BI PUBLISHER TEMPLATE BUILDER QUICK TUTORIAL - ANNOTATED

- *The following is an annotated version of an Oracle "quick tutorial" document to introduce the user to working with BI Publisher Templates.*
- *The annotations were added to clarify how the information is presented and to remove material that does not apply to our installation.*
- ***The annotations are in dark red italics, or are bordered in dark red.***
- *Some original formatting has been changed to make the instructions more clear.*
- *Text in need of further emphasis has been highlighted in yellow.*
- *Some text or screenshots different from our installation have been deleted or replaced.*

*This tutorial uses files that were installed on your computer at the time that the Design Helper was installed. They can all be found under **C:\Program Files\Oracle\BI Publisher\BI Publisher Desktop***

Welcome to Oracle BI Publisher Template Builder for Word 10.1.3.3.0!

Introduction

The Template Builder is an extension to Microsoft Word that simplifies the development of RTF templates. While the Template Builder is not required to create RTF templates, it provides many functions that will increase your productivity.

The Template Builder is tightly integrated with Microsoft Word and allows you to perform the following functions:

- Insert data fields into your RTF templates
- Insert data driven tables and crosstabs
- Insert data driven charts
- Preview and Validate RTF templates with sample XML data
- Browse and update the content of form fields
- Extract boilerplate text into an XLIFF translation file and test translations

This help document assumes a basic working knowledge of Oracle BI Publisher. Please refer to the *Oracle BI Publisher User's Guide* for additional information. This Template Builder version is based on BI Publisher 10.1.3.3.0.

If the template builder is installed correctly, *you will see an additional item in Word called Add-Ins that appears as follows:*

Home	Page Layout	References	Mailings	Review	View	Developer	Insert	Add-Ins	EndNote X4	Acrobat

Quick Tutorial

This tutorial describes how you would typically create a simple layout template. You will create a letter that shows the outstanding balance for a customer. This letter contains a table of all unpaid or partially paid invoices.

Load Word File

- Often a template starts from an example document in the form of a regular Microsoft Word document.
- For this tutorial go to the **samples\RTF templates\Balance Letter** folder under your BI Publisher installation directory (e.g. **C:\Program Files\Oracle\BI Publisher Desktop**) and load the file **Balance Letter Start.rtf**.
  - *Navigation: C:\Program Files\Oracle\BI Publisher\BI Publisher Desktop\samples\RTF Templates\Balance Letter\Balance Letter Start.rtf*
- This file represents a Word document that has not been marked up for use with Oracle BI Publisher.
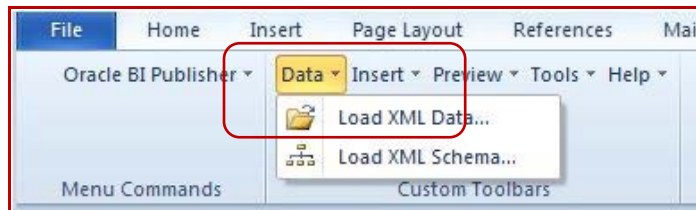- *The text in the file looks like this:*

Load Sample XML Data

- *Click on the Add-Ins menu. The BI Publisher menu opens*
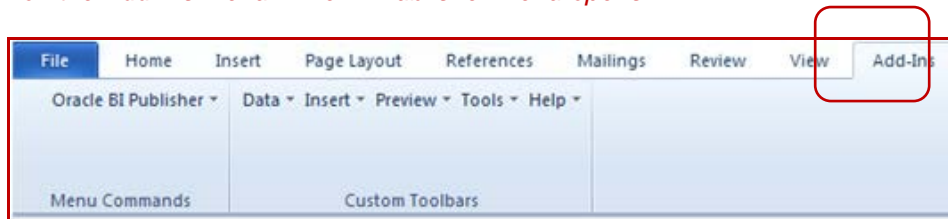
- *To load the sample XML data file, click on the Data menu and select Load XML Data*

