

# **MediaWiki User Guide**

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This is a user guide to MediaWiki, the software that runs Wikipedia, Wikibooks and other Wikimedia projects. The book focuses on Mediawiki markup. Topics out of scope of the book include administration and development of Mediawiki.



# 1 Text Formatting

The following is an overview of text formatting available in Mediawiki:

Basic text formatting		
Format- ting	Markup	Note
Boldface	<b>'''text'''</b>	
Italics	<i>''text''</i>	
Boldface and italics	<b>''''text''''</b>	
Boldface combined with wik- ilink	<b>''' [[text]] '''</b>	The reverse order of ticks and brackets does not work: [[ <b>'''text'''</b> ]]

Other text formatting such as underline or blockquote needs to be done using HTML tags, including U for underline, TT for typewriter text, S for strikethrough, SUB for lower index and SUP for upper index.

## 1.1 HTML

Text formatting can also be done using HTML and CSS. Some of the most useful HTML elements are:

Most needed HTML markup		
Task	Markup	Note
Preformatted text	<code>&lt;pre&gt; preformatted&lt;/pre&gt;</code>	The effect in wiki differs from the one in HTML; in wiki, the text within the PRE element is treated as within NOWIKI element, leaving all the HTML and wiki markup uninterpreted.
Blockquote	<code>&lt;blockquote&gt;Longer passage.&lt;/blockquote&gt;</code>	
Comments	<code>&lt;!-- comment --&gt;</code>	Avoid nesting, such as <code>&lt;!-- &lt;!-- comment --&gt; --&gt;</code>

<b>Most needed HTML markup</b>		
<b>Task</b>	<b>Markup</b>	<b>Note</b>
Generic inline element	<code>&lt;span style="TODO"&gt;&lt;/span&gt;</code>	Can be styled arbitrarily using cascading style sheets - CSS.
Generic block element	<code>&lt;div style="TODO"&gt;&lt;/div&gt;</code>	Can be styled arbitrarily using cascading style sheets - CSS.

Some HTML elements are not allowed, such as A and IMG.

## 1.2 Source code

Source code of various programming and markup languages can be formatted using `<source>` element, which leads to **colored syntax** of the code.

An example of wiki markup:

```
<source lang="html4strict">
<html>
  <body>
    <p>Hello <span style="font-weight: bold;">world</span>!
    </p>
  </body>
</html>
</source>
```

The rendering of that markup:

```
<html>
  <body>
    <p>Hello <span style="font-weight: bold;">world</span>!
    </p>
  </body>
</html>
```

Category:MediaWiki User Guide<sup>1</sup>

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<sup>1</sup> <http://en.wikibooks.org/wiki/Category%3AMediaWiki%20User%20Guide>

## 2 Hyperlinks

There are two types of hyperlinks in MediaWiki: internal, also called wikilinks, and external.

### 2.1 Internal hyperlinks

Task	Markup	Note
Internal hyperlink	<code>[[keyword]]</code>	
Internal hyperlink 2	<code>[[keyword]]s</code>	
Internal hyperlink to a section	<code>[[keyword#section_heading link title]]</code>	
Internal hyperlink showing a different word	<code>[[keyword its appearance]]</code>	
Internal hyperlink with a tooltip	<code>[[keyword &lt;span title="A tooltip"&gt;its appearance&lt;/span&gt;]]</code>	
Internal hyperlink in bold	<code>"[[keyword]]"</code>	

### 2.2 External hyperlinks

Task	Markup	Note
External hyperlink	<code>[URL_containing_no_spaces title of the URL]</code>	

### 2.3 Redirecting

Readers and editors from different backgrounds search for the same topic under different titles, such as TODO. To avoid replication of similar content and confusion of editors and readers, the editors of a wiki website usually choose one topic title as the authorized one, under which the content is to be created, and let one or more alternative topic titles redirect to it.

