

# Hyperref for PDF Links

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# Introduction

*HyperTeX is a defacto standard for inclusion of hyperlink information in TeX and LaTeX documents, which can then be used to generated PDF or DVI files with embedded links. These links enable easy navigation inside documents as well as between documents, just as in HTML, using standard PDF, Postscript and DVI viewers. Various TeX, LaTeX and BibTeX style sheets and macro packages exist which facilitate the construction of hyperlinked documents.*

– <http://arxiv.org/hypertex/>

# The Basics

```
\usepackage{hyperref}
```

Adding hyperlinks to a  $\text{\LaTeX}$  document is accomplished with the `hyperref` package.

Hyperlinks can be generated by hand or automatically generated for all `cite` and `ref` commands as well as for the table of contents, any lists of figures/tables and the index.

# Example

Just by importing the hyperref package my citations [1] become links to my bibliography [2] and my references link to their corresponding content. 1.

## Example Cont.



**Figure:** This figure becomes the target of the previous link.

# Hyperref's Domain

Most DVI previewers (xdvi, dviout, and idvi) and PDF viewers (Adobe Reader and Xpdf among others) will display hypertext links. Some postscript previewers (GSview and HyperHacked Ghostview) can handle the hypertext links.

The most popular approach seems to be generating the PDF file directly from  $\text{\LaTeX}$  source using pdftex.

# Considerations

The `\special` command has previously been used to extend TeX by allowing inclusion of line drawings, PostScript figures, and colored text. **For this reason the hyperref library should be listed last in the import queue.**



# Subpackages

**backref** adds back-link text to the end of each item in the bibliography, as a list of section numbers.

*This can only work properly if there is a blank line after each `\bibitem`.*

**nameref** defines a `\nameref` command that makes reference to an object by its name (e.g., the title of a section or chapter).

**xr-hyper** can create hyperlinks to the external documents that are cross-referenced.

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## Generating External Links

*The URL that you supply must be a full URL (relative to the base URL, if defined). Special characters # and ~ do not need to be escaped in any way.*

```
\hyperbaseurl{use_base}
```

A base URL is established, which is prepended to other specified URLs, to make it easier to write portable documents.

## External Link Example

```
\url{url_path}
```

Show the clickable URL using a mono-spaced font.

```
http://www.google.com
```

## External Link Example

```
\nolinkurl{url_path}
```

Same function as `\url` without creating a clickable hyperlink.

```
http://www.google.com
```

## External Link Example

```
\href{url_path1}{description}
```

\href allows for a descriptive link rather than the raw URL.

The Google Search Engine

## External Link Example

```
\href{mailto:user@domain.com}{user@domain}
```

user@domain.com

```
\href{mailto:user@domain.com}{\nolinkurl{user@domain}}
```

user@domain

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# Generating Internal Links

In this section we will generate some labels and references.

```
\label{marker_1}
```

## Generating Internal Links Cont.

This is the labeled referred above. From here we can reference

```
\ref{marker_1}
```

... and we can see the result is 3

# Generating Internal Links

```
\hyperlink{foo_1}{This becomes a link}.
```

Link to something on the next page.

# Generating Internal Links

```
\hypertarget{foo_1}{This is the target}.
```

This is the target.

## Generating Internal Links

For instances where you want a reference to use the correct counter, but not to create a link, there are starred forms, i.e.

`\ref*{label}`, `\pageref*{label}`, etc.

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# Bookmarks

Hyperref automatically adds bookmarks for `\section` and similar macros. But they can also be set manually. The following command creates a bookmark at the current level.

```
\currentpdfbookmark{This is a bookmark}{bookmark_1}
```

A set of bookmarks are written, in a manner similar to the table of contents, requiring two passes of the compiler.

# Bookmarks

```
\pdfbookmark[level]{text}{name}
```

Creates a bookmark with the specified text and at the given level. As name for the internal anchor name is used – requiring the name to be unique.

```
\subpdfbookmark{text}{name}
```

Creates a bookmark one step down in the bookmark hierarchy.

```
\belowpdfbookmark{text}{name}
```

Creates a bookmark below the current bookmark level.



## PDF and HTML forms



Hyperref can be used to generate PDF and HTML forms. One one form can be used in one document. Forms can use either the GET or POST method, and a URL is supplied as well. Input options include the following:

```
\TextField[parameters]{label}  
\CheckBox[parameters]{label}  
\ChoiceMenu[parameters]{label}{choices}  
\PushButton[parameters]{label}
```

If you absolutely must use this feature you can find out more here.

# Questions

# Bibliography

-  S. R. Heiko Oberdiek, “Readme for hyperref bundle,” 3 2010.
-  H. O. Sebastian Rahtz, “Hypertext marks in latex: a manual for hyperref,” 1 2010.