

# Wiki Processors

Processors are WikiMacros designed to provide alternative markup formats for the Wiki engine. Processors can be thought of as *macro functions to process user-edited text*.

Wiki processors can be used in any Wiki text throughout Trac, for various different purposes, like:

- syntax highlighting or for rendering text verbatim,
- rendering Wiki markup inside a context, like inside `<div>` blocks or `<span>` or within `<td>` or `<th>` table cells,
- using an alternative markup syntax, like raw HTML and Restructured Text, or ?textile

## Using Processors

To use a processor on a block of text, first delimit the lines using a Wiki *code block*:

```
{{{
The lines
that should be processed...
}}}
```

Immediately after the `{{{` or on the line just below, add `#!` followed by the *processor name*.

```
{{{
#!processorname
The lines
that should be processed...
}}}
```

This is the "shebang" notation, familiar to most UNIX users.

Besides their content, some Wiki processors can also accept *parameters*, which are then given as `key=value` pairs after the processor name, on the same line. If `value` has to contain space, as it's often the case for the `style` parameter, a quoted string can be used (`key="value with space"`).

As some processors are meant to process Wiki markup, it's quite possible to *nest* processor blocks. You may want to indent the content of nested blocks for increased clarity, this extra indentation will be ignored when processing the content.

# Examples

## Wiki Markup

## Display

### Example 1: Inserting raw HTML

```
{{{
<h1 style="color: grey">This is raw HTML</h1>
}}}
```

**This is raw HTML**

### Example 2: Highlighted Python code in a <div> block with custom style

```
{{{#!div style="background: #ffd; border: 3px ridge #f00; padding: 10px; width: fit-content; margin: 10px auto; font-family: monospace;">
This is an example of embedded "code" block:

def hello():
    return "world"

}}}
```

### Example 3: Searching tickets from a wiki page, by keywords.

```
{{{
#!html
<form action="/query" method="get">
<input type="text" name="keywords" value="~" size="30">
<input type="submit" value="Search by Keywords">
<!-- To control what fields show up use hidden fields
<input type="hidden" name="col" value="id">
<input type="hidden" name="col" value="summary">
<input type="hidden" name="col" value="status">
<input type="hidden" name="col" value="milestone">
<input type="hidden" name="col" value="version">
<input type="hidden" name="col" value="owner">
<input type="hidden" name="col" value="priority">
<input type="hidden" name="col" value="component">
-->
</form>
}}}
```

## Available Processors

The following processors are included in the Trac distribution:

```
#!default
```

Present the text verbatim in a preformatted text block. This is the same as specifying *no* processor name (and no `#!`)

`#!comment`

Do not process the text in this section (i.e. contents exist only in the plain text - not in the rendered page).

## HTML related

`#!html`

Insert custom HTML in a wiki page.

`#!htmlcomment`

Insert an HTML comment in a wiki page (*since 0.12*).

Note that `#!html` blocks have to be *self-contained*, i.e. you can't start an HTML element in one block and close it later in a second block. Use the following processors for achieving a similar effect.

`#!div`

Wrap an arbitrary Wiki content inside a `<div>` element (*since 0.11*).

`#!span`

Wrap an arbitrary Wiki content inside a `<span>` element (*since 0.11*).

`#!td`

Wrap an arbitrary Wiki content inside a `<td>` element (*since 0.12*)

`#!th`

Wrap an arbitrary Wiki content inside a `<th>` element (*since 0.12*)

`#!tr`

Can optionally be used for wrapping `#!td` and `#!th` blocks, either for specifying row attributes of better visual grouping (*since 0.12*)

See [WikiHtml](#) for example usage and more details about these processors.

## Other Markups

`#!rst`

Trac support for Restructured Text. See [WikiRestructuredText](#).

`#!textile`

Supported if [?Textile](#) is installed. See [?a Textile reference](#).

## Code Highlighting Support

Trac includes processors to provide inline syntax highlighting:

`#!c (C), #!cpp (C++), #!python (Python), #!perl (Perl), #!ruby (Ruby), #!php (PHP), #!asp (ASP), #!java (Java), #!js (Javascript), #!sql (SQL), #!xml (XML or HTML), #!sh (Bourne/Bash shell), etc.`

Trac relies on external software packages for syntax coloring, like [?Pygments](#).

See [TracSyntaxColoring](#) for information about which languages are supported and how to enable support for more languages.

Note also that by using the MIME type as processor, it is possible to syntax-highlight the same languages that are supported when browsing source code. For example, you can write:

```
{{{
#!text/html
<h1>text</h1>
}}}
```

The result will be syntax highlighted HTML code:

```
<h1>text</h1>
```

The same is valid for all other [mime types supported](#).

For more processor macros developed and/or contributed by users, visit:

- [?ProcessorBazaar](#)
- [?MacroBazaar](#)
- [th:WikiStart Trac Hacks] community site

Developing processors is no different from Wiki macros. In fact they work the same way, only the usage syntax differs. See [WikiMacros#DevelopingCustomMacros](#) for more information.

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See also: [WikiMacros](#), [WikiHtml](#), [WikiRestructuredText](#), [TracSyntaxColoring](#), [WikiFormatting](#), [TracGuide](#)