Hands on Lab:
Custom Table: Create and Display

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Kentico CMS Hands on Lab

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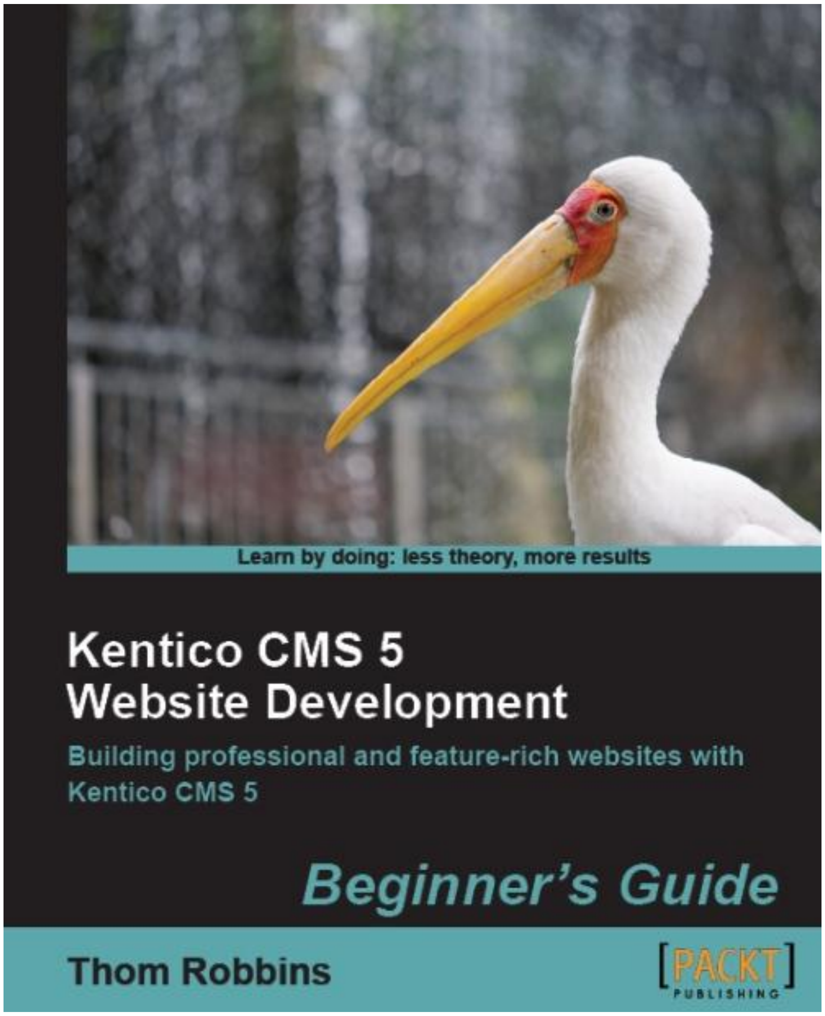

Available from Packt Publishing

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

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Lab Overview

System Requirements:

- Kentico CMS 5.5 R2 installed with the Sample Corporate Site

Intended Lab Audience:

- CMS Designers
- CMS Developers

Lab Introduction

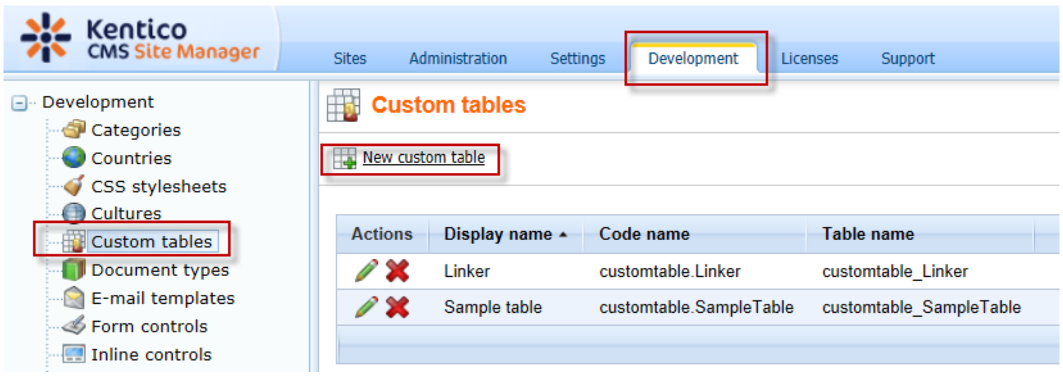
Kentico CMS provides custom tables as a way to store and manage custom data. Technically, they are SQL tables and coupled stored procedures. Once a custom table is created and contains data, the next step is to provide a display for site visitors. In this lab we will add a custom table and then use the 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

