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OfficeWriter Reporting Services Integration

For SQL Server 2005 and above with Reporting Services 2005 and above

- **Introduction**
  describes the basic features and requirements of OfficeWriter Reporting Services Integration.
- **Quick Start**
  walks you through your first Word and Excel reports.
- **How to Create Word Reports**
  provides in-depth explanations of each aspect of creating Word Reports.
- **How to Create Excel Reports**
  provides in-depth explanations of each aspect of creating Excel Reports.
- **Reference**
  contains a glossary, OfficeWriter dialog descriptions, and information on Microsoft's RDL format.
- **Installation**
  includes client and server installation and removal instructions.
- **OfficeWriter Links**
  Links to the other parts of OfficeWriter
- **External Links**
  Links to SoftArtisans resources outside of the documentation that can help you get up and running with OfficeWriter

Introduction

- What is OfficeWriter Reporting Services Integration?
- Features and Benefits
- New Features
- Requirements
- OfficeWriter Editions
- Frequently Asked Questions
- Change Log

What is OfficeWriter Reporting Services Integration?

OfficeWriter Reporting Services Integration enhances Microsoft SQL Server Reporting Services by allowing users to design and deliver their reports in native Word and Excel. Reporting Service Integration is a two part solution:

- **The OfficeWriter Designer**
  The OfficeWriter Designer is a toolbar add-in for Microsoft Excel and Word. It allows the user to design a report template in Excel or Word instead of Visual Studio. The template is then integrated into the Reporting Services xml-based Report Definition File (RDL) format for publishing on the reporting server.
- **The OfficeWriter Renderer**
  The renderer runs on the Reporting Services server. The renderer interprets the template information that was added to the RDL file with the OfficeWriter Designer and populates the template with data supplied by Reporting Services.

Using Reporting Services without OfficeWriter, the report designer uses a tool such as Visual Studio to design queries, specify data sources, and generate an RDL file that will be published on the Reporting Services server. Since Visual Studio is a development tool, designing a report likely requires a developer. Using OfficeWriter Reporting Service Integration, two workflow options exist:

Option 1: Adding a Template to an Existing Report

The OfficeWriter Designer can open existing RDL files. When a user opens an RDL file in Word or Excel, only its database queries are available for use. The query fields appear in a drop-down list on the OfficeWriter toolbar. The user can insert these fields as data placeholders in the report template and cannot create additional queries. When the user saves the file, the OfficeWriter template information is added to the RDL file. The advantages of adding a template to an existing RDL file are:

- **Two Display Formats** Render the original report design or view the report as a Word or Excel file.
- **Separation of Report Design Roles** A developer may be responsible for creating shared data sources on the server and defining SQL queries in RDL files. A business user can then open an RDL, insert field placeholders from the predefined queries, and design a report.

Option 2: Create a New Template Report

When you create a new template report without an existing RDL file, the OfficeWriter Designer allows you to set a data source and create database queries in Word and Excel. With this approach, the business user can be entirely responsible for both creating queries and designing the report. This option is not enabled by default by security reasons, but can be enabled by changing a single registry key value.

Features and Benefits

Benefits of ExcelWriter Renderer over Native Excel Renderer

- OfficeWriter allows Microsoft Excel users to maintain and create spreadsheets that contain:
    - Pivot tables
    - Interactive charts
    - VBA and macros
    - Advanced formulas
- OfficeWriter allows you to separate roles of query developer and report designer. A developer can create shared data sources and build queries, and a business user can design the report in Word or Excel.
- OfficeWriter delivers reports directly from Excel or Word. Use the OfficeWriter toolbar to browse the Reporting Services server and display the OfficeWriter rendered reports directly in Office.
- The familiar Word and Excel design environments eliminate the learning time required by more complex development environments like Visual Studio .NET.
- Avoid the cost of additional Visual Studio licenses by using the freely-distributed OfficeWriter designer in Word or Excel.
- OfficeWriter generates real RDL files, allowing you to take full advantage of Reporting Services' report management, security, and delivery options.

Benefits of WordWriter Renderer over Native Word Renderer

- The Microsoft Word format has only limited support in Reporting Services 2008 and no support in Reporting Services 2005 without the use of OfficeWriter.
- OfficeWriter delivers reports directly from Excel or Word. Use the OfficeWriter toolbar to browse the Reporting Services server and display the OfficeWriter rendered reports directly in Office.
- The familiar Word and Excel design environments eliminate the learning time required by more complex development environments like Visual Studio .NET.
- Avoid the cost of additional Visual Studio licenses by using the freely-distributed OfficeWriter designer in Word or Excel.
- OfficeWriter generates real RDL files, allowing you to take full advantage of Reporting Services' report management, security, and delivery options.

