Create WebTextEditor Field Type in Microsoft SharePoint 2007

This white paper describes the techniques and walkthrough about using WebTextEditor as a custom field type using WebTextEditor.

Prerequisites

The following are the prerequisites development environments before proceeding further.

- Windows 2003 Server with IIS installed.
- Microsoft Office SharePoint Server 2007.
- Intersoft WebUI Studio.NET 2009 R2.

The virtual PC image of Microsoft Office SharePoint Server 2007 can be obtained <u>here</u>. Click <u>here</u> to download the 30-day fully functional WebUI Studio 2009 R2.

Preparing your new SharePoint Project

1. Run your Visual Studio 2008. Create an empty SharePoint template. Please go to *New Project > Visual C# > SharePoint > Empty template.*

ew Project			?		
Project types:		Templates:	000		
Windows Windows Windows Office Smart Dev Database Starter Kil SharePoir Test Visual C# Windows Office	vice ts nt	Visual Studio installed templates Team Site Definition List Definition Imply My Templates Search Online Templates			
Smart Dev Smart Dev Database Starter Kil SharePoir Test Visual 1#	vice ts it for creating a SharePo	nt application			
lame:	Empty2				
ocation:	C:\Documents and Settings\Administrator\My Documents\Visual Studio 2005\Projects				
olution:	Create new Solution Solution Name:	Create directory for solution Empty2			
		ОК	Cancel		

- 2. Give it a name. In this sample, it is named *WebTextEditorFieldType*.
- 3. Press Ok button and you'll see the empty project. On the Solution Explorer, right-click on the project name, select *Add*, and choose *New Item*.
- 4. Choose Field Control Templates.
- 5. In the *Name* field, enter the exact same name as your project name. For example: WebTextEditorFieldType.

Add New Item - WebTextEditor	FieldType		? ×
Categories:	<u>T</u> emplates:		
 ✓ Visual C# Code Data General Web Windows Forms WPF Reporting SharePoint Workflow 	Visual Studio installed template	Event Receiver	
A new custom SharePoint List field			
Name: WebTextEdito	rFieldType		
		Add	Cancel

6. Click *Add*. Two files will be created automatically: *WebTextEditorFieldType.Field.cs* and *WebTextEditorFieldType.FieldControl.cs* inside the WebTextEditorFieldType folder.

- 7. Next, add reference to all required assemblies. Right click on the References in Solution Explorer and navigate to:
 - %Installation Path\Intersoft Solutions\WebUI Studio for ASP.NET\ WebUI.NET Framework 3.0\Bin. Add ISNet.dll, ISNet.WebUI.dll, and ISNet.WebUI.Resources.dll.
 - %Installation Path\Intersoft Solutions\WebUI Studio for ASP.NET\ WebTextEditor.NET 1.1\Bin. Add ISNet.WebUI.WebTextEditor.dll and ISNet.WebUI.WebTextEditor.Resources.dll.

Solution Explorer - WebTextEditorFieldType 💿 🗸 🗢 🗙
🖶 🔂 🛃 🖧
Solution 'WebTextEditorFieldType' (1 project)
🖻 📲 📴 WebTextEditorFieldType
主 🔤 Properties
🖻 🗁 🗁 References
ISNet
ISNet.WebUI
- System.Web
📄 🗠 🗁 Templates
🖹 🗁 xml
🔤 fldtypes_WebTextEditorFieldType.xml
🖻 🗠 🗁 WebTextEditorFieldType
🔤 🛀 WebTextEditorFieldType.Field.cs
🔤 🐏 WebTextEditorFieldType.FieldControl.cs