- From the **Oracle BI Publisher > Data** menu select **Load XML Data** to load a sample XML document that contains the data fields you may want to insert into your RTF layout template.
- For this tutorial go to the **samples\RTF templates\Balance Letter** folder under your BI Publisher installation directory and load the file **Balance.xml**.
  - o *Navigation: C:\Program Files\Oracle\BI Publisher\BI Publisher Desktop\samples\RTF Templates\Balance Letter\Balance.xml*
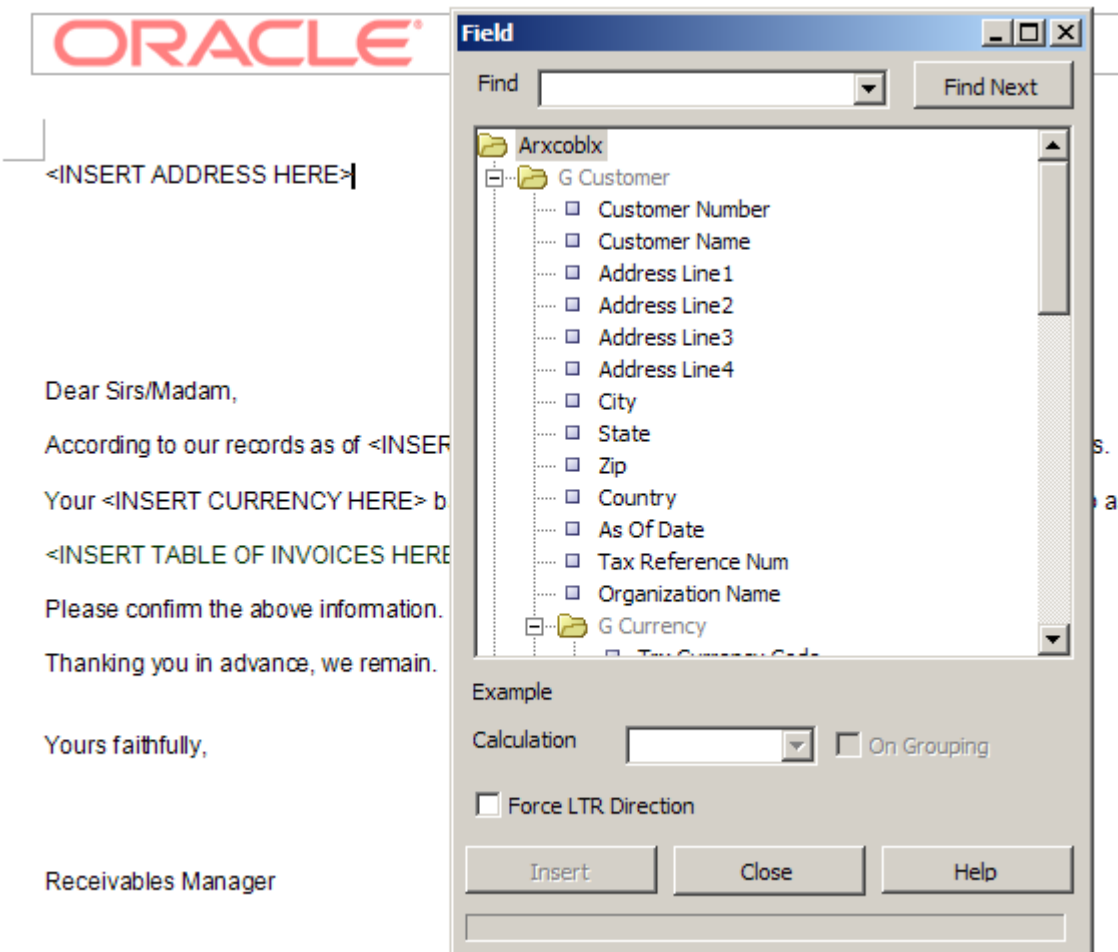- *When this message appears, click OK*
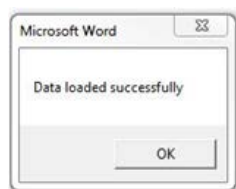
Insert Form Fields

- You may want to select single data fields, such as the customer name and address at the header of the letter.
- Position the cursor in the Word document where you want to insert the Address.
- *Open the Add-Ins > Insert menu.*

- From the **Oracle BI Publisher > Insert** menu select **Field…** to open the dialog window shown below.

- Select the field **Customer Name** and click **Insert** to insert a form field for the customer name into the document.
  - You may also insert the remaining address fields (such as **Address Line1** to 4, **City**, **State** and **Zip**).

- Starting with this version, you can also just drag the Customer Name field from the dialog and drop it into the Word document. *NEW!*

- You can also select the fields, **As of Date**, **Trx Currency Code** and the **C Inv Open Balance** and insert them into the appropriate spaces in the document.

- Note: As a beginner, you should use **Insert Fields** only for data fields that are unique (not repeating) in your document. Refer to the "Insert Table" section for additional information on how to insert repetitive fields

- *Once you have inserted the fields listed above, that portion of the document will resemble the following, depending upon how many address lines you include:*

```
CUSTOMER_NAME
ADDRESS_LINE1
ADDRESS_LINE2
ADDRESS_LINE3
ADDRESS_LINE4
CITY, STATE ZIP


Dear Sirs/Madam,

According to our records, as of AS_OF_DATE, we show the following open balances.

Your TRX_CURRENCY_CODE balance is C_INV_OPEN_BALANCE, made up as follows:
```

Preview Template

- After adding fields to the document, you may want to test your template.
    - Oracle BI Publisher Template Builder allows you to preview your template with your sample XML data.
    - You can preview the output in Adobe Acrobat Reader (PDF), Microsoft Word file (RTF), Microsoft EXCEL (EXCEL) or a browser (HTML).

- From the **Oracle BI Publisher > Preview** menu select **HTML** to preview your template in a browser. From the **Oracle BI Publisher > Preview** menu select **PDF** to preview your document in Acrobat Reader. You must have Adobe Acrobat Reader version 5.0 or higher installed to preview documents in PDF format. You can download Acrobat Reader for free at http://www.adobe.com/products/acrobat/readstep2.html.

- *Click on Add-Ins and then the Preview menu*
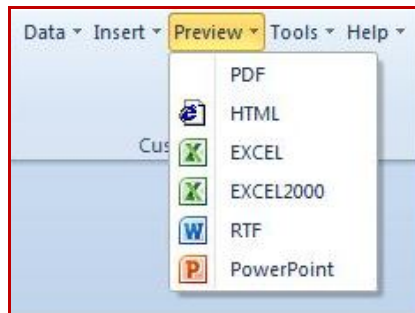
- The preview should show Vision Corporation instead of the field Customer Name.