New Features

New in Version 4.6

- Reporting Services 2008 R2 formulas are now supported in OfficeWriter Reporting Services Integration for Word
- Reporting Services Designer nor supports Reporting Services 2008 formulas

New in Version 4.5.1

- OfficeWriter Designer now supports reports built using Report Builder 3.0

New in Version 4.0

- **Full SQL Server Reporting Services 2008 support**
  The OfficeWriter Designer now supports the embedding of Excel and Word within reports for SQL Server Reporting Services 2008.
- **Add real Excel and Word to reports designed in Visual Studio 2008**
  The OfficeWriter Designer also now supports reports designed in Visual Studio 2008 and Report Builder 2.0, allowing the addition of Excel and Word versions to an existing report.
- **Office Open XML Format support**
  In SoftArtisans OfficeWriter version 4, the Office Open XML format (.docx and .xlsx; .docm and .xlsm) is now supported.
- **Significant performance improvements**
  Improvements with memory efficiency in underlying ExcelWriter and WordWriter DLLs can lead to significant performance gains
- **Unicode Field Names in Data Markers**
  Data markers can now include any Unicode character except brackets [] and braces {}
- **Unicode Data Source Names with Excel Reports**
  Excel reports now accept any Unicode character in data source names

Requirements

Server Requirements

- **Windows** 2000, XP, 2003 Server, 2003 Server R2, Vista, 7, 2008 Server, or 2008 Server R2. 64-bit Operating Systems are supported.
- **Microsoft Reporting Services** 2005 or 2008
- **Microsoft .NET Framework Redistributable version 2.0 or later** for Reporting Services 2005 integration. **Microsoft .NET Framework Redistributable version 3.5 or later** for Reporting Services 2008 integration.
- To run the OfficeWriter Reporting Services samples, **SQL Server** 2005 or 2008 and the **AdventureWorks** database must be installed.
- To run Reporting Services 2005, IIS 5.0 or above is required

> Microsoft Office is not required on the server. This prevents the performance penalties and instability associated with instantiating multiple copies of the Excel or Word object on a Web server. (See why Microsoft does not recommend use of Office on the server.)

Client Requirements

- **Microsoft Word** 2003 or 2007 (see Office 2007 Support for WordWriter).
- **Microsoft Excel** 2003 or 2007 (see Office 2007 Support for ExcelWriter).
- **MS Query**
  MS Query is part of Microsoft Office, but may not be installed by default. To install MS Query:
  1. Have your Office Installation CD ready.
  2. Open Microsoft Excel.
  3. Open the **Data** menu.
  4. Select **Import External Data > New Database Query**. You will be prompted to install MS Query.

> You must be logged in on an account with **local Administrator privileges** to install the OfficeWriter Designer.

OfficeWriter Editions

OfficeWriter Reporting Services Integration is available in both OfficeWriter Enterprise Edition and OfficeWriter Standard Edition. The chart below illustrates the differences between these editions in regards to Reporting Services integration. See the OfficeWriter Site for a complete list of OfficeWriter editions and functionality comparison.

	OfficeWriterEE	OfficeWriterSE

OfficeWriter Designer	yes	yes
OfficeWriter Renderer	yes	yes
Support for Reporting Services parameters, formulas and global variables as report data sources	yes	no

OfficeWriter also comes in Developer Edition. This edition has built-in limitations, but resemble OfficeWriter SE in regards to Reporting Services Integration features. Please see the OfficeWriter Editions Comparison page for more information.

Frequently Asked Questions

1. **What is the relationship between Microsoft's Reporting Services and SoftArtisans OfficeWriter?**
2. **How and where do I install OfficeWriter for Reporting Services?**
3. **How do I install the OfficeWriter Designer?**
4. **Is Microsoft Office necessary with OfficeWriter for Reporting Services?**
5. **Why do the spreadsheets that I generate with Microsoft's standard Excel rendering extension, which is included with Reporting Services, appear to be a "watered down" version of Excel?**
6. **How do I publish full-featured Excel and Word reports?**
7. **How does the OfficeWriter Designer differ from the Report Builder design tool which ships with SQL Server Reporting Services 2005 and 2008?**
8. **How do I connect to my database to design reports?**
9. **Can I still use Visual Studio to design my reports, then render them with OfficeWriter to gain full Excel/Word functionality?**
10. **I have designed a report in Visual Studio and it looks fine in PDF and HTML. What happens when my users try to view it with the OfficeWriter Rendering Extensions?**
11. **How can I tell if a report has been generated from SoftArtisans OfficeWriter?**
12. **Can I create a single RDL file that includes both an Excel and Word template?**

