

# RichText Field Type

This Field Type validates and stores structured rich text, and exposes it in several formats.

Name	Internal name	Expected input
RichText	ezrichtext	mixed

## PHP API Field Type

### Input expectations

Type	Description	Example
string	XML document in one of the Field Type's input formats as a string.	See the example below.
DOMDocument	XML document in one of the Field Type's input formats as a <b>DOMDocument</b> object.	See the example below.
eZ\Publish\Core\FieldTypes\RichText\Value	An instance of the Field Type's <b>Value</b> object.	See the example below.

### Input formats

Field Type works with XML and also expects an XML value as input, whether as a string, **DOMDocument** object or Field Type's **Value** object. When the value is given as a string or a **DOMDocument** object, it will be checked for conformance with one of the supported input formats, then dispatched to the appropriate converter, to be converted to the Field Type's internal format. No conversion will be performed if providing the value in Field Type's internal format or as Field Type's **Value** object. In the latter case it will be expected that **Value** object holds the value in Field Type's internal format.

Currently supported input formats are described in the table below:

Name	Description
eZ Publish Docbook variant	FieldType's internal format
XHTML5 editing format	Typically used with in-browser HTML editor
Legacy eZXML format	Compatibility with legacy eZXML format, used by <a href="#">XmlText Field Type</a>

### Example of the Field Type's internal format

```
<?xml version="1.0" encoding="UTF-8"?>
<section xmlns="http://docbook.org/ns/docbook"
        xmlns:xlink="http://www.w3.org/1999/xlink"

xmlns:ezxhtml="http://ez.no/xmlns/ezpublish/docbook/xhtml
1"

xmlns:ezcustom="http://ez.no/xmlns/ezpublish/docbook/cus
tom"
        version="5.0-variant ezpublish-1.0">
  <title ezxhtml:level="2">This is a title.</title>
  <para ezxhtml:class="paraClass">This is a
paragraph.</para>
</section>
```

### Example of the Field Type's XHTML5 edit format

This format is used by eZ Platform Online Editor and will change with its needs as we continue to evolve this part of the UI.

```
<?xml version="1.0" encoding="UTF-8"?>
<section
xmlns="http://ez.no/namespaces/ezpublish5/xhtml5/edit">
  <h2>This is a title.</h2>
  <p class="paraClass">This is a paragraph.</p>
</section>
```

For more information about internal format and input formats, see [Field Type's conversion test fixtures on GitHub](#).

For example, ezxml does not use explicit level attributes for <header> elements, instead <header> element levels are indicated through the level of nesting inside <section> elements.

### Example of using XML document in internal format as a string

```

...

$contentService = $repository->getContentService();
$contentTypeService =
$repository->getContentTypeService();

$contentType =
$contentTypeService->loadContentTypeByIdentifier(
"article" );
$contentCreateStruct =
$contentService->newContentCreateStruct( $contentType,
"eng-GB" );

$inputString = <<<DOCBOK
<?xml version="1.0" encoding="UTF-8"?>
<section xmlns="http://docbook.org/ns/docbook"
        xmlns:xlink="http://www.w3.org/1999/xlink"

xmlns:ezxhtml="http://ez.no/xmlns/ezpublish/docbook/xhtml
1"

xmlns:ezcustom="http://ez.no/xmlns/ezpublish/docbook/cus
tom"

        version="5.0-variant ezpublish-1.0">
        <title ezxhtml:level="2">This is a title.</title>
        <para ezxhtml:class="paraClass">This is a
paragraph.</para>
</section>
DOCBOK;

$contentCreateStruct->setField( "description",
$inputString );

...

```

## Value object

**eZ\Publish\Core\FieldType\RichText\Value** offers following properties:

Property	Type	Description
xml	DOMDocument	Internal format value as an instance of DOMDocument.

## REST API specifics

### Creating or updating Content

When creating RichText content with the REST API, it is possible to provide data as a string, using the "xml" fieldValue key:

```
<fieldValue>
  <value key="xml">&lt;?xml version="1.0"
encoding="UTF-8"?&gt;
&lt;section xmlns="http://docbook.org/ns/docbook"
xmlns:xlink="http://www.w3.org/1999/xlink"
xmlns:ezxhtml="http://ez.no/xmlns/ezpublish/docbook/xhtml
1"
xmlns:ezcustom="http://ez.no/xmlns/ezpublish/docbook/cus
tom" version="5.0-variant ezpublish-1.0"&gt;
&lt;title ezxhtml:level="2"&gt;This is a
title.&lt;/title&gt;
&lt;/section&gt;
</value>
</fieldValue>
```

When the value given over REST API is transformed into a Field Type's `value` object, it will be treated as a string. This means you can use any supported input format for input over REST API.

For further informations [about the internal implementation of RichText Field Type](#), see in [the doc/ directory](#)