To **let a page title redirect** to another one, create a page with the unauthorized (or minor) title, containing only the following text:

```
#REDIRECT [[Authorized topic title]]
```

An alternative markup; notice the additional ":":

```
#REDIRECT: [[Authorized topic title]]
```

If an unauthorized topic title has more possible target authorized topic titles, redirecting does not do. In that case, a **disambiguation page** can be created, such as:

```
The term '''unauthorized term''' may refer to:  
* [[Authorized topic title 1]]  
* [[Authorized topic title 2]]
```

The exact wording depends on the kind of content of the wiki website.

Category:MediaWiki User Guide<sup>1</sup> dr drum beat making software<sup>2</sup>

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<sup>1</sup> <http://en.wikibooks.org/wiki/Category%3AMediaWiki%20User%20Guide>

<sup>2</sup> <http://pinterest.com/pincoholic/dr-drum-beat-making-software/>

## **3 Sections and Headings**

Headings are created using sequences of "=" characters, placed before the heading title and after the heading title, on the same line. The level of headings is determined by the number of "=" characters.

Examples:

Level	Example				
2.	-	3.	-	4.	====Plants====

### 3.1 Start level: 2

Do not use headings of level 1, such as "**Title**"; start with level 2 instead. The heading at level 1 is used for the title of the page.

### 3.2 Maximum level: 6

The maximum level of a heading is 6, rendered using =====Heading L6===== . Entering a heading with 7 equals-signs such as =====Heading L7===== results in the creation of a heading of the level 6, with one equal-sign becoming part of the text of the heading: "**Heading L7**".

### 3.3 Spaces

Depending on the convention that users and editors adopt, there can be any number of spaces between the "=" characters and the title.

An example without spaces:

```
==Plants==
```

An example with spaces:

```
== Plants ==
```

### 3.4 Table of contents

By default, the titles of headings appear in the table of contents, shown at the top of the page. To prevent having a table of contents, put the "**\_\_NOTOC\_\_**" sequence of characters into the page. To force the presence of table of contents on a specific place of the page, use "**\_\_TOC\_\_**".

### 3.5 Headings not in TOC

There is no simple way to make a heading not appear in the table of contents. For a complex way requiring the adjustment of the MediaWiki software, see [Meta:Help:Section](http://en.meta.org/wiki/Help%3ASection)<sup>1</sup>.

<sup>1</sup> <http://en.meta.org/wiki/Help%3ASection>

### 3.6 Customizing TOC

There are various ways how to customize the table of contents. For instance, to place it to the right, use:

```
<div style="float:right; clear:both;
margin-left:0.5em;">__TOC__</div>
```

### 3.7 Editability of sections

By default, all sections are editable separately, without the need to see the complete text of the page.

To make all the sections on a page non-editable, place `__NOEDITSECTION__` anywhere on the page.

There is no simple way to make a single section non-editable, AFAIK.

Category:MediaWiki User Guide<sup>2</sup>

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<sup>2</sup> <http://en.wikibooks.org/wiki/Category%3AMediaWiki%20User%20Guide>

## 4 Lists

Lists formatting:

Bullet lists:

```
* a
** b
** c
*** d
```

Numbered lists:

```
# a
## b
## c
### d
```

Definition lists:

```
; defined term : definition
; defined term 2 : definition 2
```

Mixed lists:

```
* a
*# b
*# c
```

Lists inside tables:

```
{|
! Heading a
! Heading b
|-
|
* a1
* a2
|
|}
```

Category:MediaWiki User Guide<sup>1</sup>

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<sup>1</sup> <http://en.wikibooks.org/wiki/Category%3AMediaWiki%20User%20Guide>



## 5 Tables

Tables:

```
{|
|+ Caption of the table
! Heading 1
! Heading 2
|-
| Cell 1 in row 1
| Cell 2 in row 1
|-
| Cell 1 in row 2
| Cell 2 in row 2
|}
```

