

Kentico CMS Hands on Lab



Hands on Lab:
Custom Table: Create and Display

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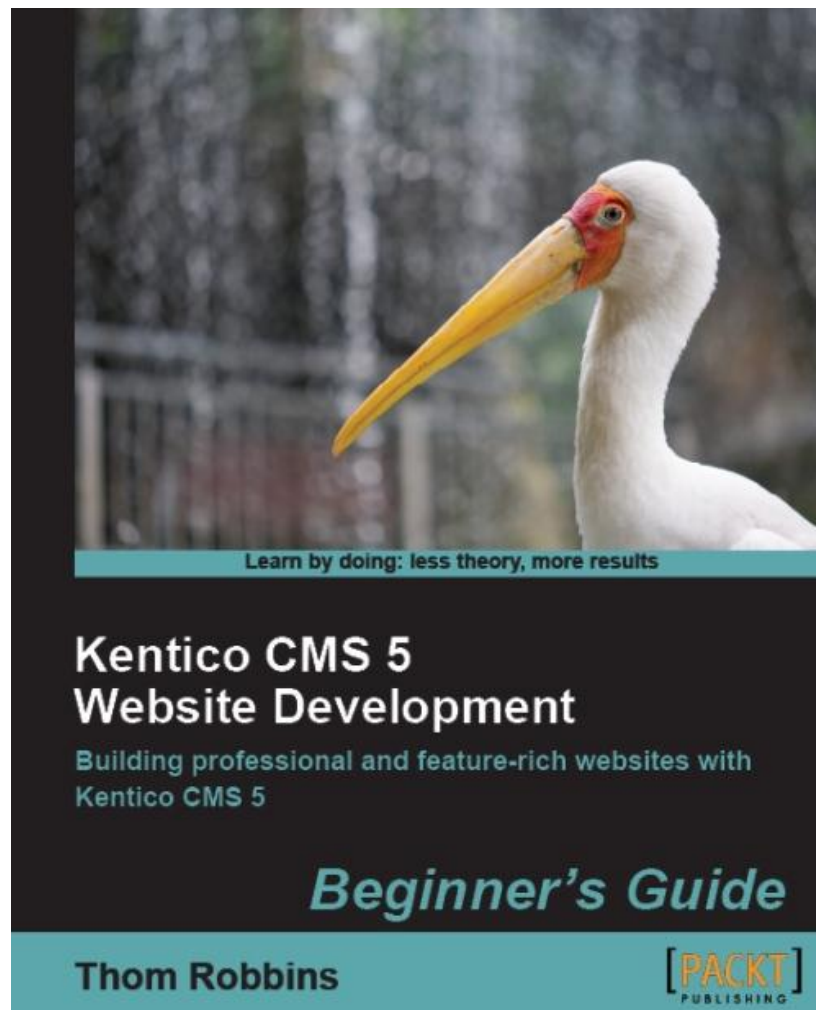
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For more information <http://www.kentico.com>

Kentico CMS Hands on Lab

Looking for more information on Kentico CMS? Please check out



Available from Packt Publishing

<https://www.packtpub.com/kentico-cms-5-website-development-beginners-guide/book>

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Hands on Lab: Custom Table: Create and Display

Lab Overview

System Requirements:

- Kentico CMS 5.5 R2 installed with the Sample Corporate Site

Intended Lab Audience:

- CMS Designers
- CMS Developers

Lab Introduction

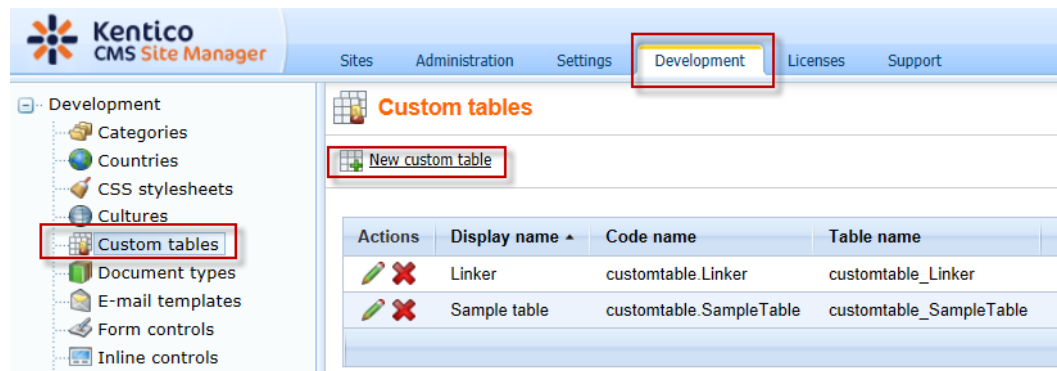
Kentico CMS provides custom tables as a way to store and manage custom data. Technically, they are SQL tables and coupled stored procedures. Once a custom table is created and contains data, the next step is to provide a display for site visitors. In this lab we will add a custom table and then use the Basic Repeater web part to display it on a page. In this completing this set of labs you will perform the following tasks:

- Create a custom table
- Explore the Data Source web part
- Explore the Basic Repeater web part
- Edit a transformation for better visual display

Lab: Custom Table: Create and Display

Lab 1: Creating a Custom Table

1. Log into **CMS Site Manager** as **Administrator**, select the **Development** tab, select **Custom tables**, and click **New custom table** as shown in the following screenshot



2. In **Step 1- General** update the following values and then click **Next**

Field	Value
Custom table display name	Customer Contacts
Custom table code name (custom table)	custom

3. In **Step 2 – Data type** click **Next** as shown in the following screenshot

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Step 2

Data type

Please supply name of the new database table and included fields.

Database table name:

Primary key name:

Include ItemCreatedBy field:

Include ItemCreatedWhen field:

Include ItemModifiedBy field:

Include ItemModifiedWhen field:

Include ItemOrder field:

Next >

- In **Step 3 – Fields** click the **New attribute (+)** button as shown in the following screenshot

Step 3

Fields

Please define custom fields of the custom table and their appearance in the editing form.

ItemID
ItemCreatedBy
ItemCreatedWhen
ItemModifiedBy
ItemModifiedWhen
ItemOrder
ItemGUID

Database

Attribute name:

Attribute type:

Attribute size:

Allow empty value:

Attribute default value:

Display attribute in the editing form

Field

Field caption:

Field type:

Field description:

OK

Next >

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5. In the **New attribute** dialog update the following values and then select **OK**

Section	Field	Value
Database	Attribute name	Name
Database	Attribute size	100
Field	Field caption	Name
Field	Field type	Textbox

6. Select the **New attribute** button, update the following values and then click **Ok**

Section	Field	Value
Database	Attribute name	Title
Database	Attribute size	100
Field	Field caption	Title
Field	Field type	Textbox

7. Select the **New attribute** button, update the following values, and select **Ok**

Section	Field	Value
Database	Attribute name	Email
Database	Attribute size	100
Field	Field caption	Email

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Field	Field type	E-mail
-------	------------	--------

8. In **Step 3 – Fields** click the **Next** button

9. In **Step 4 – Sites** click the **Next** button as shown in the following screenshot

Step 4 | **Sites**
Please select sites where this document type can be used:

<input type="checkbox"/>	Site name
<input type="checkbox"/>	Corporate Site

[Remove selected](#) [Add sites](#)

[Next >](#)

10. In **Step 5 – Search options** click the **Next** button as shown in the following screenshot

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Step 5 | **Search options**
Please set search fields for Smart search module.

Title field:
Content field:
Image field:
Date field:

Set automatically

Field name	Content	Searchable	Tokenized	Custom search name
ItemID	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Name	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>
Title	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>
Email	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>
ItemCreatedBy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

Next >

11. In **Step 6 – The wizard has finished** click the **Finish** button as shown in the following screenshot

Step 6 | **The wizard has finished**

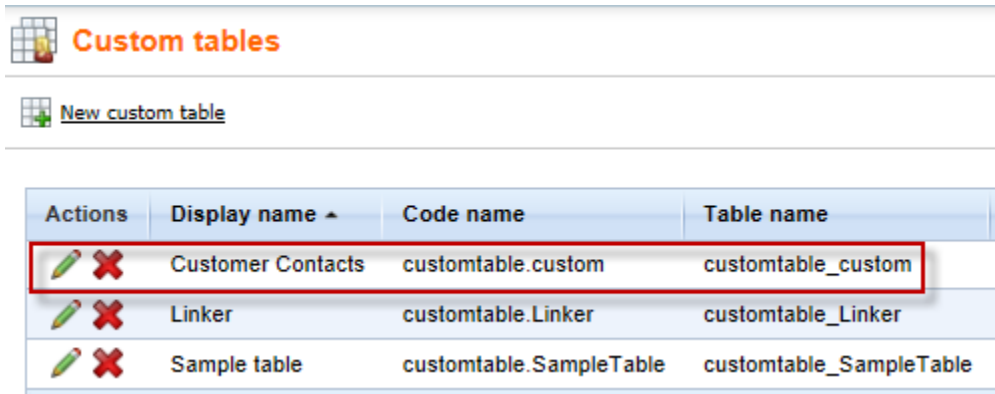
The setup has finished the following steps:







- The new custom table was created.
- The sites were selected where this custom table can be used.
- The default queries were created.
- The default ASCX transformation was created.
- The default permission names were created.