Using OfficeWriter With SQL Server Reporting Services

1. **What is the relationship between Microsoft's Reporting Services and SoftArtisans OfficeWriter?**
   OfficeWriter is a separate product that is seamlessly integrated with Reporting Services, allowing users an option to design reports in Excel and Word and then deliver the reports without ever leaving Microsoft Office. OfficeWriter gives users full Excel and Word support that is currently not available with Reporting Services alone. With OfficeWriter, you can still take advantage of all of Reporting Services' key features like report security, management and delivery.

2. **How and where do I install OfficeWriter for Reporting Services?**
   The OfficeWriter for Reporting Services installer is run on the server that also hosts Microsoft's Reporting Services. This installs the custom rendering extensions required to output pure Excel and Word reports created with the OfficeWriter Designer.

3. **How do I install the OfficeWriter Designer?**
   The OfficeWriter Designer is part of the overall OfficeWriter kit. The installer for the Designer gets unpacked when you install OfficeWriter on the Report Server. Just run the installer on every client machine where report designing takes place. The designer toolbar can be freely distributed.

4. **Is Microsoft Office necessary with OfficeWriter for Reporting Services?**
   With any edition of OfficeWriter, Microsoft Office is NOT required on the server. However, to design reports created by OfficeWriter, Excel AND Word are required on the client machines. To view reports client-side, Excel, Word or equivalent software like Open Office, is required.

5. **Why do the spreadsheets that I generate with Microsoft's standard Excel rendering extension, which is included with Reporting Services (SP1), appear to be a "watered down" version of Excel?**
   "The "out of the box" Microsoft Excel renderer can only produce output that is based on the lowest common denominator between a static file (i.e. HTML or PDF) and an Excel file. This is due to the fact that the Excel features are interpreted from the XML structure of the report which has no facility to store advanced Excel features such as charts, pivot tables, VBA, etc.

6. **How do I publish full-featured Excel and Word reports?**
   To enjoy dynamic spreadsheets that contain all Excel and Word features when using Reporting Services, end users must employ the

OfficeWriter Designer to generate an Excel or a Word "template-behind" and associate it with an RDL published to Reporting Services. The RDL must be exported using the "Excel designed by OfficeWriter" or "Word designed by OfficeWriter" custom extensions provided by OfficeWriter Reporting Services version.

7. **How does the OfficeWriter Designer differ from the Report Builder design tool which ships with SQL Server Reporting Services 2005 and 2008?**
   The obvious difference is that Report Builder will be a brand new tool with a steep learning curve, whereas the OfficeWriter Designer leverages the user's existing knowledge of Excel and Word to design reports. Microsoft's Report Builder requires .NET and supports only RDL. Because RDL must render to the lowest common denominator between all Reporting Services outputs, Report Builder will produce reports with extremely limited functionality. In addition, developers must create a meta model before utilizing Report Builder. A developer/designer only needs to know the structure of his/her Excel/Word report to use the OfficeWriter Designer.

8. **How do I connect to my database to design reports?**
   You can create a parallel connection to a data source and shape queries by using the OfficeWriter Designer's client-side query tool. With OfficeWriter V3, you also have the option to create a "shared data source" that can contain parameters. This is done by starting the Report Definition in VS.NET and then downloading the RDL into the OfficeWriter Designer. The OfficeWriter Designer will be able to open the RDL file and allow users to build reports using the pre-defined queries, which are then locked for editing.

9. **Can I still use Visual Studio to design my reports and render them with OfficeWriter to gain full Excel/Word functionality?**
   With the advent of OfficeWriter V3, you have the option to retrieve into the client-side OfficeWriter Designer an existing RDL file that was designed using VS.NET. All existing static (HTML) representation of the report will be preserved, along with "shared" data sources. When the RDL is uploaded and overwritten on the Report Server, you have the option to display the static rendition or a full-formatted Excel or Word version, based on which rendering extension is selected.

10. **I've designed a report in Visual Studio and it looks fine in PDF and HTML. What happens when my users try to view it with the OfficeWriter Rendering Extensions?**
    An error will occur at render-time. The OfficeWriter Rendering Extensions can only be called to render reports created with the OfficeWriter Designer. This is due to the fact that the "template-behind" required to publish the report must be embedded at design-time by means of the OfficeWriter Designer.