Configuring the Control

- 1. Open the *WebTextEditorFieldType.Field.cs* file. By default, the class is inherited from SPFieldText.
- 2. Open *WebTextEditorFieldType.FieldControl.cs*. By default, the class is inherited from TextField. Since we won't use any standard .NET controls, the class must be changed to BaseFieldControl.
- 3. Override the CreateChildControls method the Value property.

```
using System;
using System.Runtime.InteropServices;
using Microsoft.SharePoint;
using Microsoft.SharePoint.WebControls;
using ISNet.WebUI.WebTextEditor;
using System.Web.UI.WebControls;
namespace WebTextEditorFieldType
{
    // TODO: Replace, as needed, "TextField" with some other class
```

```
derived from Microsoft.SharePoint.WebControls.BaseFieldControl.
    [CLSCompliant(false)]
    [Guid("db82fa4d-4470-4386-a4bd-1661d32300aa")]
    public class WebTextEditorFieldTypeFieldControl : BaseFieldControl
    {
        protected WebTextEditor WebEditor;
        protected override void CreateChildControls()
        {
            if (this.ControlMode == SPControlMode.Edit ||
this.ControlMode == SPControlMode.New)
            {
                // Make sure inherited child controls are completely
rendered.
                base.CreateChildControls();
                this.WebEditor = new WebTextEditor();
                if (!this.Page.IsPostBack)
                {
                    if (this.ControlMode == SPControlMode.New)
                    {
                        this.WebEditor.Content = "";
                    } // end assign default value in New mode
                    this.WebEditor.Width = Unit.Pixel(500);
                    this.WebEditor.Height = Unit.Pixel(600);
                    this.WebEditor.ImagesDirectory = "http://budianto-
pc/CommonLibrary/Images/WebTextEditor/";
                    this.WebEditor.ScriptDirectory = "http://budianto-
pc/CommonLibraryTemp08/WebTextEditor/V1 0 1000/";
                    this.WebEditor.SharedScriptDirectory =
"http://budianto-pc/CommonLibrary/Shared/";
                    this.WebEditor.SharedScriptDirectory =
"http://budianto-pc/CommonLibrary/Shared/";
                    this.WebEditor.WebDesktopScriptDirectory =
"http://budianto-pc/CommonLibraryTemp08/WebDesktop/V3 0 7200/";
                    this.WebEditor.ToolBarSettings.ToolBarMode =
WebTextEditorToolBarMode.Minimal;
                }// end if this is not a postback
                Controls.Add(this.WebEditor);
            }
        }
        public override object Value
        {
            get
            {
                //EnsureChildControls();
                return this.WebEditor.Content;
            }
            set
            {
                //EnsureChildControls();
                this.WebEditor.Content = (String)value;
```

```
}
}
}
```

The main concept is to render WebTextEditor when user enters the Edit or the New mode.

Creating the Field Type Definition

By default, Field type definition file (*fldtypes_CustomWeb.xml*) is created inside the Templates/xml folder. Build the project and Visual Studio will automatically generate the content, but not the *RenderPattern*.

Add RenderPattern definition under the </FieldType>.

```
<RenderPattern Name="DisplayPattern" DisplayName="DisplayPattern"> </RenderPattern>
```

If you want to store more than 255 characters in your control, you should change the *ParentType* of your control to Note.

Your final XML file should look like this.

```
<?xml version="1.0" encoding="utf-8"?>
<FieldTypes>
<RenderPattern Name="DisplayPattern" DisplayName="DisplayPattern">
</RenderPattern>
<FieldType>
<Field Name="TypeName">WebTextEditorFieldTypeField</Field>
<Field Name="TypeDisplayName">WebTextEditorFieldTypeField</Field>
<Field Name="TypeShortDescription">WebTextEditorFieldTypeField</Field>
<Field Name="TypeShortDescription">WebTextEditorFieldTypeField</Field>
<Field Name="ParentType">Text</Field>
<Field Name="ParentType">Text</Field>
<Field Name="UserCreatable">TRUE</Field>
<Field Name="FieldTypeClass">01041dd8-3c5e-496c-8d50-5ca20669a72b</Field>
</FieldType>
</FieldType>
```

Deploy and Create Column

Now, you are ready to deploy your solution. Simply click on *Deploy* from your solution and the field will be added to SharePoint directly.

1. Go to your local Microsoft SharePoint page. Eg, <u>http://hpv-win03-1/Pages/Default.aspx</u>

2. Go to View All Site Content > Document > Settings > CreateColumn.

Home > Documents							
Documents							
This sy	This system library was created by the Publishing feature to store documents that are used on pages in this site.						
New	Upload Actions	Setting	s 🔻				
Туре	Name		Create Column	O Modified By			
Ð	DialogTextEditor		Add a column to store additional information about each item.	HPV-WIN03-1\Administrator			
•	Editor	Cr	Create View Create a view to select columns, filters, and other display settings.	HPV-WIN03-1\Administrator			
Ð	EditorField	Q		HPV-WIN03-1\Administrator			
•	WebTextEditorField		Document Library Settings	HPV-WIN03-1\Administrator			
		Ma col	Manage settings such as permissions, columns, views, and policy.				

3. Enter the column name and set the type to "*WebTextEditorFieldType*" (your custom template name) and hit OK. If you go to "Document Library Settings", you will see something like this.

Columns						
A column stores information about each document in the document library. The following columns are currently available in this document library:						
Column (click to edit)	Туре	Required				
Title	Single line of text					
Description	WebTextEditorFieldTypeField	~				
Created By	Person or Group					
Modified By	Person or Group					
Checked Out To	Person or Group					
Create column						
Add from existing site columns						
Column ordering						
Indexed columns						

4. When you open your list item in a new form, it will show you:

PS \administrator 🔹 My Site My Links 🔹 🔞
Advanced Search
Site Actions *
View: All Documents •
TextEditorFieldType