Finish

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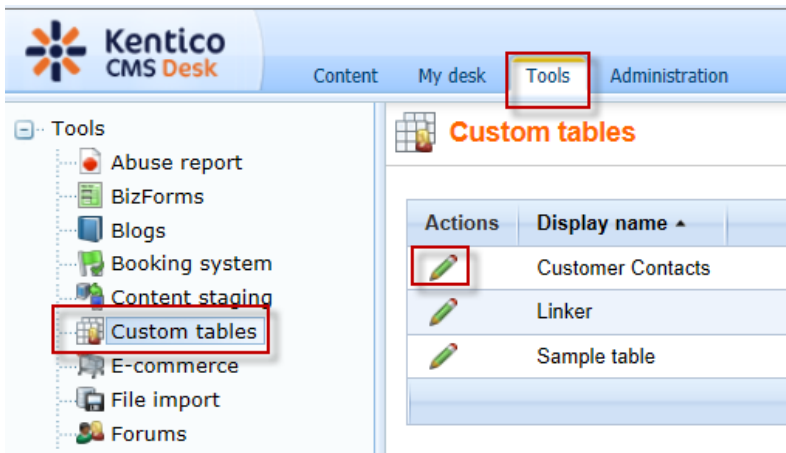
12. In the menu item click **Custom table** and validate that the **Customer Contacts** custom table is displayed as shown in the following screenshot



Actions	Display name ^	Code name	Table name
 	Customer Contacts	customtable.custom	customtable_custom
 	Linker	customtable.Linker	customtable_Linker
 	Sample table	customtable.SampleTable	customtable_SampleTable

Lab 2: Adding the Custom Table Data

1. Log into **CMS Desk** as **Administrator**, select the **Tools** tab, in the Content tree click **Custom tables** and then the **Edit (Pencil)** icon for the **Customer Contacts** table as shown in the following screenshot






Kentico CMS Desk

Content My desk **Tools** Administration

Tools

- Abuse report
- BizForms
- Blogs
- Booking system
- Content staging
- Custom tables**
- E-commerce
- File import
- Forums

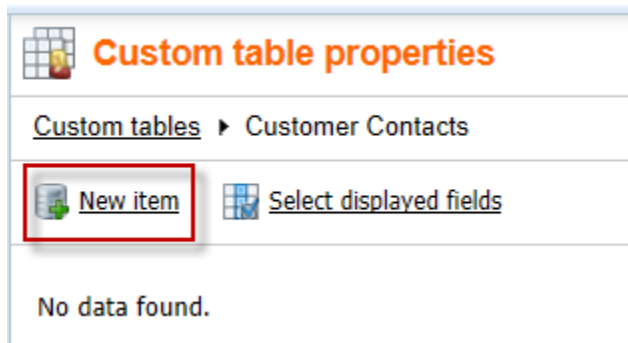
Actions	Display name ^
	Customer Contacts
	Linker
	Sample table



Adding data to custom tables

You can also add data programmatically to custom tables using the Kentico CMS API. Consult the [Kentico CMS Developer's Guide](#) for examples.

2. Click the **New item** button as shown in the following screenshot



3. In the **New item** screen enter update the following values and then select **Ok**

Field	Value
Name	Joe Brown
Title	President
Email	joe@company.com

4. Click the **Create another** button, update the following values, and then click **Ok**

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Field	Value
Name	Ted Thomas
Title	Marketing VP
Email	ted@company.com

- Click the **Data** link as shown in the following screenshot

Edit item

Data ▶ Edit item

[Create another](#)

The changes were saved.

