

The Kentico Portal engine allows you to create dynamic web pages without any programming. With the Portal engine, you do not need to use Visual Studio or any other web development tool. Instead, you create reusable page templates directly in your web browser.

Every page on a Kentico website, with the exception of pages based on [content only](#) page types, is based on a **page template**. Page templates consist of a layout and instances of web parts. The system stores portal engine page templates in the database.

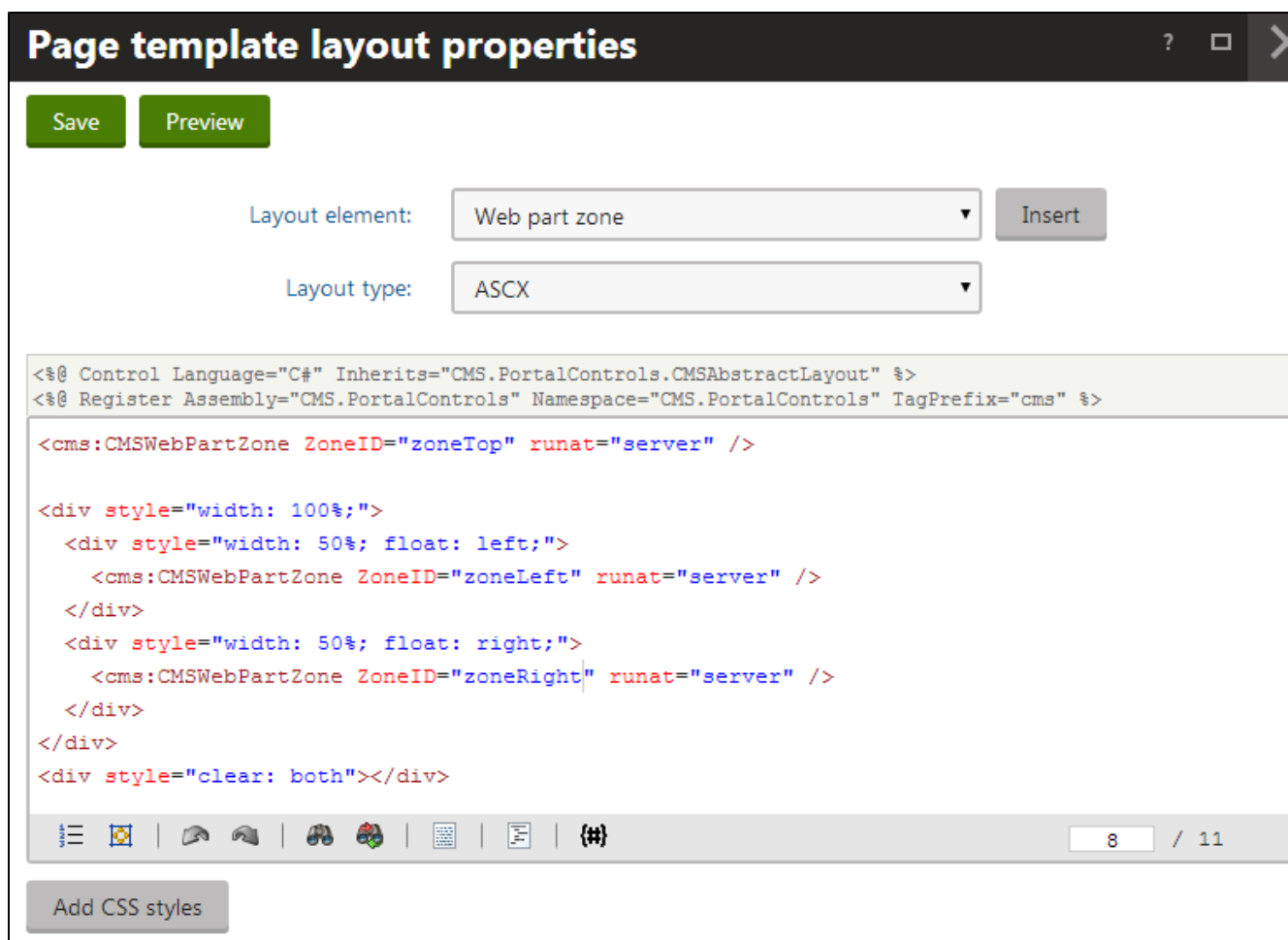
The structure of each page template is determined by its **page layout**, which you can either define through full ASCX markup or standard HTML code. The code allows you to set up any layout that you require for your pages. Portal engine page layouts need to contain special markup tags that define **web part zones** — areas where developers place web parts. Each web part zone can contain any number of web part instances.

Web parts (called "servlet", "portlet" or "module" in other solutions) are components that display some type of content or provide background functionality. From a technical point of view, web parts are standard [ASP.NET user controls](#) with a predefined portal engine interface.