- *The fields should look like this:*

Vision Operations
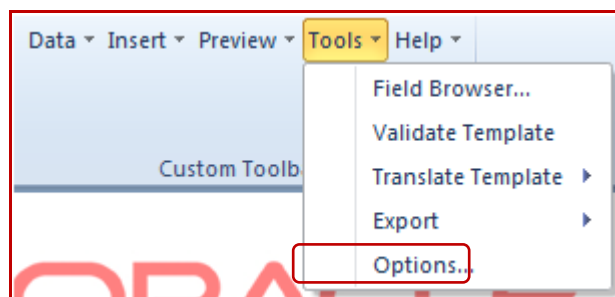5645 Main Street
Jacksonville, FL 32209

Dear Sirs/Madam,

According to our records, as of 01-JAN-08, we show the following open balances.

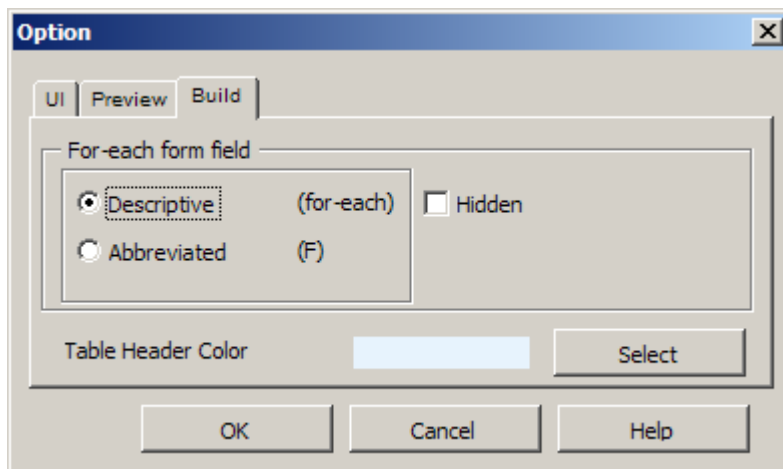Your CAD balance is 31500, made up as follows:

- *Once you have viewed the Preview, you can delete it. The RTF file will not be affected.*

Insert Table

- You can build a table or a repeating section by inserting the elements and then adding additional form fields with processing instructions (for-each).
  - o Instead, the Template Builder offers an additional function that generates a table for you.
- The Template Builder can generate for-each instructions either as descriptive or abbreviated.
- Abbreviated instructions are less invasive to the appearance of the document, while descriptive processing instructions make the template easier to understand.
- *Open Add-ins > Tools > Options*

Data ▾ Insert ▾ Preview ▾ Tools ▾ Help ▾

Custom Toolb...

Field Browser...
Validate Template
Translate Template ▶
Export ▶
Options...

- For this tutorial, select **Options…** from the **Oracle BI Publisher** menu, switch to the **Build** tab and select **Descriptive** as shown below.

Option

UI | Preview | Build

For-each form field

⦿ Descriptive   (for-each)   ☐ Hidden
○ Abbreviated   (F)

Table Header Color   Select

OK   Cancel   Help

- The document should include a table of all invoices that are not or only partially paid.
- On the **Oracle BI Publisher > Insert** menu select **Table/Form…** to open the **Table/Form Dialog**. The following dialog will be displayed:
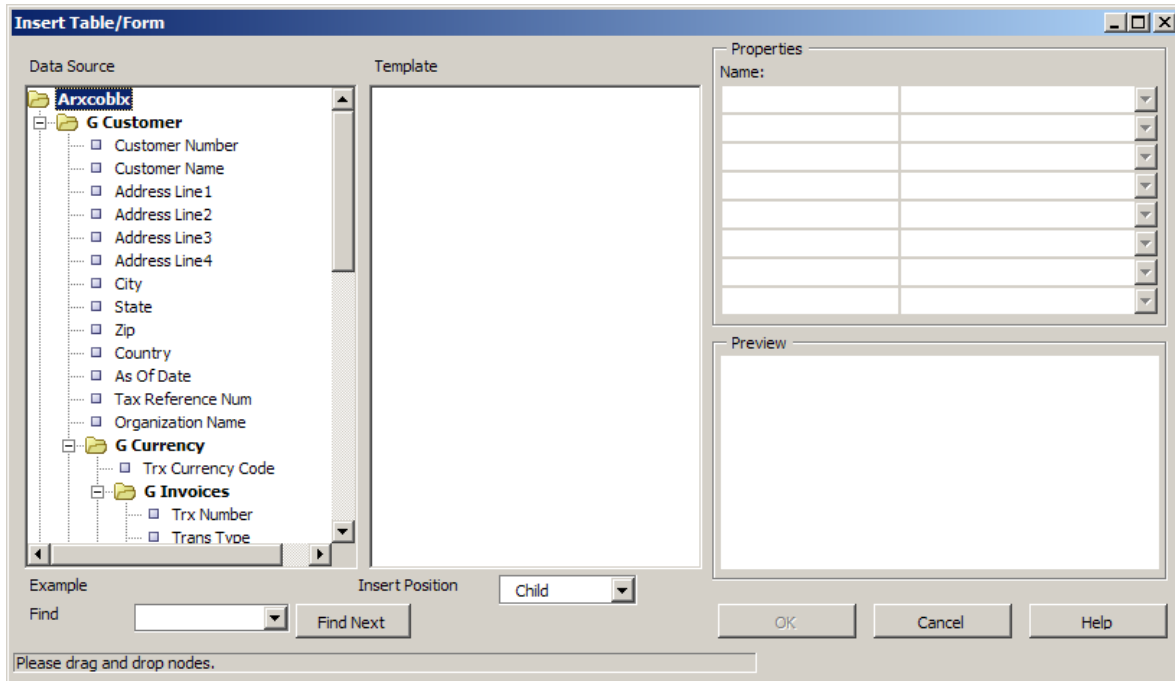