ItemID: 2

Name:

Title:

Email:

- Validate that the two items just entered are visible as shown in the following screenshot

Custom table properties

Custom tables ▶ Customer Contacts

[New item](#) [Select displayed fields](#)

Actions	ItemID	Name	Title	Email	Created by	Created when	Modified by	Modified when	Order	GUID
	1	Joe Brown	President	joe@company.com	53	7/11/2011 3:44:29 PM			1	8161e4cf-24c2-4b04-9e3e-de9d-c56e178e
	2	Ted Thomas	Marketing VP	ted@company.com	53	7/11/2011 3:46:58 PM			2	eb47fa69-1a9c-4f49-92d3-34c192b83f2

Items per page: 25

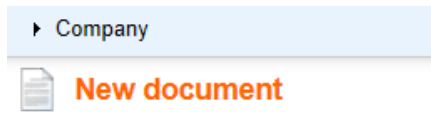
Lab 3: Creating the Display Page

1. Select the **Content** tab, in the Content tree select the **Company** node and then the **New (Paper)** icon, as shown in the following screenshot

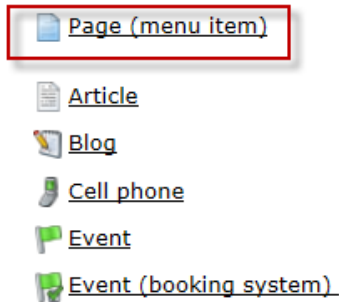


2. Click the **Page (menu item)** as shown in the following screenshot

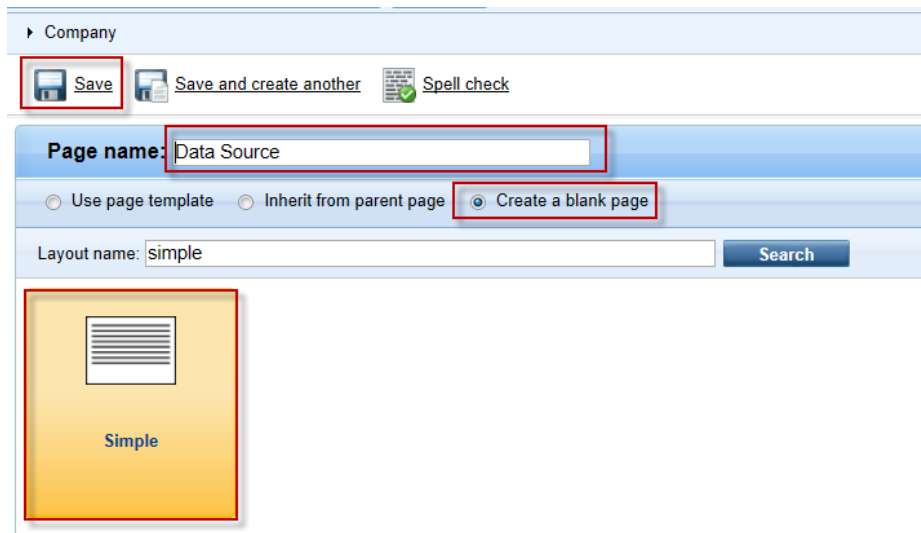
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Please select new document type:

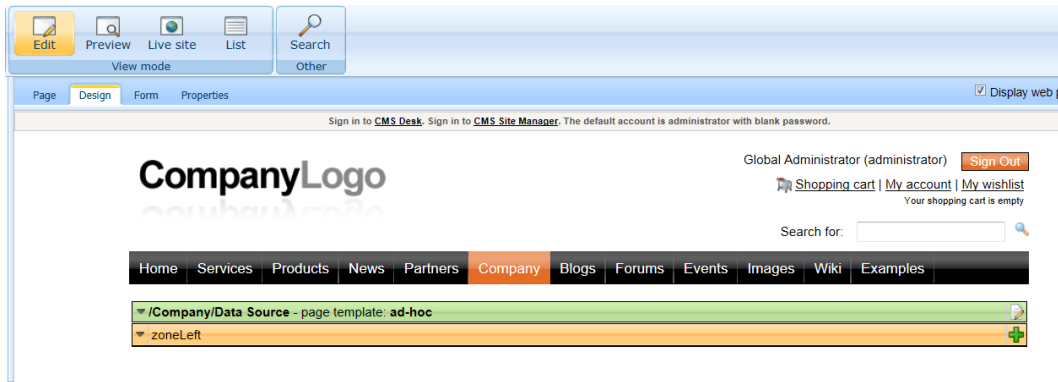


3. In the **New Page (menu item)** screen enter the **Page name** of **Data Source**, click **Create a blank page**, in the **Layout name** enter **Simple**, then click the **Search** button, select the **Simple** page template, and finally click the **Save** button as shown in the following screenshot