The following figures show the components of a sample page — the page layout, web part zones and web parts on the page template, and the output in various view modes.

The page layout of the template

The following image shows the layout code of a page template that defines three sections: top, left and right. Each section contains a `CMSWebPartZone` tag representing a web part zone.



Page template layout properties

Save Preview

Layout element: Web part zone Insert

Layout type: ASCX

```
<%@ Control Language="C#" Inherits="CMS.PortalControls.CMSAbstractLayout" %>
<%@ Register Assembly="CMS.PortalControls" Namespace="CMS.PortalControls" TagPrefix="cms" %>

<cms:CMSWebPartZone ZoneID="zoneTop" runat="server" />

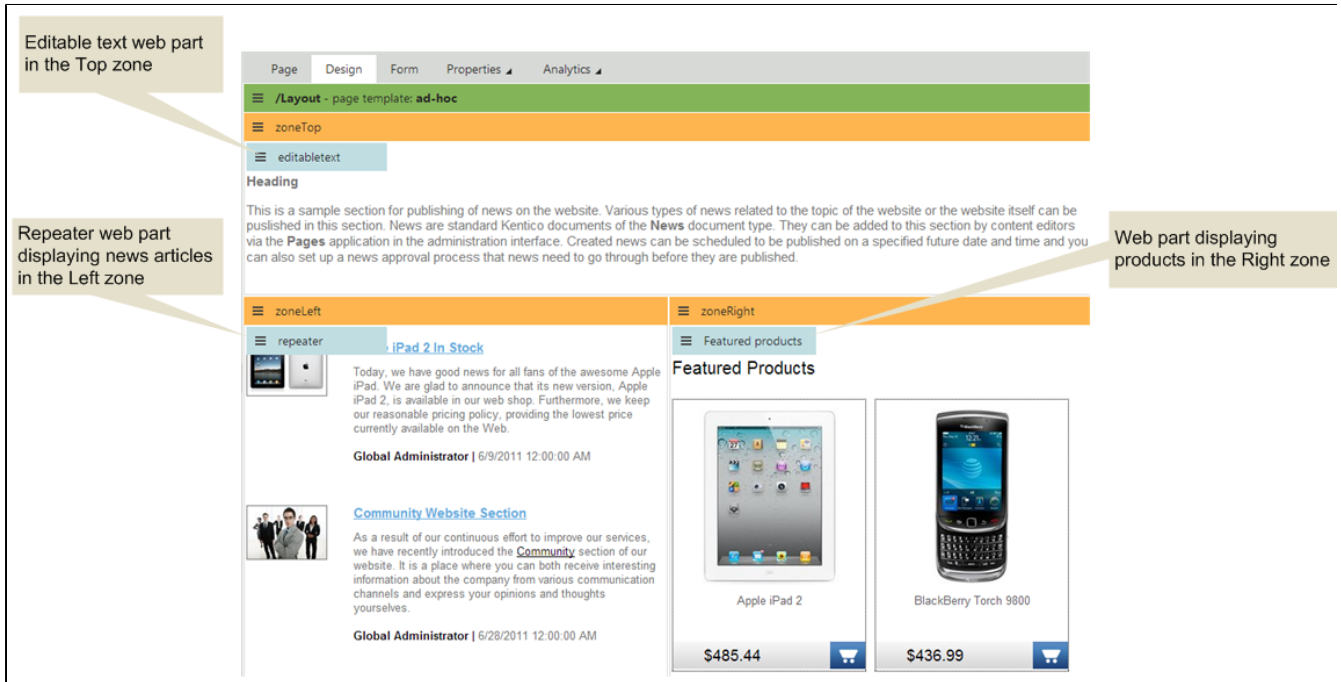
<div style="width: 100%;">
  <div style="width: 50%; float: left;">
    <cms:CMSWebPartZone ZoneID="zoneLeft" runat="server" />
  </div>
  <div style="width: 50%; float: right;">
    <cms:CMSWebPartZone ZoneID="zoneRight" runat="server" />
  </div>
</div>
<div style="clear: both"></div>
```

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Add CSS styles

The page template on the Design tab

The following shows a template that uses the sample page layout on the **Design** tab of the **Pages** application. The template consists of three web part zones: **zoneTop**, **zoneLeft** and **zoneRight**. The web part zones contain individual instances of web parts.



