marks up the whole paragraph even if some words in it
are identical}\DIFdelend .
...
```

into

```
...
And \DIFdel{sometimes a whole
  paragraph gets completely rewritten. In this
case latexdiff marks up the whole paragraph even if some words in it
are identical}.
...
```

and run

```
latexrevise -a example-rev.tex > example-final.tex
```

`example-final.tex` is then be almost identical to `example-rev.tex` except for the last paragraph.