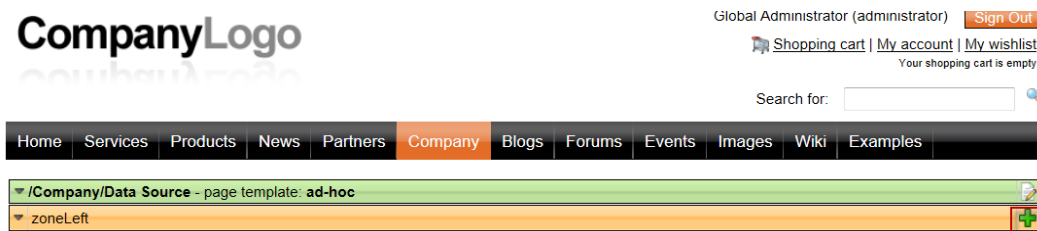
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4. Validate that you see the new Data Source page as shown in the following screenshot



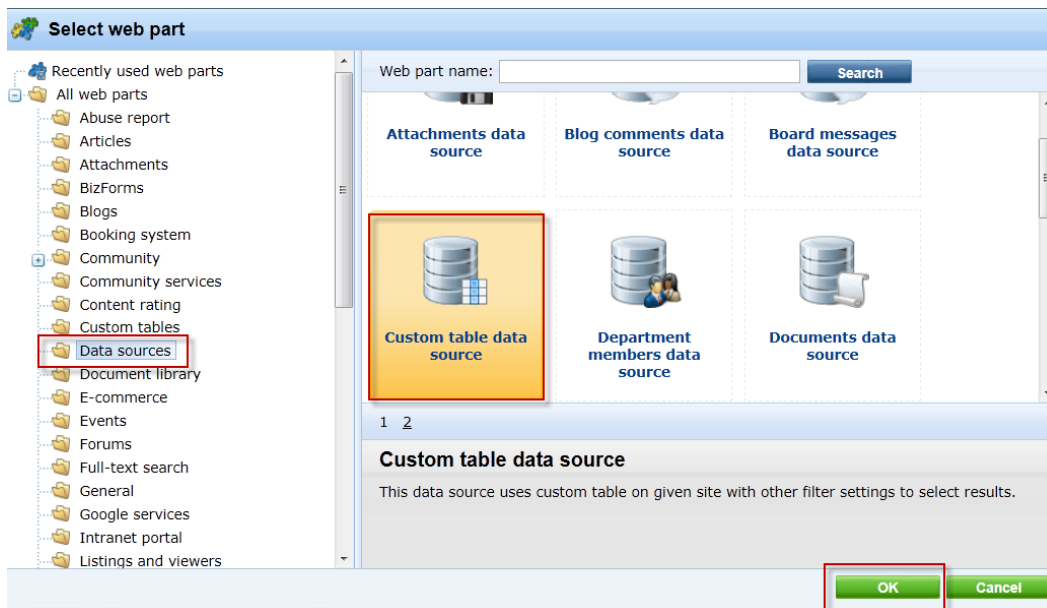
Lab 4: Displaying Custom Table Data

1. In the **zoneLeft** web part zone, click the **Add web part icon (+)** as shown in the following screenshot

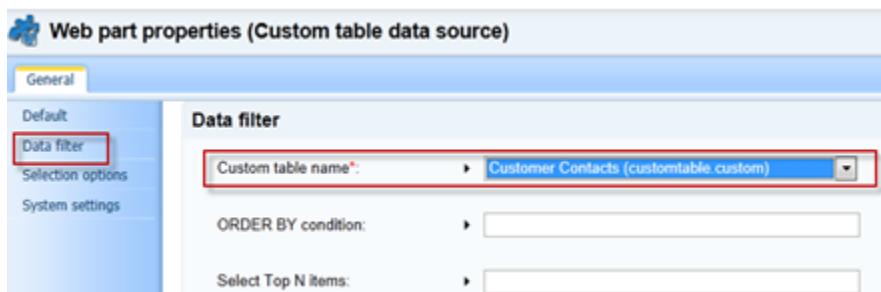


2. In the **Select web part** screen select the **Data sources** node, then select the **Custom table data source** web part, and then click **OK** as shown in the following screenshot

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3. In the **Web part properties (Custom table data source)** screen select the **Data filter** tab, in the **Custom table name** field select the **Customer Contacts (customtable custom)** and click **Ok** as shown in the following screenshot

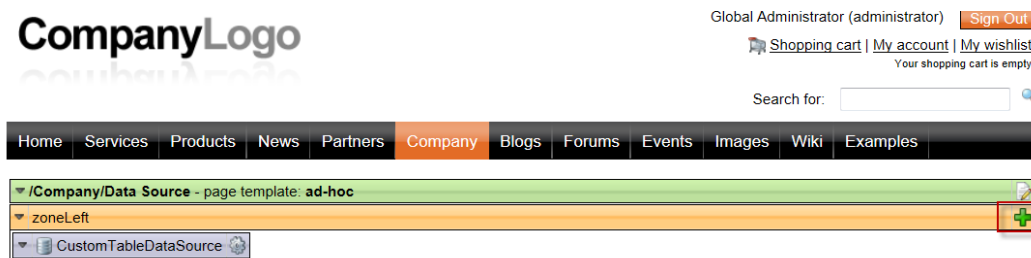


What is a data sources web part?