11. **How can I tell if a report has been generated from SoftArtisans OfficeWriter?**
    Check for the presence of a <Custom> tag in the <Report> section of the RDL file. When the "Excel designed by OfficeWriter" or "Word designed by OfficeWriter" custom extension is called on the Report Server, this <Custom> tag is located and the report is hydrated with data. If the custom tag contains a base64-encoded template, you can assume it's a SoftArtisans RDL.

12. **Can I create a single RDL file that includes both an Excel and Word template?**
    With OfficeWriter V4.0.0 and SQL Server Reporting Services 2005 or 2008, you can embed both an Excel and Word template into a single RDL file. Simply use the OfficeWriter Designer within Excel and Word to design and publish the different versions of the report to the same RDL file.

Change Log

Below are a list of added features and bug fixes that are incorporated for each minor and major build of OfficeWriter Reporting Services Integration.

Differences between 4.6 and 4.6.1

Issues Resolved

- Specific formula caused "Unreadable Content" error in XLSX file processed by ExcelTemplate in SSRS
- Opening an RDL in the OfficeWriter Designer threw a "Type Mismatch" error with certain regional settings

Differences between 4.5.1 and 4.6

Issues Resolved

- Reporting Services 2008 R2 formulas did not work in OfficeWriter Reporting Services integration for Word
- OfficeWriter Designer did not read Reporting Services 2008 formulas from the RDL files

Differences between 4.1 and 4.5.1

Features Added

- OfficeWriter Designer now supports reports built using Report Builder 3.0

Issues Resolved

- Reporting Services created in the designer broke reports when an Oracle data source was used.

- License Key Manager threw error when being run on a machine with no SoftArtisans license keys in the registry.

Differences between 4.0 and 4.1

Issues resolved

- OfficeWriter Designer threw an error when attempting to publish a 2008 RDL with a Report Global embedded using the Insert Formula button
- OfficeWriter Designer threw data source exception when a query was associated with a row in a table in a Word Document
- OfficeWriter Designer did not allow exporting Excel 2007 files with macros as RDLs
- OfficeWriter Designer's RDL parser thew an Unknown Exception for report model data sources with field names containing fewer than 5 characters

Quick Start

- Create a Word Report From an Existing RDL
- Create an Excel Report from an Existing RDL
- Create a Word Report with Microsoft Query
- Create an Excel Report with Microsoft Query

Create a Word Report From an Existing RDL

This tutorial will help you design your first report in Word using the OfficeWriter for Word Designer from a report file created in Visual Studio or Report Builder. To follow this demonstration you need the AdventureWorks sample database, which is an optional component in the Reporting Services installation.

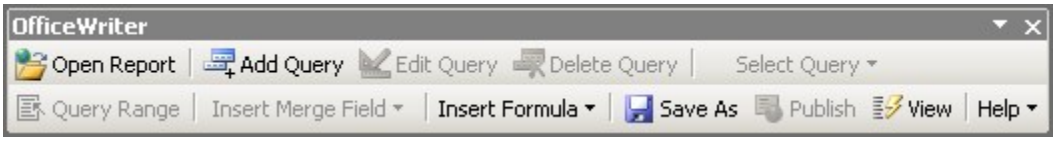
We will build a simple employee list and display some basic information about each employee.

Before you start, verify the following:

- Reporting Services is installed and working properly on a server you can access and you have rights to publish and view reports.
- The AdventureWorks database, which ships with Reporting Services, is installed on the Reporting Services server.
- OfficeWriter with the Reporting Services renderers is installed on the Reporting Services server.
- The OfficeWriter Designer Client is installed on your local PC.
  For more information on installing and configuring OfficeWriter Reporting Services Integration, see Installation or contact your System Administrator.

OfficeWriter Designer Toolbar

The control center for creating reports with OfficeWriter is the OfficeWriter Designer toolbar. When you first start Word, you will see the toolbar directly underneath the Word toolbar at the top of your document.



If you do not see the toolbar:

1. Open Word's **View** menu and select **>Toolbars > OfficeWriter**.

2. Check **OfficeWriter**. If OfficeWriter is not listed, run the OfficeWriter client installer.

If your toolbar does not contain query-building buttons (Add Query, Edit Query, etc.), your registry settings have been set to disable MS Query. These buttons are not required for this tutorial, so you do not need to make any changes to your installation.

