

# 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

```
{{{
#!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"
```

This is raw HTML

## Wiki Markup

This is an example of embedded "code" block:

```
{{{
#!python
def hello():
    return "world"
}}}
```

## Display

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"><div>
<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"/>
-->
</div></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

**#!c**  
**#!cpp (C++)**  
**#!python**  
**#!perl**  
**#!ruby** Trac includes processors to provide inline syntax highlighting for source code in various languages.  
**#!php**  
**#!asp**  
**#!java** Trac relies on external software packages for syntax coloring, like [?Pygments](#).  
**#!js (Javascript)**  
**#!sql** See [TracSyntaxColoring](#) for information about which languages are supported and how to enable support for more languages.  
**#!xml (XML or HTML)**  
**#!sh (Bourne/Bash shell)**  
**etc.**

Using the MIME type as processor, it is possible to syntax-highlight the same languages that are supported when browsing source code.

### MIME Type Processors

Some examples:

```

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

{{{
#!diff
--- Version 55
+++ Version 56
@@ -115,8 +115,9 @@
     name='TracHelloWorld', version='1.0',
     packages=find_packages(exclude=['*.tests*']),
-    entry_points = ""
-    [trac.plugins]
-    helloworld = myplugins.helloworld
-    "",
+    entry_points = {
+        'trac.plugins': [
+            'helloworld = myplugins.helloworld',
+        ],
+    },
+    )
}}}

```

The result will be syntax highlighted HTML code:

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

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

**#!diff** has a particularly nice renderer:

### •Version

```

115 115 name='TracHelloWorld', version='1.0',
116 116 packages=find_packages(exclude=['*.tests*'])
117     entry_points = ""
118     [trac.plugins]
119     helloworld = myplugins.helloworld
120     "",
117     entry_points = {
118     'trac.plugins': [
119         'helloworld = myplugins.helloworld',
120     ],
121     },

```

## MIME Type Processors

121 122 )

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

- [?ProcessorBazaar](#)
- [?MacroBazaar](#)
- [?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](#)