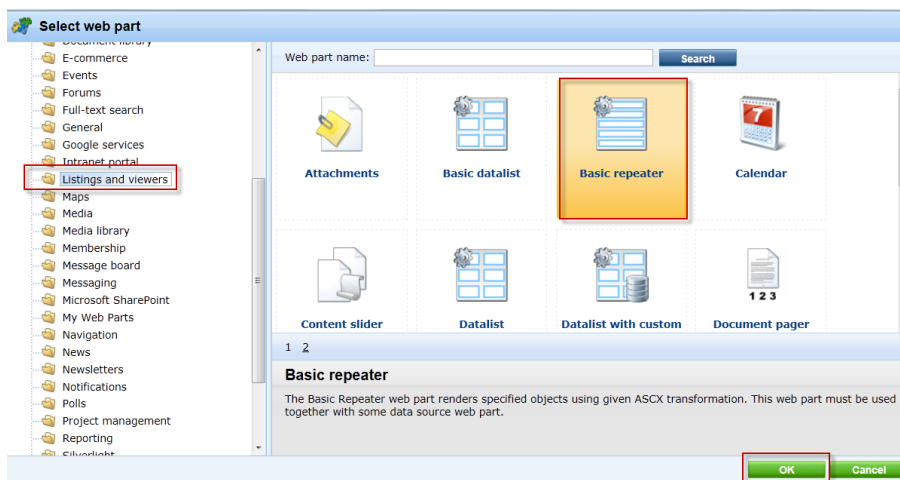
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Data source web parts are used to connect and retrieve data from back end data sources like custom tables. They retrieve data and pass them to display web parts. This separation is designed to provide page based flexibility in data retrieval and display. Data sources provide reusable sources of data. They reduce page resources as data is retrieved just once and then can be used by different web parts on the same template to display content.

4. In the **zoneleft** web part zone select the **Add web part icon (+)** as shown in the following screenshot



5. In the **Select web part** screen select the **Listings and viewers** node, click the **Basic repeater** web part and click **Ok** as shown in the following screenshot

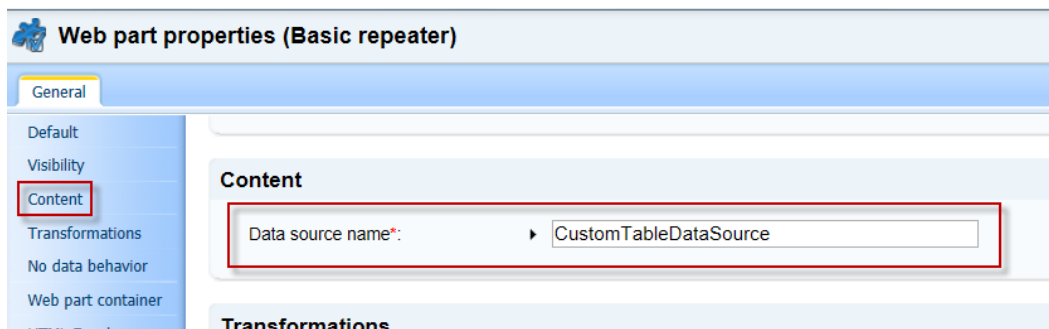




Listings and Viewers

The listings and viewers node contains web parts that can be used to provide display for the data source web parts.

6. In the **Web part properties (Basic repeater)** select the **Content** tab, and in the **Data source name** field enter **CustomTableDataSource** as shown in the following screenshot

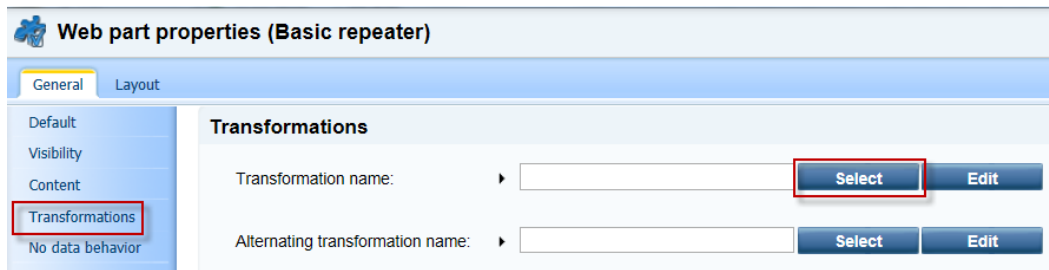


Connecting to Data Sources

The Data source name field is the connection between this web part and the data source web part we added in Step 2 and must be an exact match.