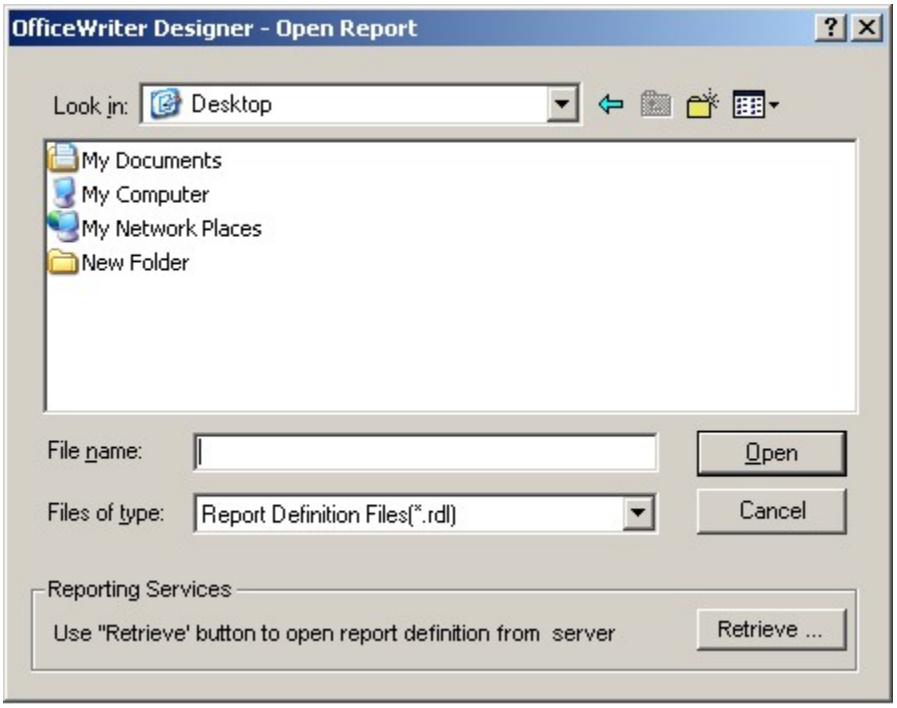
Step 1. Open an RDL File

An a RDL file is an xml-based report definition file. We will open an RDL file created in Visual Studio. The file contains a database connection and a query. The query fields will appear in a drop-down list on the OfficeWriter toolbar. You will be able to insert these fields as merge fields (data placeholders) in the report template. You will not be able to create additional queries.

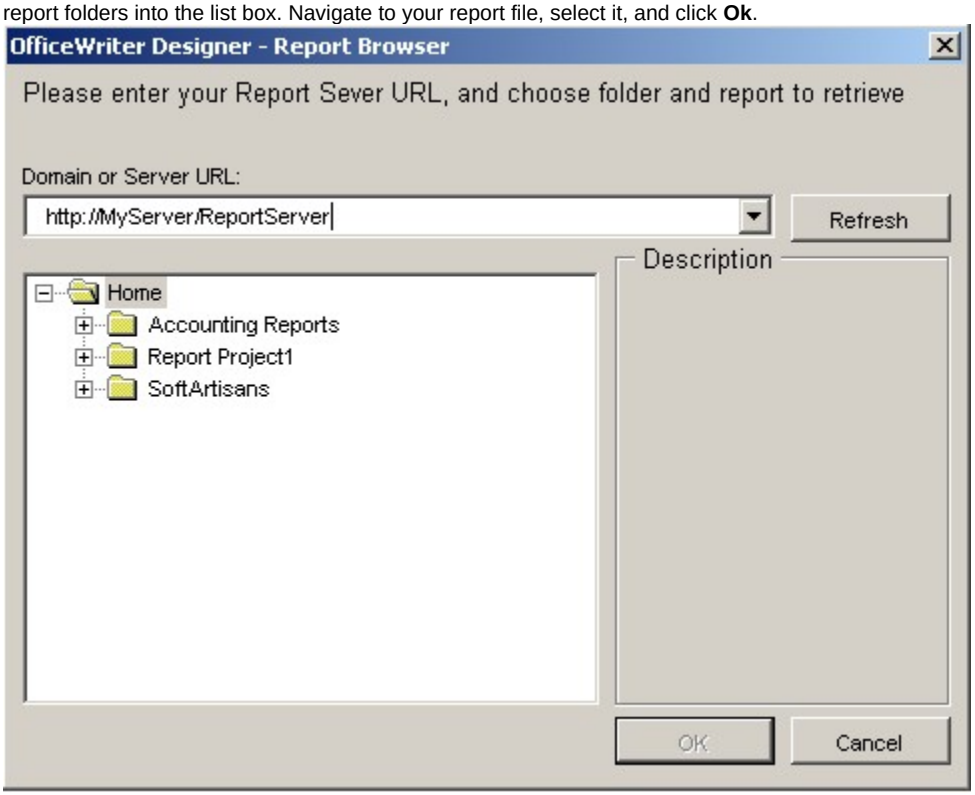
1. Open Microsoft Word and create a new file.