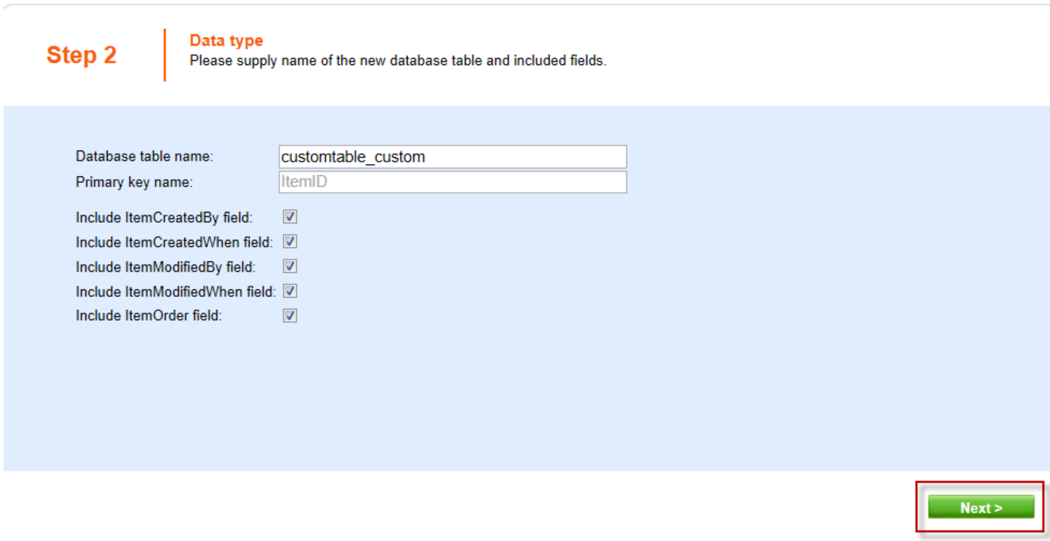
1. Log into **CMS Site Manager** as **Administrator**, select the **Development** tab, select **Custom tables**, and click **New custom table** as shown in the following screenshot



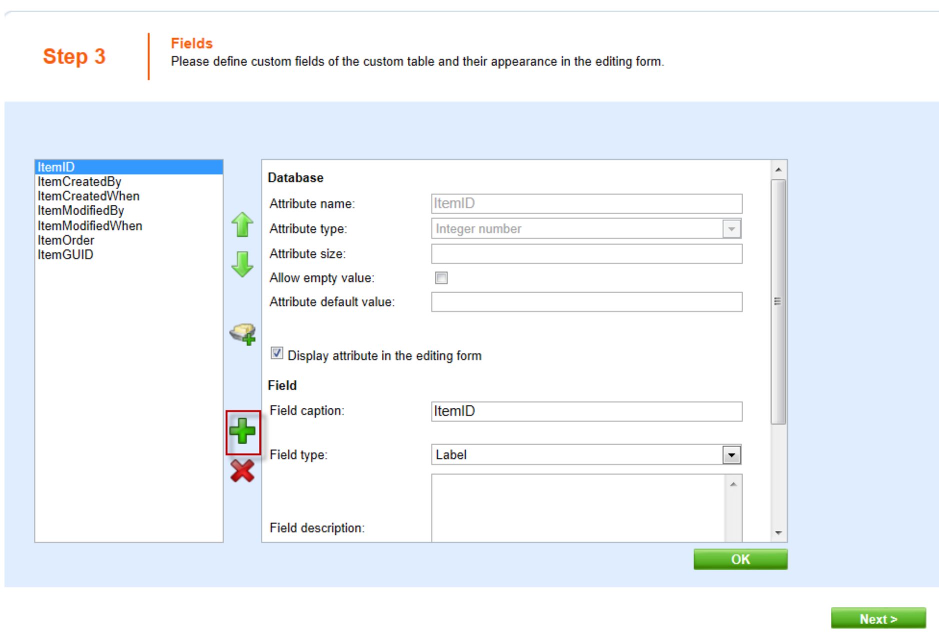
2. In **Step 1- General** update the following values and then click **Next**

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



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



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**

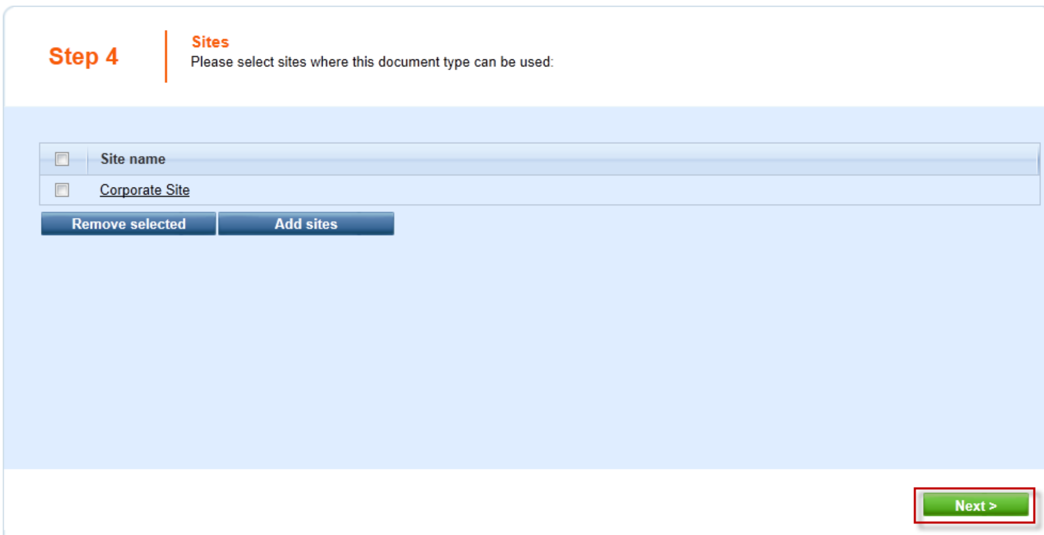
7. Select the **New attribute** button, update the following values, and select **Ok**