- Scroll in the left **Data Source** view pane until you see the **G Invoices** element.
- Push the left mouse button and drag the **G Invoices** element over to the center **Template** tree view.
- When you drop an element with children (other elements below the element), the following pop-up dialog appears:
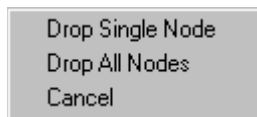

> *Note: A Node is a term used in tree views for an element in the tree view. For example, Customer Name, G Currency and G Invoices are all nodes. Transaction Date is also called a child node of G Invoices, and G Invoices is referred to as a parent node of Transaction Date.*

- To add multiple nodes, click **Drop All Nodes** with the left mouse button. When you select the "G Invoices" node, the dialog box should now look like this:
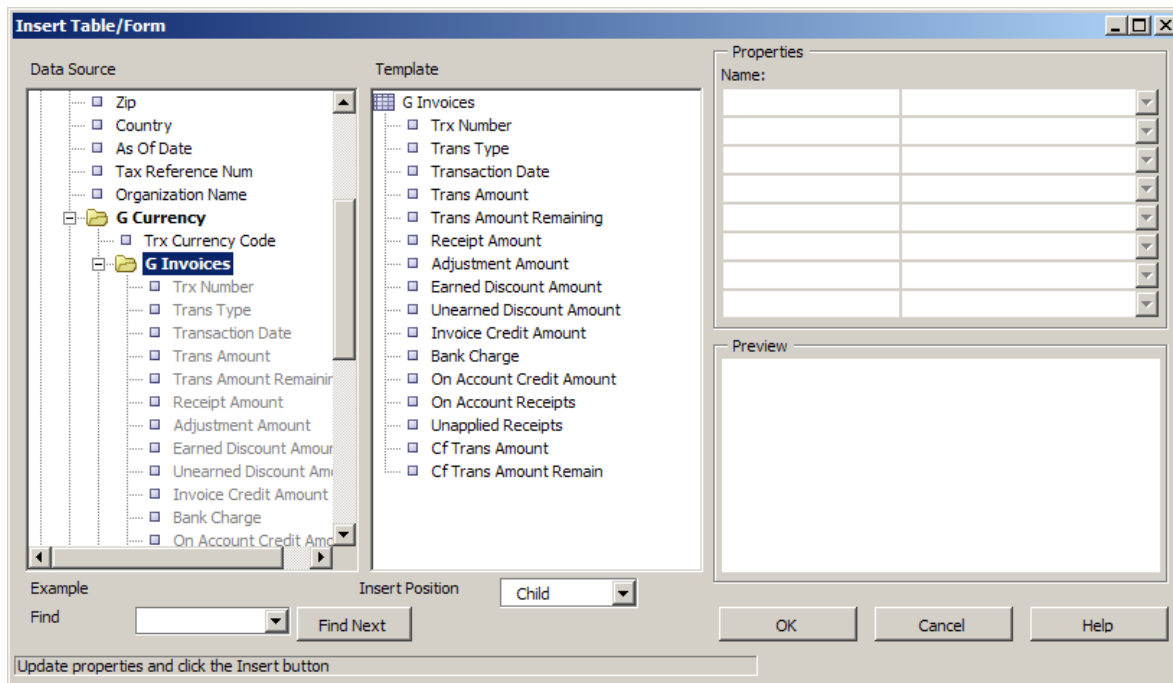
- We only want to show the fields **Trx Number**, **Transaction Date**, **Trans Amount**, and **Trans Amount Remaining**.
  - ○ Select the field **Trans Type** in the center view and press the **Delete** button on your keyboard. *Note: You can also left click on the field and drag and drop it back into the left column.*
  - ○ Repeat the procedure for the other fields that you do not want to be included in the table (as shown in the screenshot below).

- You should now click again on the **G Invoices** element in the center view.