7. In the **Web part properties (Basic repeater)** screen select the **Transformation** tab, and in the **Transformation name** field click the **Select** button as shown in the following screenshot

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The screenshot shows the 'Web part properties (Basic repeater)' dialog box. The 'Transformations' tab is selected in the left-hand menu. The main area is titled 'Transformations' and contains two rows of input fields. The first row is labeled 'Transformation name:' and has a text input field followed by a 'Select' button (highlighted with a red box) and an 'Edit' button. The second row is labeled 'Alternating transformation name:' and has a text input field followed by 'Select' and 'Edit' buttons.



What is a transformation?

When data is passed from the data source web part to the Basic repeater a set of formatting code (transformation) is applied to define the output that is displayed.

8. In the **Select transformation** dialog in the **Class type** drop down select **Custom table**, in the **Custom table** drop down select **Customer Contacts (customtable.custom)**, then click the **customtable.custom.Default** transformation as shown in the following screenshot

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Select transformation

Class type: Custom table

Custom table: Customer Contacts (customtable.custom)

Transformation name or its part:

Transformation name
<u>customtable.custom.Default</u>
<u>customtable.custom.Preview</u>

Items per page: 10

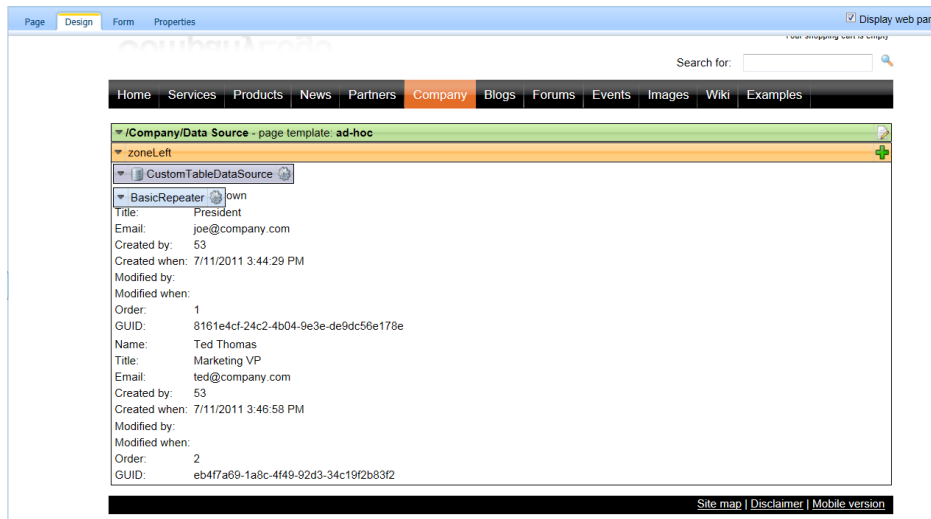


Where did these come from?

When we created the custom table the system automatically creates a Default and Preview transformation

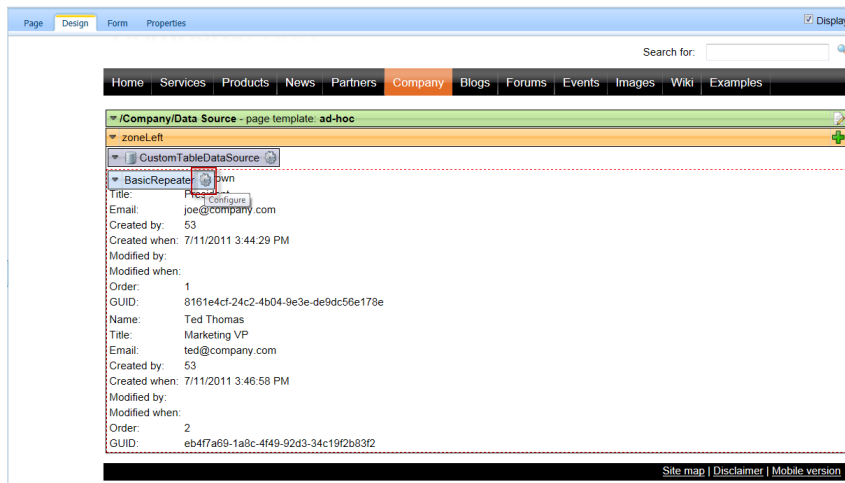
9. Validate that the data is displayed as shown in the following screenshot