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

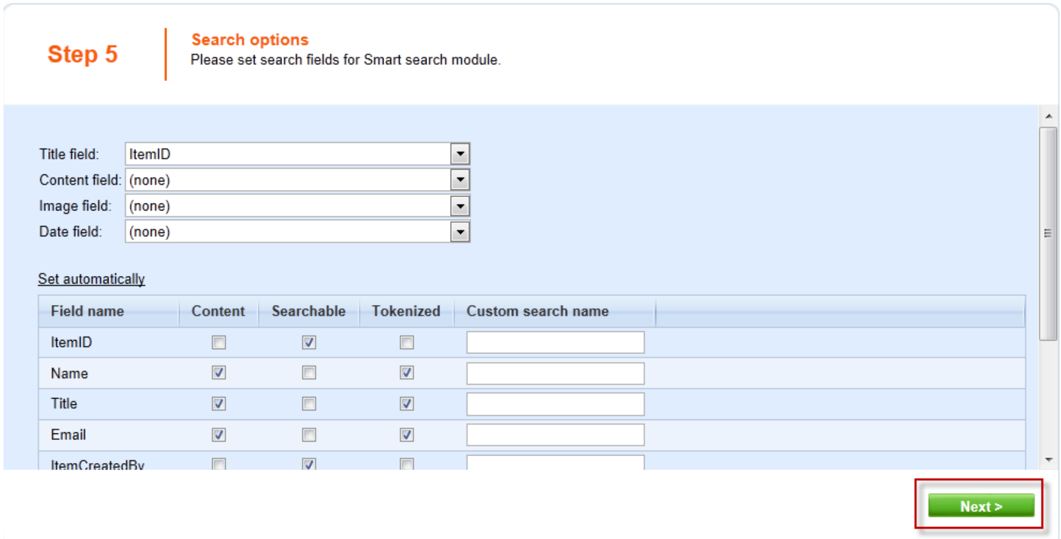
Field	Field type	E-mail

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

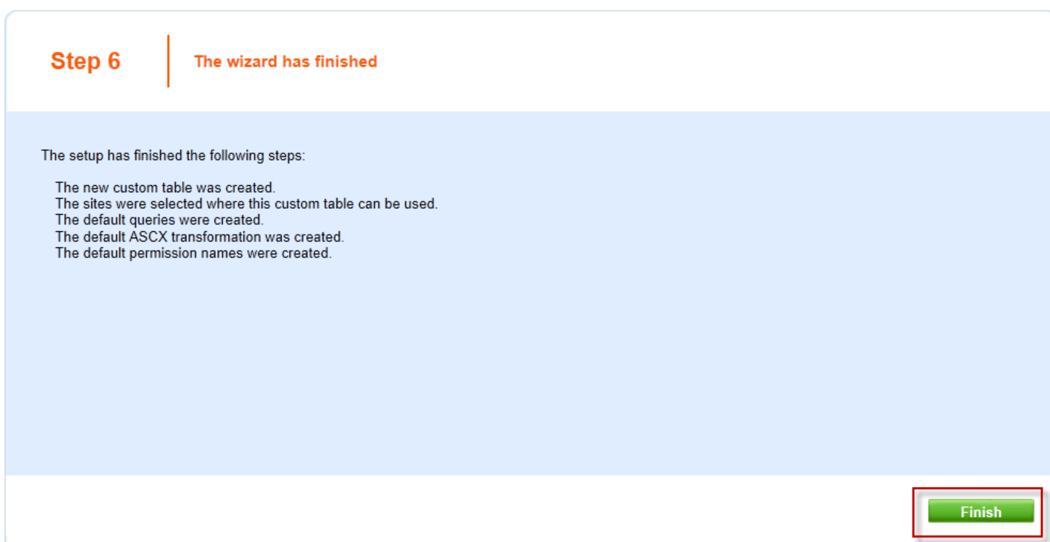
9. In **Step 4 – Sites** click the **Next** button as shown in the following screenshot



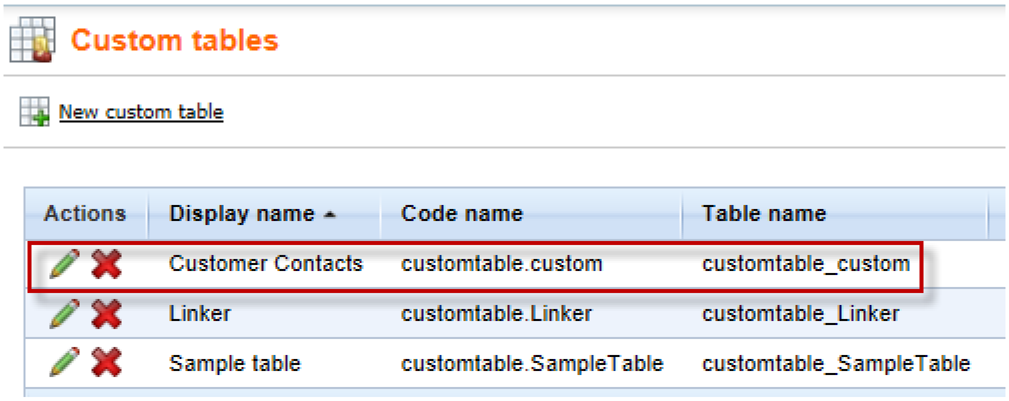
10. In **Step 5 – Search options** click the **Next** button as shown in the following screenshot



