

HTML Support

A major requirement for providing rich text editing capabilities is support for HTML. Telerik's **RadRichTextBox** is designed to offer import/export functionality for **HTML** out of the box – through the `HtmlFormatProvider`. However, as HTML is a diverse and complicated standard, supporting it comes with certain limitations. `HtmlFormatProvider` is designed to handle slightly malformed HTML (missing closing tags, missing quotes around attributes), however in this case correct parsing cannot be guaranteed. For best results we recommend importing valid XHTML content.

The purpose of this article is to outline what parts of HTML are supported and what aren't.

Importing

When the `HtmlFormatProvider` imports an HTML document, it parses it and converts the **HTML element tree to RadDocument** – Telerik's internal document format. Importing is basically made up of two parts – content and styling.

Content

HTML content is mapped to two types of `RadDocument` elements – paragraphs and spans.

Tags mapped to paragraphs are:

- `<p>`
- `<h1>` through `<h6>`
- `<ul>`, `<ol>`, `<li>`
- `<tr>`

Tags mapped to spans are

- formatting tags, `<span>`, `<font>`

Additionally, line breaks are inserted between consequent block elements (`<div>`).

Styling

Styling is supported through **CSS styles** (classes or inline) and a number of **formatting tags** (including `<font>`). Although the `<font>` tag has been deprecated, legacy software and markup requires support for it.

Supported formatting tags are:

- `<b>`, `<strong>` – turn on bold
- `<i>` – turn on italic
- `<u>` – turn on underline
- `<h1>` through `<h6>` – apply heading

- <sub> – turn on subscript
- <sup> – turn on superscript

Supported CSS properties are:

- text-align
- margin-left
- margin-right
- color
- background-color
- font-family
- font-size
- font-style
- font-weight
- text-decoration (underline, line-through)
- vertical-align (sub, super)

Supported tag attributes are:

- face – equivalent to CSS property *font-family*
- size – equivalent to CSS property *font-size*
- color – equivalent to CSS property *color*

Exporting

When exporting to HTML, HtmlFormatProvider iterates through the RadDocument tree and generates HTML nodes. It is designed to generate valid XHTML document in order to preserve the formatting as much as possible. Styles are exported as CSS classes in the head of the document and used through the body. The structure of the HTML document closely resembles that of RadDocument – paragraphs and spans.