Dense format:

```
{|
|+ Caption of the table
! Heading 1
! Heading 2
|-
| Cell 1 in row 1 || Cell 2 in row 1
|-
| Cell 1 in row 2 || Cell 2 in row 2
|}
```

Lists in tables:

```
{|
! Heading a
! Heading b
|-
|
* a1
* a2
|
|}
```

Category:MediaWiki User Guide<sup>1</sup>

---

<sup>1</sup> <http://en.wikibooks.org/wiki/Category%3AMediaWiki%20User%20Guide>



# 6 Images

Mediawiki supports the use of images in various formats. In order to be used in a wiki, image first needs to be uploaded, to which we come later.

## 6.1 Placing images

The following is an overview of placing images into pages, such images that have already been uploaded.

Placing of images			
Task	Markup	Default Frame	Note
Image	[[Image:image_-name.png]]	No	The image is shown in its full size as found in the file.
Image with thumb	[[Image:image_-name.png thumb A caption text of the image.]]	Yes	Thumbs are always scaled down so as not to exceed an upper limit on the size.
Image without thumb, with restricted size	[[Image:image_-name.png 150px]]	No	

### Location:

- 'right'
- 'left'
- 'center'
- 'none'

## 6.2 Galleries

Images can be put into a gallery as follows. Notice the absent "[" and "]" around the names of the image files.

```
<gallery>
Image:name_1.png
Image:name_2.jpeg
</gallery>
```

Images in galleris can be given captions, as follows.

```
<gallery>
Image:name_1.png | Caption 1.
Image:name_2.jpeg | Caption 2.
</gallery>
```

### 6.3 Uploading images

Category:MediaWiki User Guide<sup>1</sup>

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<sup>1</sup> <http://en.wikibooks.org/wiki/Category%3AMediaWiki%20User%20Guide>

# 7 Categories

Pages in wiki can be put into categories, by placing a category assignment anywhere in them. An example:

```
[[Category:Birds]]
```

Categories have their own namespace "Category:", and are pages of sorts too. A category can be put into another category, so the categories can form a hierarchy or other structures.

A list of uncategorized pages can be shown by Mediawiki software.

There is no easy way to rename a category; all its pages need to be edited and the line of category assignment changed.

## 7.1 Linking

A wikilink to a category needs to start with ":", such as

```
See also [[:Category:Birds]]
```

Otherwise, the page is put into the category instead of linking to it, and the wikilink is not shown.

## 7.2 Templates

Categories can be used in templates, just like in mainspace pages. However, when you put a category assignment into a template, all the pages using that template become a member of that category. That is sometimes the required effect, but it may be unwanted, for instance when you want to categorize the templates rather than the pages that use the templates. For that case, embrace the category assignment into `</pre>`

```
[[Category:MediaWiki User Guide]]
```



# 8 Templates

Templates provide a means to repeat the same text on several pages. More advanced templates make use of parameters, and even of control structures as found in programming languages. That said, basic templates are quite easy to create, requiring no knowledge of programming.

Templates have their own "Template:" namespace.

To create a template called "header", edit the page "Template:header" and place the text to be repeated into that template.

To use the template in a page, type "`{{header}}`". What marks the use of the template are the "{" and "}" characters, also known as curly brackets.

To replace the name of the template with its contents directly in the source wikitext before the text is saved, use "`{{subst:header}}`".

## 8.1 Parameters

Templates can have unnamed and named parameters. The unnamed parameters are automatically numbered.

To use an unnamed parameter inside a template, refer to it using `{{{1}}}`, `{{{2}}}`, and the like. Notice the *three* curly brackets.

To use a named parameter inside a template, refer to it using the same curly brackets and the name, instead of a number, like `{{{parameter_name}}}`.