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

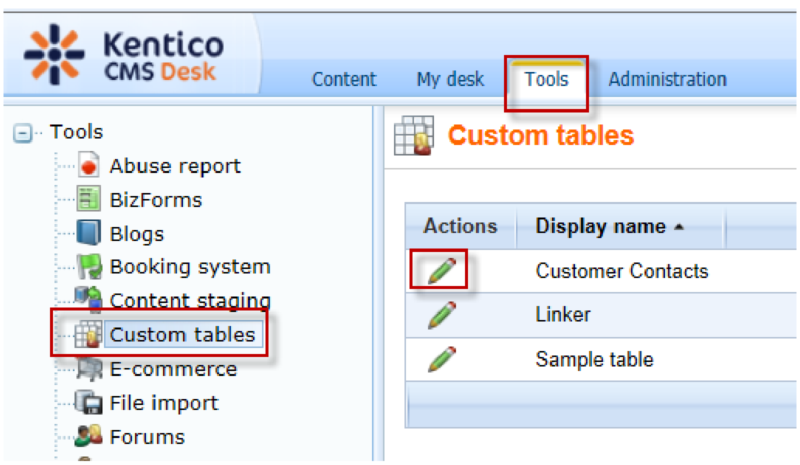


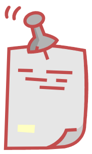
12. In the menu item click **Custom table** and validate that the **Customer Contacts** custom table is displayed as shown in the following screenshot



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

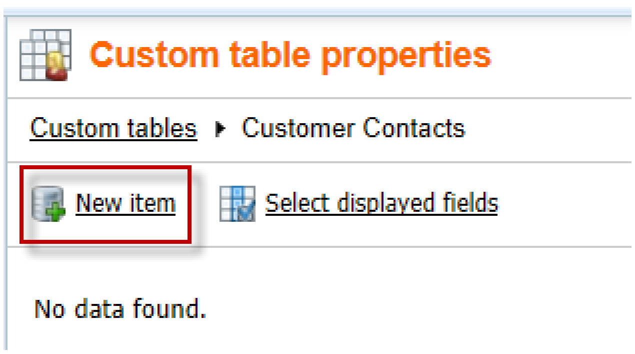




Adding data to custom tables

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



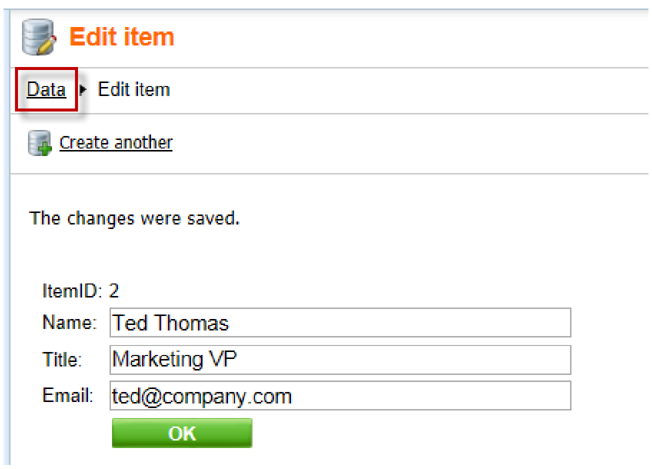
3. In the **New item** screen enter update the following values and then select **Ok**

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

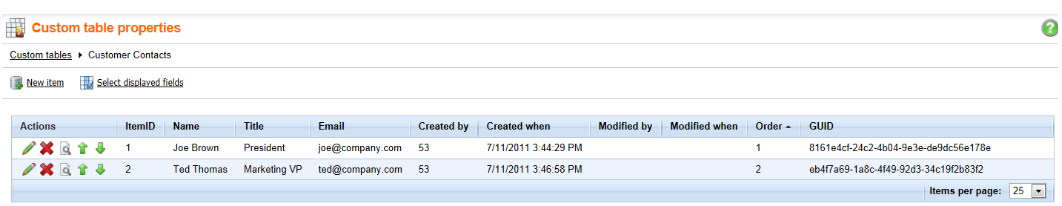
4. Click the **Create another** button, update the following values, and then click **Ok**

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

5. Click the **Data** link as shown in the following screenshot



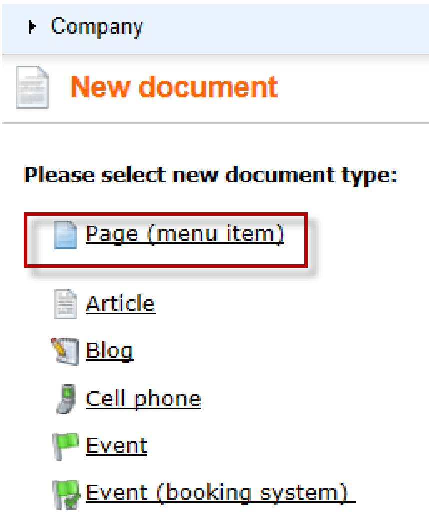
6. Validate that the two items just entered are visible as shown in the following screenshot