- The **Properties** region on the right shows how the data fields will be formatted. You should see the following information:
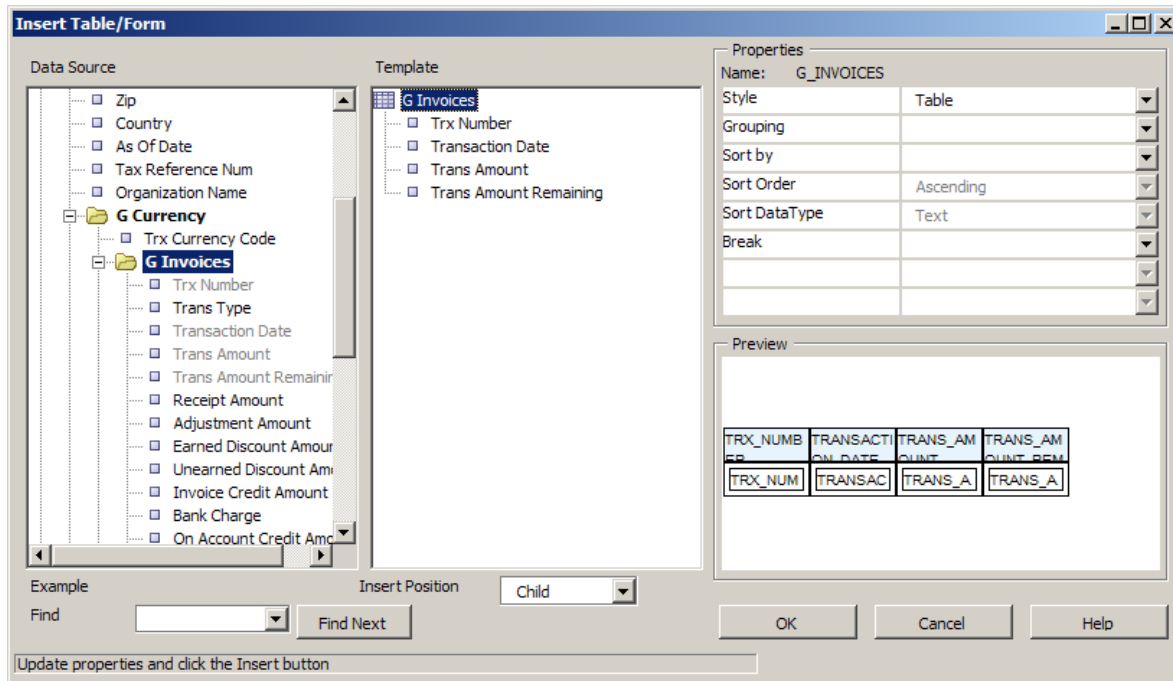
For each group you can set the following properties that describe how a group (such as **G Invoices)** should be rendered by the template builder:

Style: Select Table to create a table around the data fields.

Grouping: Grouping is an advanced operation that allows you to re-group the data – for example by transaction date instead of currency. You can select the element that the data should be grouped by for this property. Please refer to the *Oracle BI Publisher User's Guide* for additional information on grouping.

Show Grouping Value: This property will only be shown if you have selected a node created by the Grouping functionality. You can choose for a group if the Data Field node used as a grouping criterion is shown in the table or form.

Sort By: You can select an element by which the data groups are sorted.

Sort Order: If you have selected an element for **Sort By** you can select, if the data should be sorted either ascending or descending.

Sort Data Type: If you have selected an element for **Sort By** the data is by default sorted as **Text**. That means that 12 will be shown after 111. If you need to sort numbers you should select **Number** as the sort data type

Break: This property allows you to insert a page break or a section break between every data group. If nothing is select, then the data groups will be shown continuously with no break. If you select **New Page per Element**, then a page break will be inserted between each element. If you select **New Section per Element**, a section break will be created for each data group. A section break allows changing the header/footer and resets the page number. You will typically use this option, if you want to print multiple documents (for example invoices or purchase orders) to a single PDF file.

o The order in which the data elements are shown reflects the order of the columns in the table. If you want to reorder the columns you need to change the **Insert Position** box from **Child** to **Same Level**. Then drag the elements into the correct order.

Click the **OK** button to create the table. The inserted table should look like this:

Trx Number	Transaction Date	Trans Amount	Trans Amount Remaining
for-each G_INVOICES TRX_NUMBER	TRANSACTION_DATE	TRANS_AMOUNT	TRANS_AMOUNT_REMAINING end G_INVOICES

The Template Builder creates two kinds of form fields:

- Form fields representing data elements
- Form fields with processing instructions for repeating table rows or document section

o Form fields representing data elements are replaced with the data when the template is processed.
o The for-each G_INVOICES and end G_INVOICES form fields indicate a repeating section.
  o The section of the document encapsulated by these two form fields is repeated, if the associated data element G_INVOICE is found repetitively in the data.
  o Please refer to the Oracle BI Publisher User's Guide for additional information on form fields.

o You can now format these elements in Microsoft Word and add additional text.

o You can also move fields around as long as you keep them in the surrounding for-each G_INVOICES and end G_INVOICES processing instruction.
  o If you remove one of these processing instructions your template may not work anymore with BI Publisher.