To pass a parameter to a template when you use it in a mainspace page:

```
{{header|apple}}
{{header|parameter=apple}}
```

To pass equality sign (=) in the value of an unnamed parameter, you need a workaround: use, for the parameter number one, `<nowiki >`

UNKNOWN TEMPLATE template

text=with=equality=sign

`</nowiki>`

## 8.2 Documentation

Templates that are to be used by many users are worth documenting. One option is to document them on their talk pages. Another is to document them in their main text, and surround the documentation with

[[Category:MediaWiki User Guide]]

## 9 References

References can be used to cite sources.

To **refer to a source** in the middle of the text, follow this example:

```
<ref name="Ref06">Reference text</ref>
```

or if a named reference has already been used before in the same page:

```
<ref name="Ref06"/>
```

To **list all the sources referred** to in the text, after a second level heading titled "References":

```
==References==  
<references/>
```

Category:MediaWiki User Guide<sup>1</sup>

---

<sup>1</sup> <http://en.wikibooks.org/wiki/Category%3AMediaWiki%20User%20Guide>



# 10 Mathematics

You can enter mathematical formulas into a wiki, using a `math` tag, such as:

```
<math>\sqrt{2}</math>
```

The formulas are marked up in the TeX markup, the markup of a complex typesetting system specialized on mathematics.

Before you start writing formulas in this markup, you can consider writing the simpler ones in HTML and wiki markup, such as:

$$f(x) = b + c / d$$

which is marked up as

```
''f''(x) = ''b'' + ''c'' / ''d''
```

## 10.1 Examples

To get started, follow the examples below.

Examples of mathematical markup		
No.	Desired Effect	Markup
1.	$\alpha$	<code>&lt;math&gt;\alpha&lt;/math&gt;</code>
2.	$\sqrt{2}$	<code>&lt;math&gt;\sqrt{2}&lt;/math&gt;</code>
3.	$\sqrt{1-e^2}$	<code>&lt;math&gt;\sqrt{1-e^2}&lt;/math&gt;</code>
4.	$\frac{2}{4} = 0.5$	<code>&lt;math&gt;\frac{2}{4}=0.5&lt;/math&gt;</code>
5.	$\sum_{k=1}^N k^2$	<code>&lt;math&gt;\sum_{k=1}^N k^2&lt;/math&gt;</code>
6.	$\int_1^3 \frac{e^{3/x}}{x^2} dx$	<code>&lt;math&gt;\int\limits_1^3 \frac{e^{3/x}}{x^2} dx&lt;/math&gt;</code>
7.	$\begin{bmatrix} 0 & \cdots & 0 \\ \vdots & \ddots & \vdots \\ 0 & \cdots & 0 \end{bmatrix}$	<pre>&lt;math&gt;\begin{bmatrix} 0 &amp; \cdots &amp; 0 \\ \vdots &amp; \ddots &amp; \vdots \\ 0 &amp; \cdots &amp; 0 \end{bmatrix}&lt;/math&gt;</pre>

Examples of mathematical markup		
No.	Desired Effect	Markup
8.	$\begin{pmatrix} x & y \\ z & v \end{pmatrix}$	<pre>&lt;math&gt;\begin{pmatrix}x &amp; y \\ z &amp; v\end{pmatrix}&lt;/math&gt;</pre>

## 10.2 Greek and symbols

There is a way of marking up Greek characters and special symbols, as the following table shows.