2. Click the **Open Report** button on the OfficeWriter toolbar.

3. If your report definition file was saved on a local or network drive, navigate to the folder containing the file, select it, click **Open**, and continue to step 2. If your report definition file was deployed to Reporting Services, click the **Retrieve** on the bottom right corner of the dialog box, and continue to step 3.

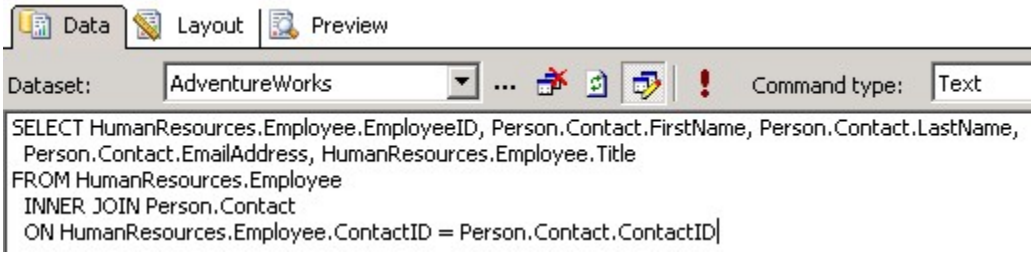


4. In the Report Browser dialog box, type in your report server's URL or Domain name and click **Refresh**. This will load all the available report folders into the list box. Navigate to your report file, select it, and click **Ok**.



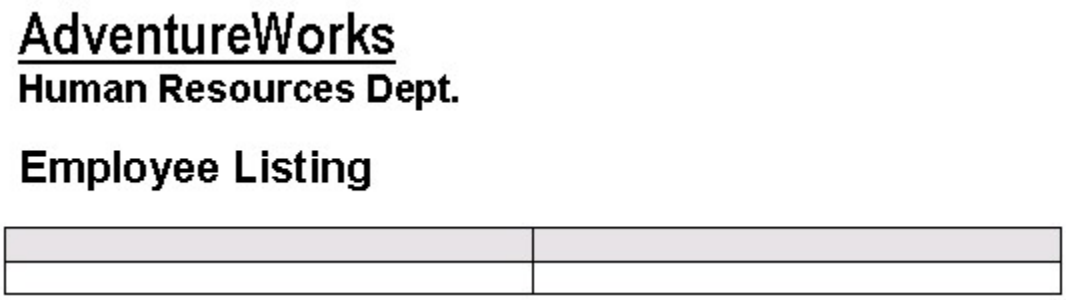
Step 2. Add Merge Fields to Your Report

For this demonstration we will use a report file created in Visual Studio containing the following query:

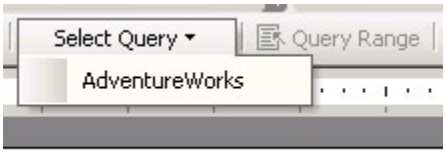


After opening your report in Word with the OfficeWriter toolbar, you should find your query listed under the **Select Query** button.

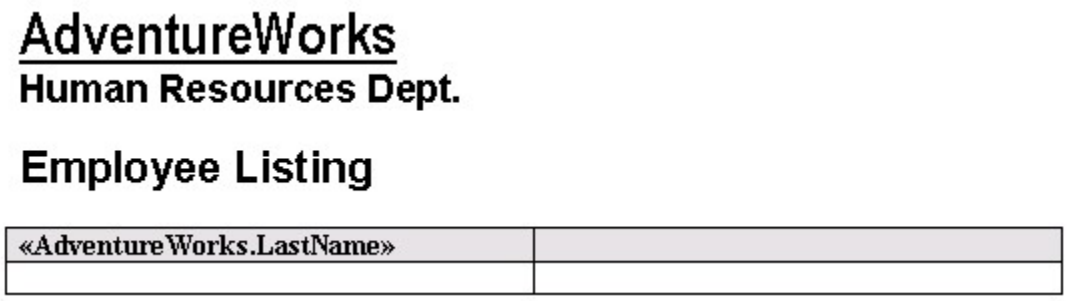
1. Place a two column, two row table in your report template.