o You now can preview the template again to review your current template (see above).
  o You probably would like to change the alignment of the table columns or change the data type and format for the amounts.
  o For example, select the TRANS_AMOUNT field, right-click and select **BI Publisher -> Properties** to see the **Properties** dialog.
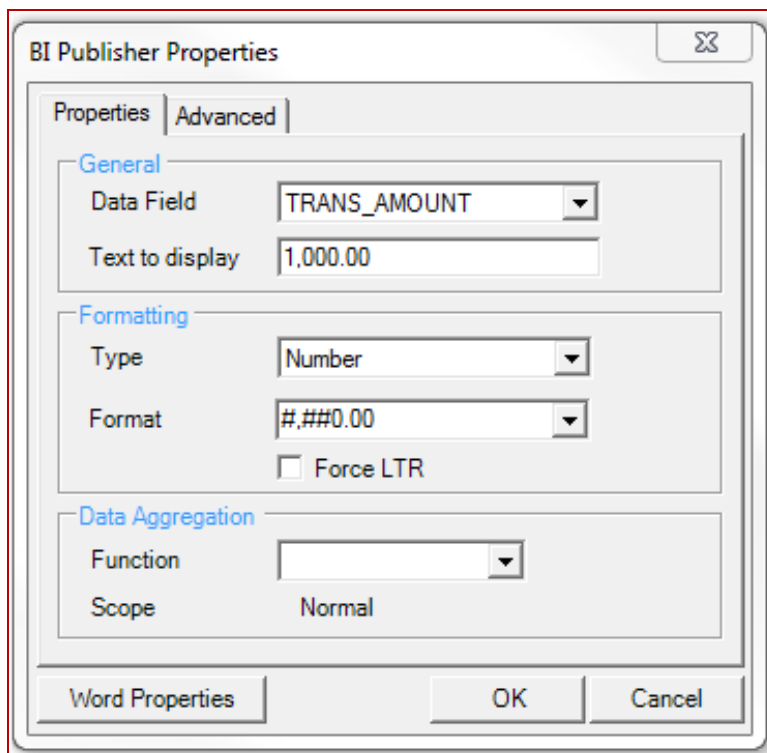
- *Under Formatting:*
    - You may select the Number in the **Type** field,
    - #,##0.00 for **Number format** and
- *Under General:*
    - enter 1000 as the ***Text to Display*** to achieve a more desirable format for currencies in US Dollar. *(When you enter 1000 and click OK, it will appear as shown above: 1,000.00.)*
- *Important: Be sure that the **Text to display** box is not empty in order that you can see the field in the Template table.*
- We recommend not to use currency signs such as $ in the format string, since it may lead to difficulties in supporting multiple languages with a single template.

  - *If you changed the **Text to display** field, **Trans Amount** now looks like this in the Template table:*

Trans Amount
1,000.00

  - *If you run the Preview now, you'll see that the **Trans Amount** field has been formatted as above.*
  - *You can make the same changes for the **Trans Amount Remaining** field and to the **C_INV_OPEN_BALANCE** field in the body of the letter.*

Trx Number	Transaction Date	Trans Amount	Trans Amount Remaining
502444	06-DEC-07	19,125.00	19125
502445	06-DEC-07	12,375.00	12375
10019903	18-NOV-07	132,733.84	132733.84
10020178	20-NOV-07	71,577.42	71577.42

Formatting options defined in this dialog box are understood by Oracle BI Publisher and used to format your fields. Try to modify the template to get an idea which Word functions are supported by BI Publisher 10.1.3.2.

Creating Charts

- The data used for creating the open balance letter is not well suited to create a chart.
- Close the previous Word document and open a new Word document.
- Then load the **RetailSales.xml** file in the **samples\RTF templates\Sales Report** folder by selecting **Load XML Data** from the **Data** menu.
  - *Navigation: C:\Program Files\Oracle\BI Publisher\BI Publisher Desktop\samples\RTF Templates\Sales Report\Retail Sales.xml*

- This data contains retail sales data for different industries. We will create a chart that shows the sales per industry.
- BI Publisher does not support native Microsoft Word Charts. You need to create charts using the Template Builder.