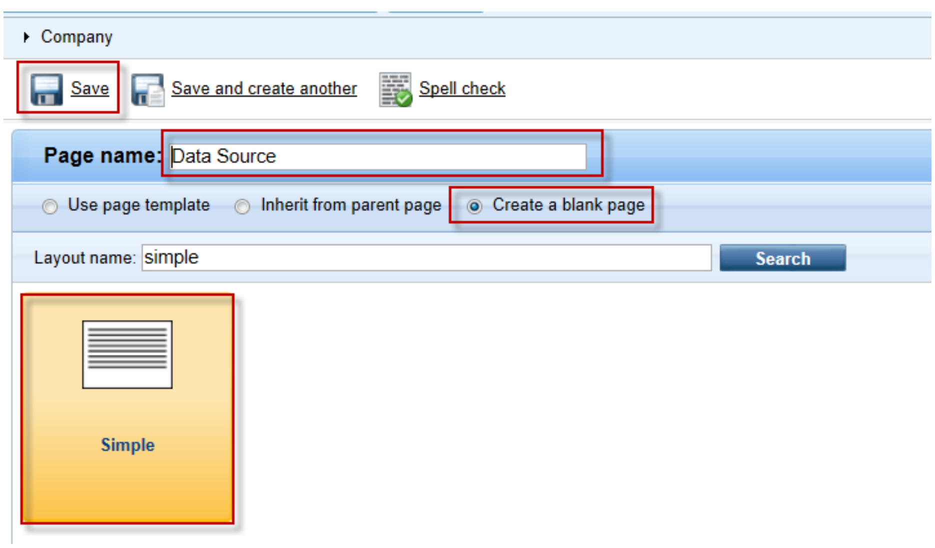
Lab 3: Creating the Display Page

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

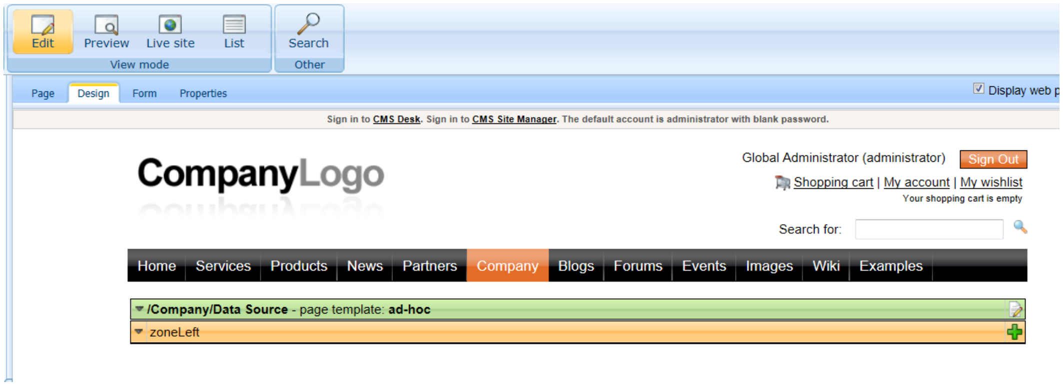
2. Click the **Page (menu item)** as shown in the following screenshot