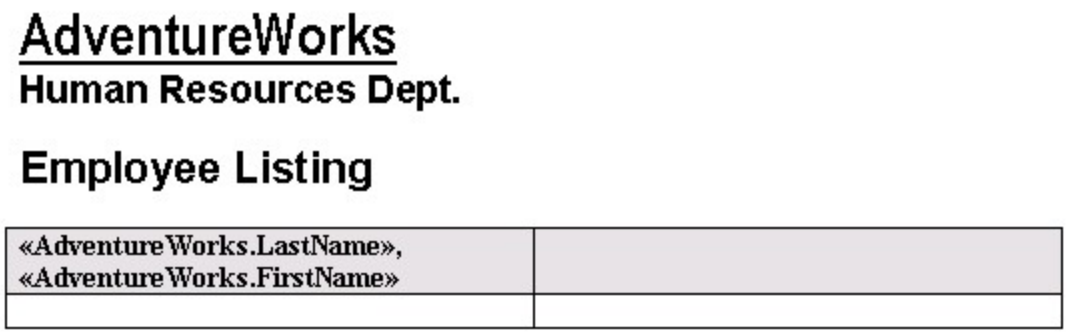
2. Click **Select Query** on the OfficeWriter toolbar and select your query from the drop-down list.



3. Place your cursor in the top left cell of the table click inside it.
4. Click **Insert Merge Field** and select the **LastName** field. Your report should now look like this:

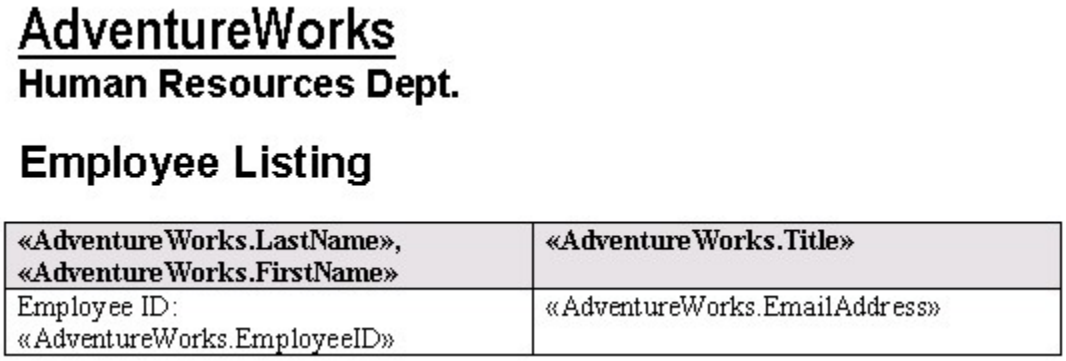


5. After the **AdventureWorks.LastName** field, type in a comma and a space. Select **Insert Merge Field** again and pick the **FirstName** field. Your report should look like this:



6. Place your cursor in the top right cell of the table. Select **Insert Merge Field** and pick **Title**.
7. In the bottom left cell, type **Employee ID:** and insert the **EmployeeID** field.
8. Place your cursor in the bottom right cell of the table. Click **Insert Merge Field** and select **EmailAddress**.

Your finished report template should look like this:

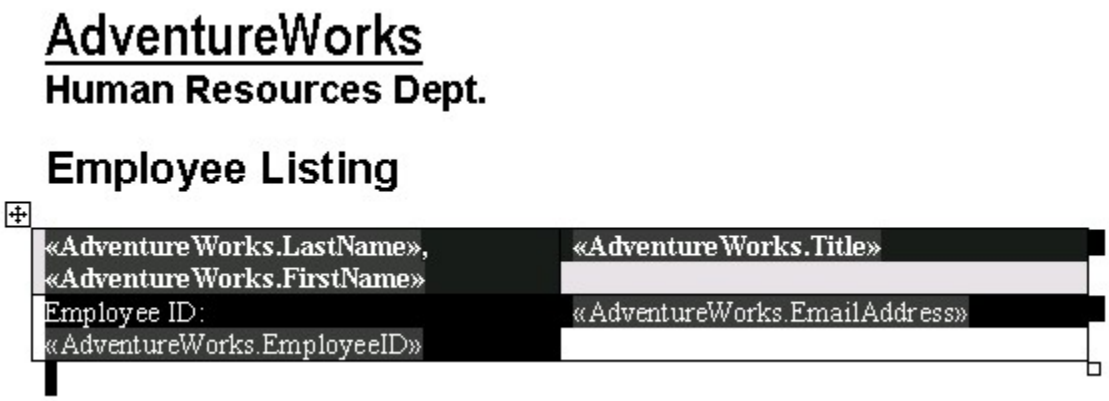


Step 3. Set a Query Range

The range of a query specifies whether all or just the first record returned by the query will be displayed in the report. See Setting Query Range section for a detailed explanation of query range.