On the **Oracle BI Publisher > Insert** menu select **Chart…** to open the **Chart Dialog**.
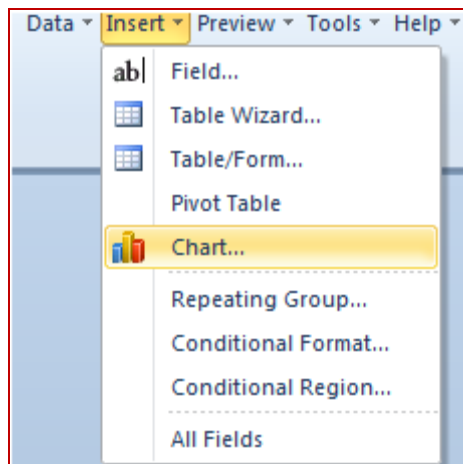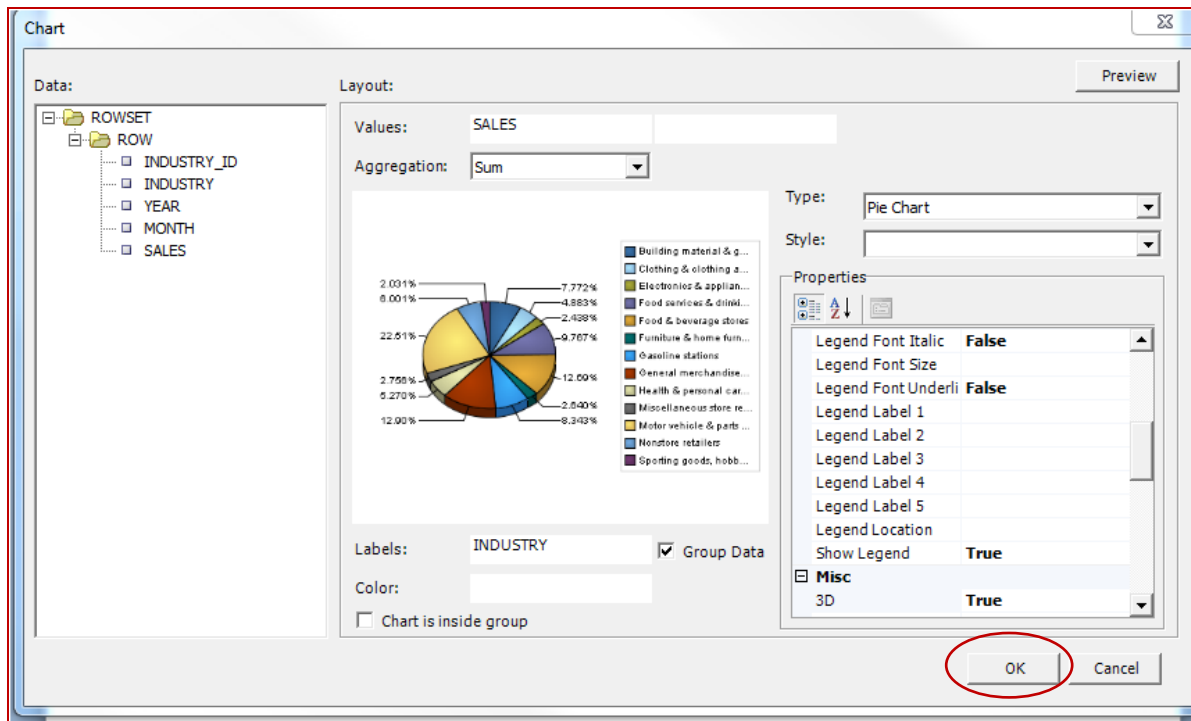
The following dialog will be displayed:
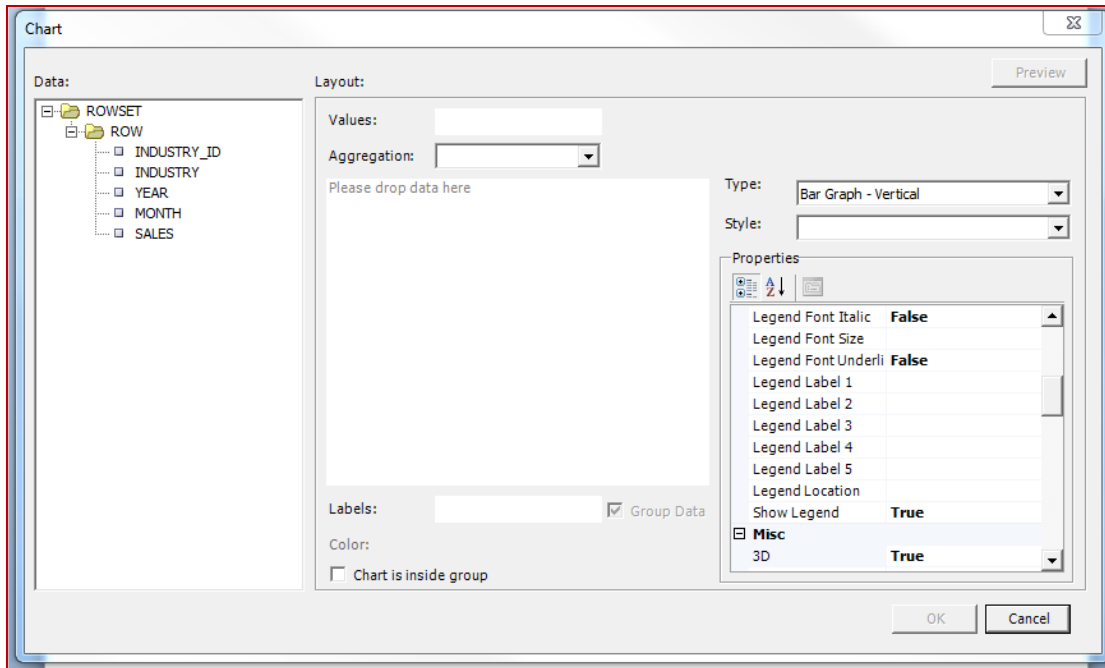
- On the left tree view pane you may drag **Industry** to the **Labels** field, because we want to see the data accumulated by industry.
  - o Then we drag the **Sales** to the **Values** field.
 - o We select a **Pie Chart** as the **Type**
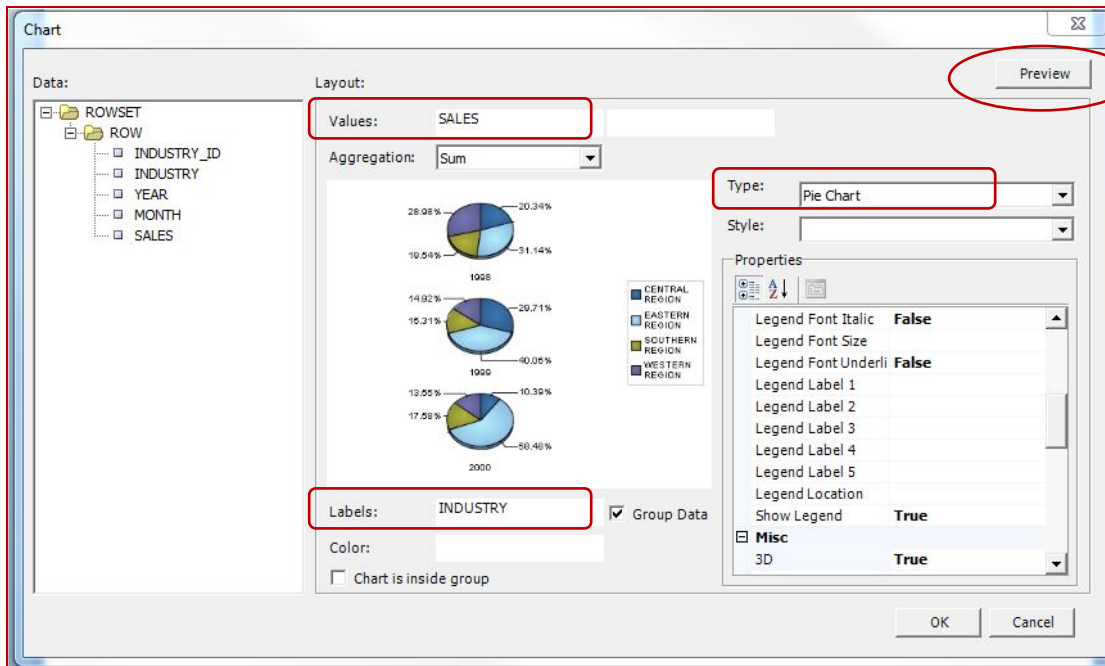
  - o and click the **Preview** button to see how the chart will look like with our sample data.