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

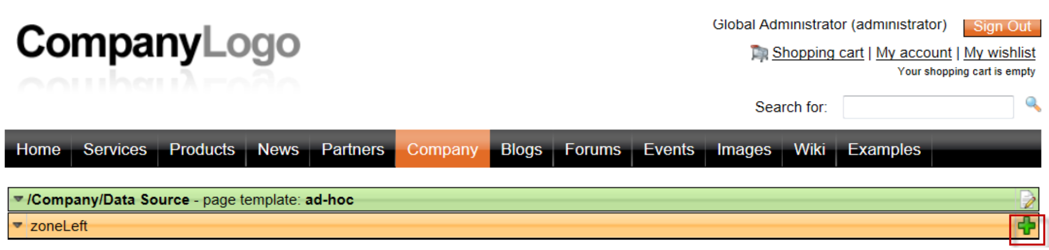


4. Validate that you see the new Data Source page as shown in the following screenshot

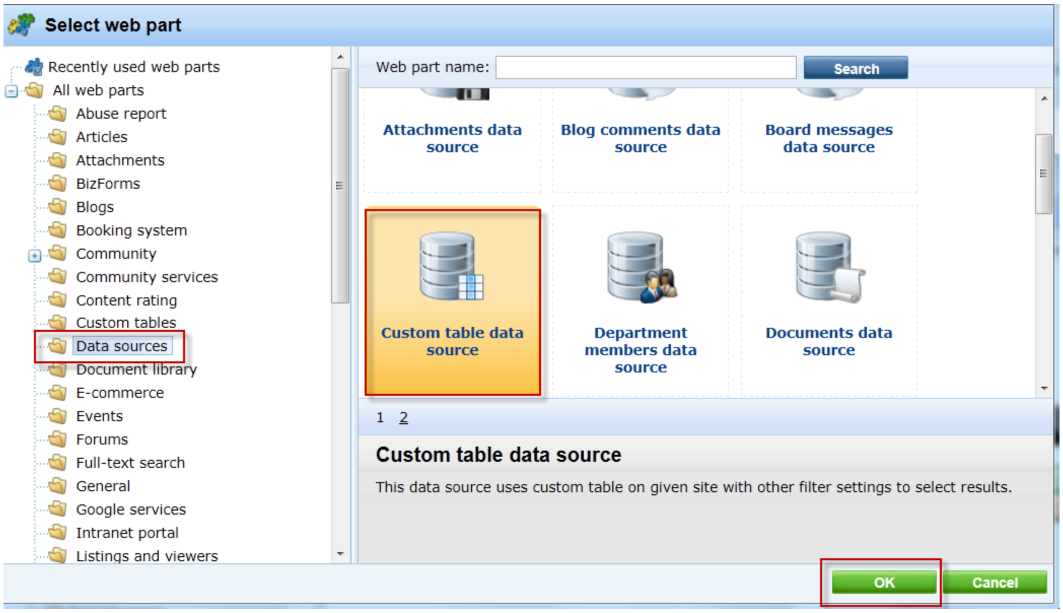


Lab 4: Displaying Custom Table Data

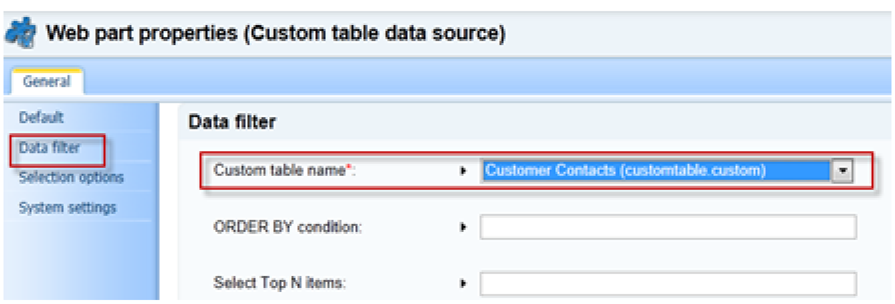
1. In the **zoneLeft** web part zone, click the **Add web part icon (+)** as shown in the following screenshot

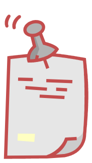


2. In the **Select web part** screen select the **Data sources** node, then select the **Custom table data source** web part, and then click **OK** as shown in the following screenshot



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

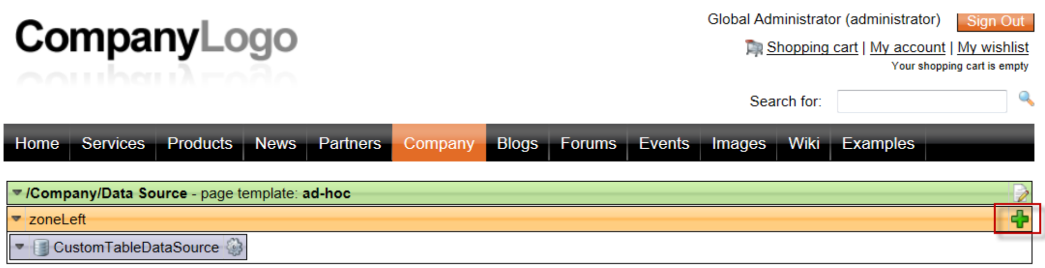




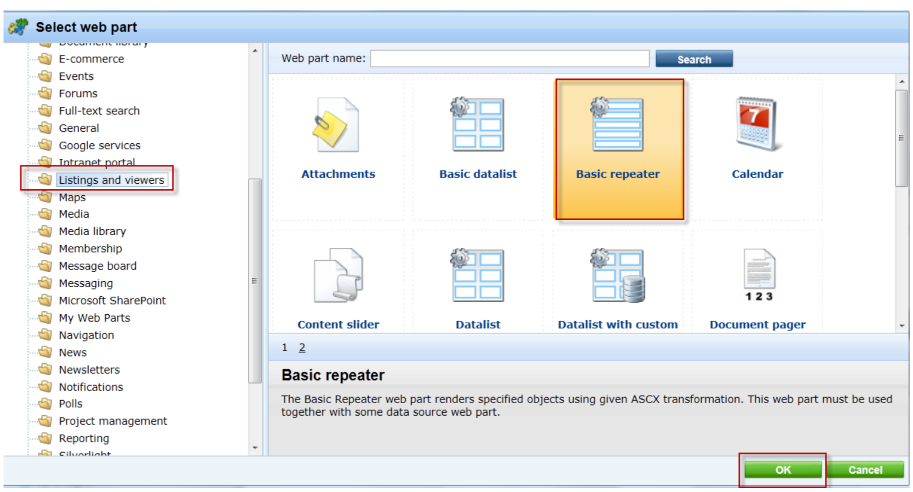
What is a data sources web part?