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Lab 5: Editing the Default Transformation

1. Select the **Configure** button on the **BasicRepeater** web part as shown in the following screenshot



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- In the **Web part properties (Basic repeater)** screen select the **Transformation** tab, in the **Transformation name** select the **Edit** button as shown in the following screenshot

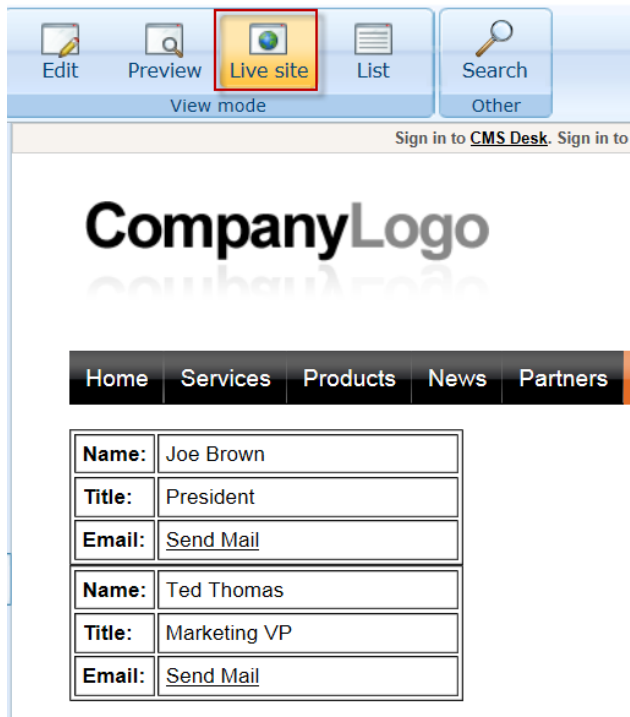


- In the **Edit transformation** dialog within the **Code** window replace the existing code with the following, then select **Save**, close the **Edit transformation** window and in the **Web part properties (basic repeater)** window click **OK**

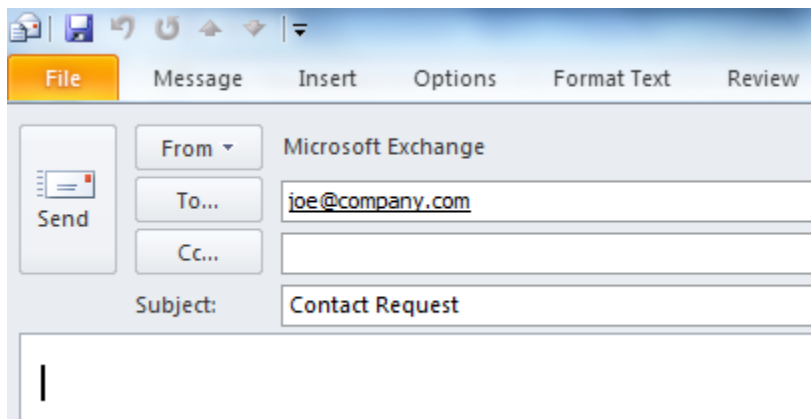
```
<table border = "1" cellpadding="4">
  <tr>
    <td><b>Name:</b></td>
    <td width="180"><%# Eval("Name") %></td>
  </tr>
  <tr>
    <td><b>Title:</b></td>
    <td><%# Eval("Title") %></td>
  </tr>
  <tr>
    <td><b>Email:</b></td>
    <td><a href="mailto:<%#
Eval("Email")%>?Subject=Contact%20Request">Send Mail</a></td>
  </tr>
</table>
```

- Select the **Live Site** button to view the edited transformation as shown in the following screenshot

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5. Click the **Send Mail** link for **Joe Brown** and validate that you see the email as shown below



Summary

In this set of Hands on Labs we looked at how to create a custom table and then display the data using the Basic Repeater web part. We also looked at how we can edit the default transformation. Specifically, we covered the following.

- Creating a custom table
- Adding data to a custom data using CMS Site manager
- Creating a new CMS page
- Using Data source web parts
- Displaying data with the Basic repeater web part
- Editing the default transformation

Key Resources:

- <http://devnet.kentico.com/Documentation.aspx>
- <http://devnet.kentico.com/Videos/Content-Management/How-To--Using-Data-Source-Web-Parts.aspx>