- Then we click **OK** to insert the chart into the RTF template.
- The Template Builder will insert the placeholder image shown below for the chart. To change the size of the chart, you can just resize the placeholder image.
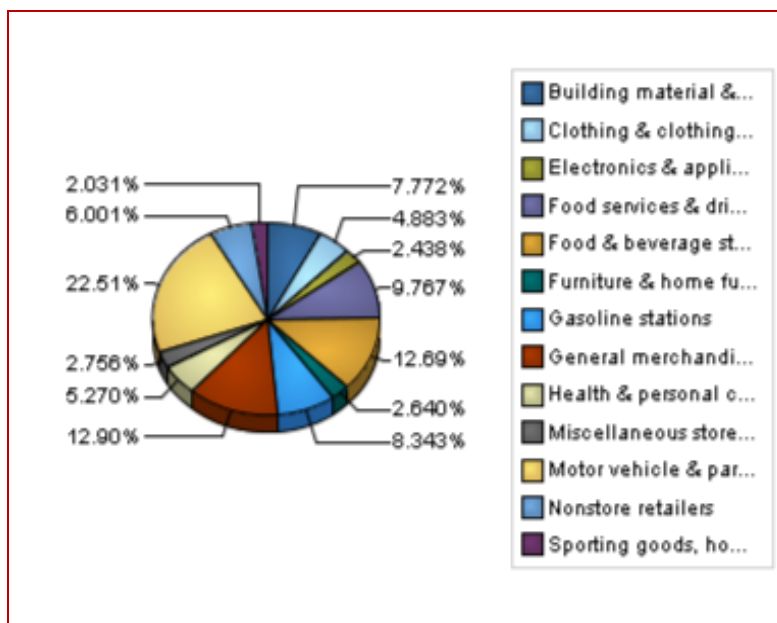
From the **Preview** menu select **HTML** to preview your template in a browser. From the **Preview** menu select **PDF** to preview the output in Acrobat Reader. The preview will show the correct chart for the preview data:
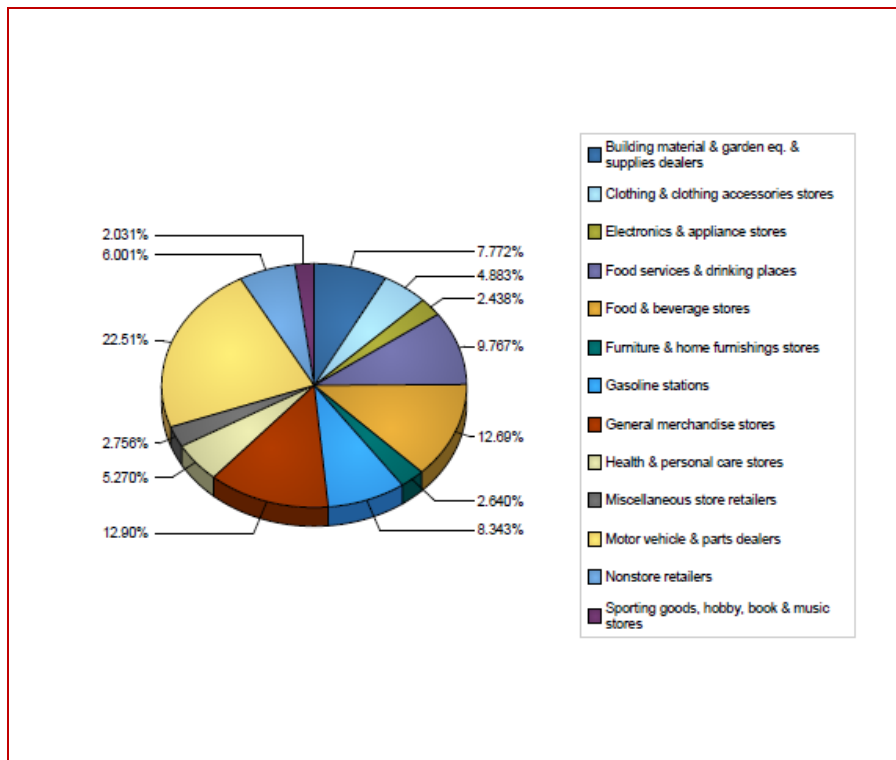
Please refer to the *Oracle BI Publisher User's Guide* for additional information regarding charts.

Next Steps

- This concludes the quick tutorial.
- Try to create your own template now.
- Refer to the help file for additional information.
- You should also consult section 2 "RTF Templates" of the *Oracle BI Publisher User's Guide*