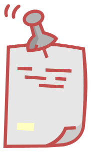
Data source web parts are used to connect and retrieve data from back end data sources like custom tables. They retrieve data and pass them to display web parts. This separation is designed to provide page based flexibility in data retrieval and display. Data sources provide reusable sources of data. 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

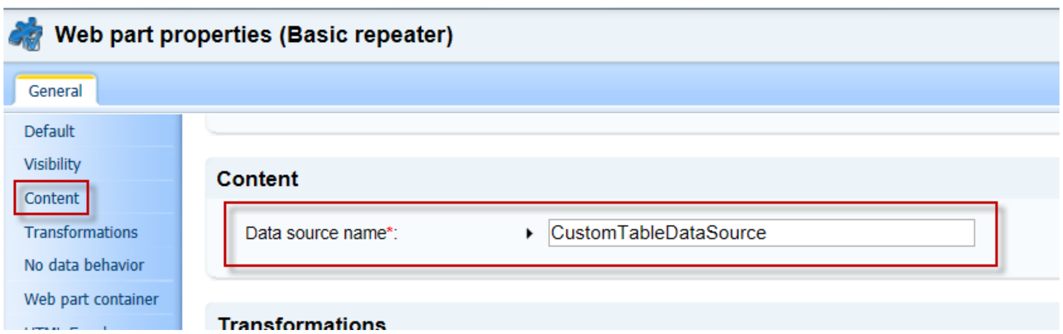


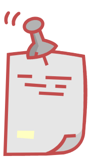


Listings and Viewers

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

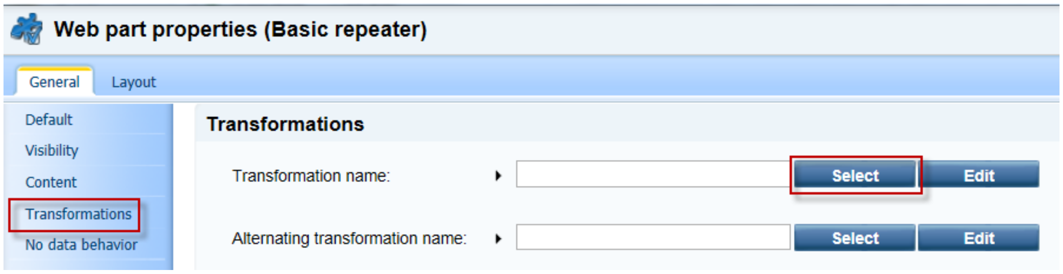


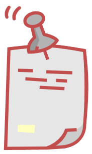


Connecting to Data Sources

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

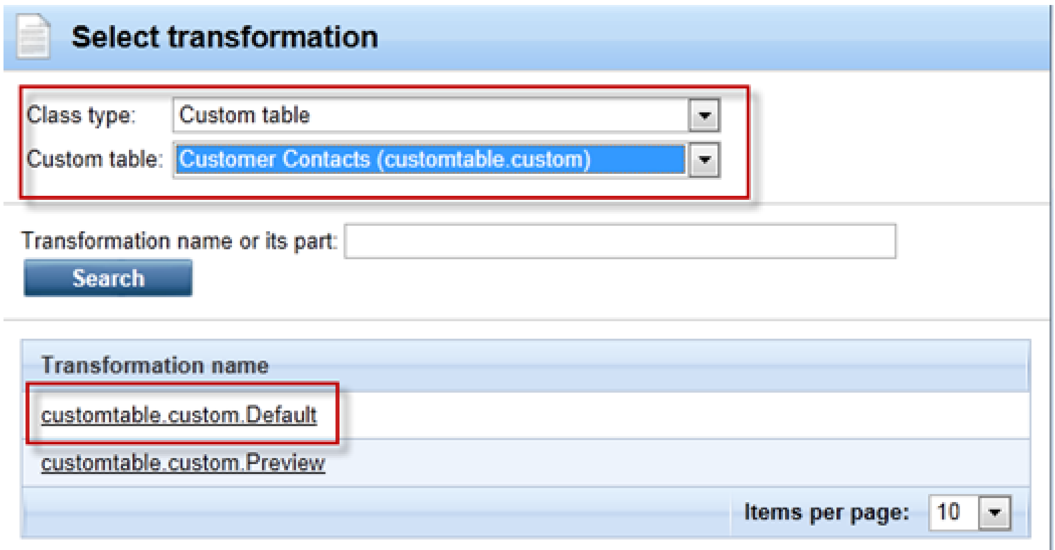


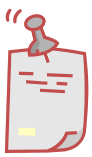


What is a transformation?

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

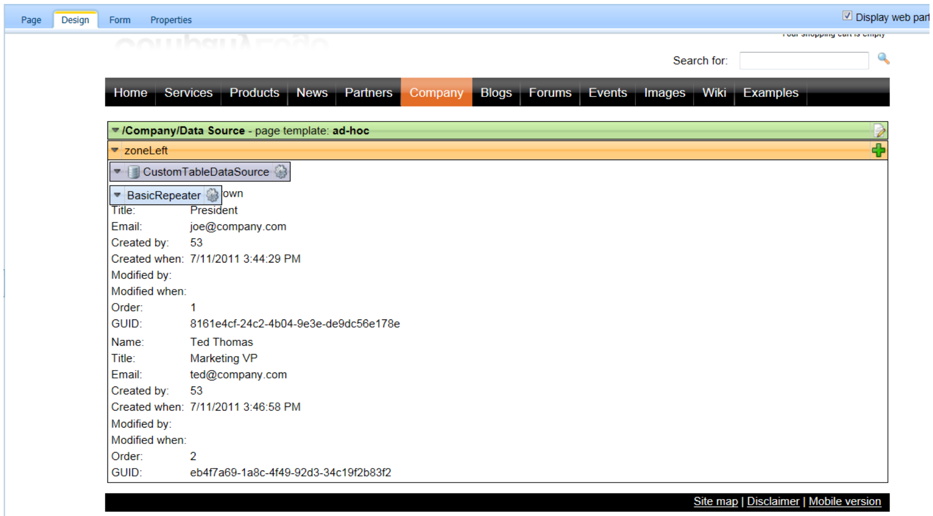




Where did these come from?

