

# href-ul: L<sup>A</sup>T<sub>E</sub>X Package That Makes Underscored Links\*

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## 1 Introduction

This package helps you make your hyperlinks underlined, using `\href` command:

Go to Google!

```
1 \documentclass{article}
2 \pagestyle{empty}
3 \usepackage{href-ul}
4 \begin{document}
5 Go to
6   \href{https://google.com}{Google}!
7 \end{document}
```

The package also supports URL breaking at various special characters, allowing long URLs to break naturally across lines:

This-link-has-a-very-long-URL-that-will-break-at-appropriate-points

```
1 \documentclass{article}
2 \pagestyle{empty}
3 \usepackage{href-ul}
4 \begin{document}
5 \parbox{7em}{
6   \href{https://google.com}{%
7   This-link-has-a-very-%
8   long-URL-that-will-break-%
9   at-appropriate-points}}
10 \end{document}
```

Changing the color of the text also changes the color of the line:

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\*The sources are in GitHub at [yegor256/href-ul](https://github.com/yegor256/href-ul)

Go to Google!

```
1 \documentclass{article}
2 \pagestyle{empty}
3 \usepackage{href-ul}
4 \usepackage{xcolor}
5 \begin{document}
6 Go to {\color{red}
7   \href{https://google.com}{Google}}!
8 \end{document}
```

Changing the size of the text doesn't change the height of the line:

You can always find anything in Google, but it's better to learn something from a school too!

```
1 \documentclass{article}
2 \pagestyle{empty}
3 \usepackage{href-ul}
4 \begin{document}
5 You can always find \\ anything in
6 {\Large \href{https://google.com}{Google}},
7 but \\ it's better to learn
8 something \\ from a school too!
9 \end{document}
```

With the help of the plain package option, it's possible to avoid underscores:

This link has no underscore: Google.

```
3 \usepackage[plain]{href-ul}
4 \begin{document}
5 This link has no underscore: \\
6 \href{https://google.com}{Google}.
7 \end{document}
```

## 2 Implementation

First, we process package options:

```
1 \RequirePackage{pgfopts}
2 \pgfkeys{
3   /href/.cd,
4   plain/.store in=\href@plain
5 }
6 \ProcessPgfPackageOptions{/href}
```

Then, we include the soul package in order to enable underscores:

```
7 \makeatletter
8 \ifdefined\href@plain\else
9 \RequirePackage{soul}
10 \fi
11 \makeatother
```

Then, we include the hyperref package for PDF hyperlinks:

```
12 \PassOptionsToPackage{hidelinks}{hyperref}
13 \PassOptionsToPackage{hyphens}{url}
14 \RequirePackage{hyperref}
15 \RequirePackage{url}
```

Then, we re-define the default `\href` command:

```
16 \makeatletter%
17 \begingroup%
18 \catcode'\$=6 %
19 \catcode'\#=12 %
20 \gdef\href@split$1#$2#$3\\$4{%
21   \hyper@link{$1}{$2}{%
22     \ifdefined\href@plain$4\else\ul{$4}\fi}%
23   \endgroup%
24 }%
25 \endgroup%
```

`\href` Then, we define our own `\href` command:

```
26 \let\href@orig\href
27 \renewcommand{\href}[2]{%
28   \urlstyle{same}%
29   \def\UrlBreaks{\do\.\do\@\do\\\do\/\do\!\do\_ \do||\do\;\do\>\do\]}%
30   \do)\do\,\do?\do\'\do+\do=\do#\do-}%
31   \def\UrlBigBreaks{\do\:\do\/}%
32   \href@orig{#1}{#2}%
33   \endgroup
34 }%
35 }%
36 \makeatother%
```

## Change History

0.4.0	General: Package options processing introduced with a single <code>plain</code> option. . . . .	2	capabilities to the second argument of <code>\href</code> and shifted from <code>ulem</code> to <code>soul</code> package. . . . .	2	
0.5.0	General: Enhanced URL breaking functionality to improve handling of long URLs. . . . .	2	v0.2.0	General: Initial version . . . . .	2
0.5.1	General: Added text breaking		v0.3.0	General: We started using "docshots" package for better rendering of examples. . . . .	2

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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.

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