Markup of Greek alphabet and some symbols	
Desired Effect	Markup
$\alpha \beta \gamma \delta \epsilon \zeta$ $\eta \theta \iota \kappa \lambda \mu \nu$ $\xi \omicron \pi \rho \sigma \varsigma$ $\tau \upsilon \phi \chi \psi \omega$ $\Gamma \Delta \Theta \Lambda \Xi \Pi$ $\Sigma \Phi \Psi \Omega$	<pre>&lt;nowiki&gt;&amp;alpha; &amp;beta; &amp;gamma; &amp;delta; &amp;epsilon; &amp;zeta; &amp;eta; &amp;theta; &amp;iota; &amp;kappa; &amp;lambd; &amp;mu; &amp;nu; &amp;xi; &amp;omicron; &amp;pi; &amp;rho; &amp;sigma; &amp;sigm; &amp;tau; &amp;upsilon; &amp;phi; &amp;chi; &amp;psi; &amp;omega; &amp;Gamma; &amp;Delta; &amp;Theta; &amp;Lambda; &amp;Xi; &amp;Pi; &amp;Sigma; &amp;Phi; &amp;Psi; &amp;Omega; &lt;/nowiki&gt;</pre>
$\int \sum \prod \sqrt{-\pm \infty}$ $\approx \alpha = \equiv \neq \leq \geq$ $\times \cdot \div \partial \prime \prime$ $\nabla \% \blacksquare \circ \therefore \emptyset \emptyset$ $\in \notin \cap \cup \subset \supset \subseteq \supseteq$ $\neg \wedge \vee \exists \forall$ $\Rightarrow \Leftrightarrow \rightarrow \leftrightarrow \uparrow$ $\times \text{---}$	<pre>&lt;nowiki&gt;&amp;int; &amp;sum; &amp;prod; &amp;radic; &amp;minus; &amp;plusmn; &amp;infin; &amp;asymp; &amp;prop; {=} &amp;equiv; &amp;ne; &amp;le; &amp;ge; &amp;times; &amp;middot; &amp;divide; &amp;part; &amp;prime; &amp;Prime; &amp;nabla; &amp;permil; &amp;deg; &amp;there4; &amp;oslash; &amp;oslash; &amp;isin; &amp;notin; &amp;cap; &amp;cup; &amp;sub; &amp;sup; &amp;sube; &amp;supe; &amp;not; &amp;and; &amp;or; &amp;exist; &amp;forall; &amp;rArr; &amp;hArr; &amp;rarr; &amp;harr; &amp;uarr; &amp;alefsym; - &amp;ndash; &amp;mdash; &lt;/nowiki&gt;</pre>

Category:MediaWiki User Guide<sup>1</sup>

<sup>1</sup> <http://en.wikibooks.org/wiki/Category%3AMediaWiki%20User%20Guide>

# 11 Namespaces

Namespace is the part of the name of the page before the first ":". The typical page has no ":" in its name, and is thus said to be in the *main space*.

Some namespaces--native ones--are automatically created by the MediaWiki software while others can be created by the administrators of the particular wiki site. The native namespaces include "Talk:", "User:", "Category:", "Template:", and others; they total 18 namespaces.

When searching the wiki, you can restrict the search to a particular namespace.

Category:MediaWiki User Guide<sup>1</sup>

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<sup>1</sup> <http://en.wikibooks.org/wiki/Category%3AMediaWiki%20User%20Guide>



# 12 Glossary

This is a glossary of the book.

## 12.1 C

### **category**

TODO

## 12.2 N

### **namespace**

The part of the name of the page before the first ":".

## 12.3 P

### **pipelink**

An internal link or interwiki link where the link target and link label are both specified.

## 12.4 W

### **wikilink**

An internal link; a link pointing to another page of the same wiki or knowledge base, marked up using [[target word]], contrasting to links to other web sites.

### **wikitext**

Text containing wiki markup, such as ""text"" for boldface.

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Category:MediaWiki User Guide<sup>2</sup>

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<sup>1</sup> <http://en.wikibooks.org/wiki/Category%3AMediaWiki%20User%20Guide>

<sup>2</sup> <http://en.wikibooks.org/wiki/Category%3AMediaWiki%20User%20Guide>



## 13 Contributors

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1	Recent Runes <sup>6</sup>

---

1 <http://en.wikibooks.org/w/index.php?title=User:Adrignola>  
2 <http://en.wikibooks.org/w/index.php?title=User:Badon>  
3 [http://en.wikibooks.org/w/index.php?title=User:Dan\\_Polansky](http://en.wikibooks.org/w/index.php?title=User:Dan_Polansky)  
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<sup>7</sup> Chapter 14 on page 35





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