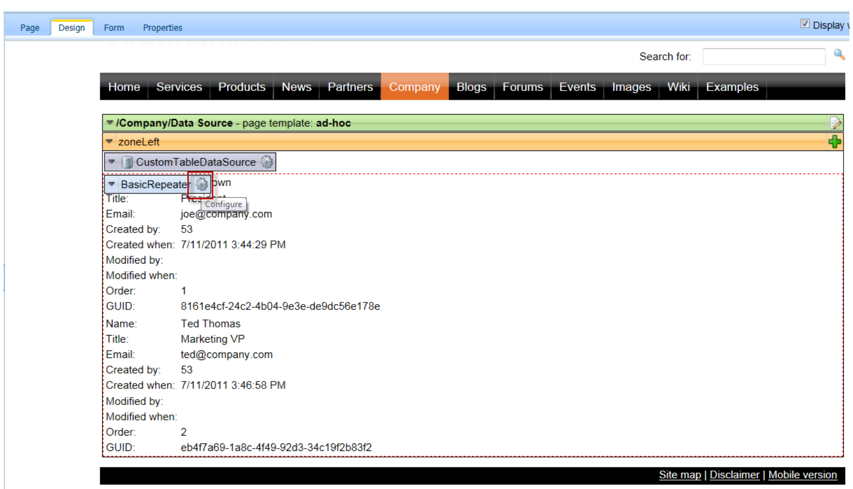
When we created the custom table the system automatically creates a Default and Preview transformation

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



Lab 5: Editing the Default Transformation

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

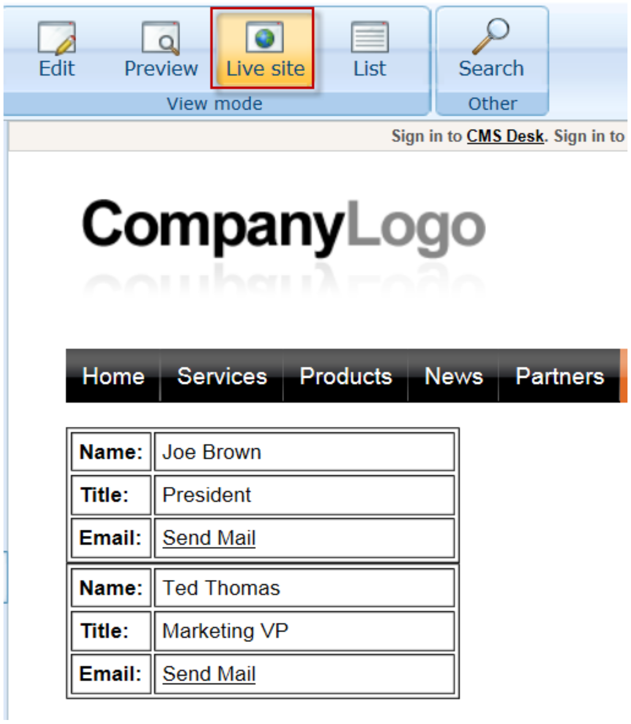


2. In the **Web part properties (Basic repeater)** screen select the **Transformation** tab, in the **Transformation name** select the **Edit** button as shown in the following screenshot

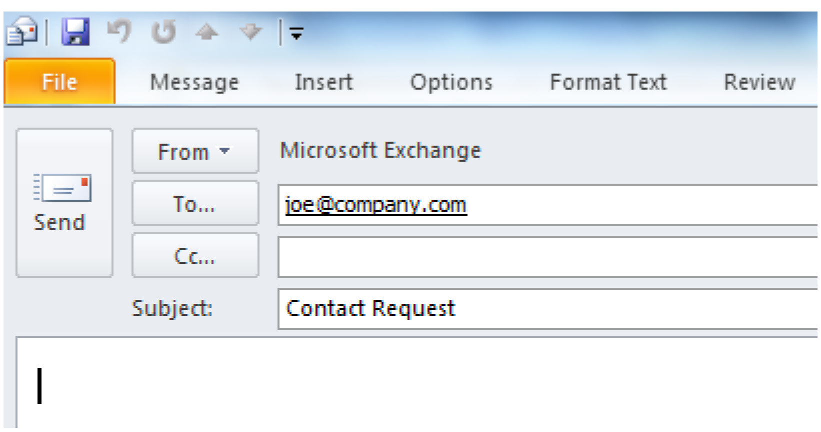
3. In the **Edit transformation** dialog within the **Code** window replace the existing code with the following, then select **Save**, close the **Edit transformation** window and in the **Web part properties (basic repeater)** window click **OK**

```
<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>
```

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



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