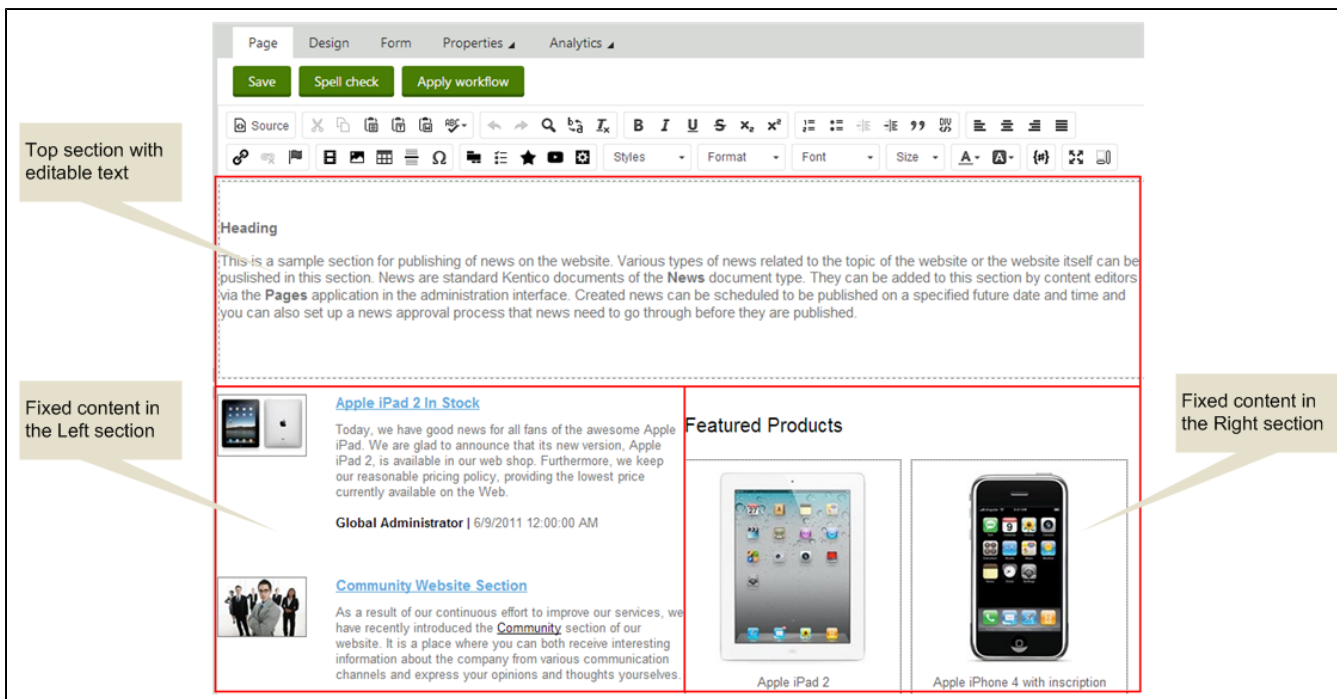
The screenshot shows the Kentico Design tab interface. The top navigation bar includes 'Page', 'Design', 'Form', 'Properties', and 'Analytics'. The main content area displays a page template titled '/Layout - page template: ad-hoc'. The template is divided into three zones:

- zoneTop:** Contains an 'editabletext' web part. A callout points to it with the text: 'Editable text web part in the Top zone'.
- zoneLeft:** Contains a 'repeater' web part. A callout points to it with the text: 'Repeater web part displaying news articles in the Left zone'.
- zoneRight:** Contains a 'Featured products' web part. A callout points to it with the text: 'Web part displaying products in the Right zone'.

The 'zoneTop' section contains a heading and a paragraph of text. The 'zoneLeft' section displays a list of news articles, including 'iPad 2 In Stock' and 'Community Website Section'. The 'zoneRight' section displays a list of featured products, including 'Apple iPad 2' and 'BlackBerry Torch 9800'.

The page in editing mode

When viewing a page that uses the sample template on the **Page** tab of the **Pages** application, editors can enter text and other content into the editable text region in the top section. Non-editable web parts (such as lists of news and products) appear as fixed content.



The screenshot shows the Kentico Page tab interface. The top navigation bar includes 'Page', 'Design', 'Form', 'Properties', and 'Analytics'. The main content area displays the same page template as the Design tab, but in editing mode. The template is divided into three zones:

- Top section with editable text:** A callout points to the 'editabletext' web part in the top section.
- Fixed content in the Left section:** A callout points to the 'repeater' web part in the left section.
- Fixed content in the Right section:** A callout points to the 'Featured products' web part in the right section.

The 'Top section with editable text' contains a heading and a paragraph of text. The 'Fixed content in the Left section' displays a list of news articles, including 'Apple iPad 2 In Stock' and 'Community Website Section'. The 'Fixed content in the Right section' displays a list of featured products, including 'Apple iPad 2' and 'Apple iPhone 4 with inscription'.

The page on the live site

On the live site, the page displays content according to the template's layout and web parts.