There are two different query ranges: **Document** and **Selection**. If a query's range is document, only the first record returned by the query will be displayed in the report. If the range is selection, all records returned by the query will be displayed in the report.

1. Click **Select Query** on the OfficeWriter Designer and choose your query from the list.
2. With your mouse highlight the entire table on your report. Select not only the table, but also include a blank row below the table.



3. Select **Query Range** from the OfficeWriter Designer.
4. Make sure that **Selection** is chosen and click **Ok** .

If you highlight a table without highlighting a row after it, the report will include a separate table for each employee without spaces between them. It would look like one long continuous table. Many times you will want to do this, but for this demo, we want to make it look like separate tables.

Step 4. Publish and View the Report

1. From the OfficeWriter Designer toolbar select **Save As**.
2. Navigate to a local folder where you will store the template report file. This will be where you store your work file in case you want to edit it later, **not** a location on the Reporting Services server.
3. Save the template as an RDL file.
4. To publish the report, from the toolbar, select **Publish**.
5. From the Publish dialog box select the drop-down to display the Server or URL.
6. Choose the server on which Reporting Services is installed.
7. Click **Refresh**.
8. Select a folder for which you have publish rights and click **Ok**.
9. If your report published with no errors, you will receive a **Publish Successful** message dialog. Click **Ok** to continue.
10. To view the report, click **View** on the OfficeWriter Designer. The report viewer will open another Word window with the report results. It should look like this:

AdventureWorks
Human Resources Dept.

Employee Listing

Gilbert, Guy	**Production Technician - WC60**
Employee ID: 1	guy1@adventure-works.com

Brown, Kevin	**Marketing Assistant**
Employee ID: 2	kevin0@adventure-works.com

Tamburello, Roberto	**Engineering Manager**
Employee ID: 3	roberto0@adventure-works.com

Walters, Rob	**Senior Tool Designer**
Employee ID: 4	rob0@adventure-works.com

D'Hers, Thierry	**Tool Designer**
Employee ID: 5	thierry0@adventure-works.com

11. Select **Close Report View** to return to your report template.

To verify that your report is actually running on Reporting Services:

1. Open a browser and go to the Reporting Services Report Manager (usually installed at http://<server address>/Reports).
2. Navigate to where you published your report.
3. Select the report. Reporting Sevices will display the report but only show you the data set.
4. From the **Select a format** drop-down, choose **Word designed by OfficeWriter**.

5. Click **Export** and - when prompted - **Open** . Word will open and display your report the way you created it.

Samples

Download an RDL file with each result displayed in a separate Word table.

Download an RDL file with all results displayed in one Word table.

Create an Excel Report from an Existing RDL

Create an Excel Report from an Existing RDL

This tutorial will help you design your first report in Excel using the OfficeWriter for Excel Designer from a report file created in Visual Studio or Report Builder. To follow this demonstration you need the AdventureWorks sample database which is an optional component in the Reporting Services installation.

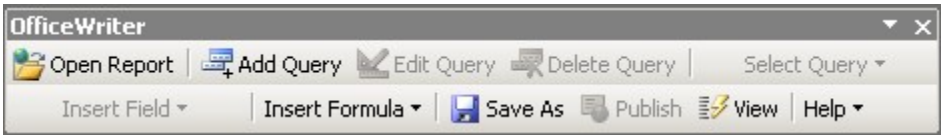
We will build a simple employee list and display some basic information about each employee.

Before you start, verify the following:

- Reporting Services is installed on a server you can access, working properly, and you have rights to publish and view reports.
- The AdventureWorks database (which ships with Reporting Services) is installed on the Reporting Services server.
- OfficeWriter with the Reporting Services renderers is installed on the Reporting Services server.
- The OfficeWriter Designer Client is installed on your local PC.
  For more information on installing and configuring OfficeWriter Reporting Services Integration, see Installation or your System Administrator.

OfficeWriter Designer Toolbar

The control center for creating reports with OfficeWriter is the OfficeWriter Designer toolbar. When you open Excel, you will see the toolbar directly underneath the Excel toolbar, above your worksheet.



If you do not see the toolbar:

1. Open Excel's **View** menu and select **>Toolbars > OfficeWriter**.

2. Check **OfficeWriter**. If OfficeWriter is not listed, run the OfficeWriter client installer.

If your toolbar does not contain query-building buttons (Add Query, Edit Query, etc.), your registry settings have been set to disable MS Query. These buttons are not required for this tutorial, so you do not need to make any changes to your installation.

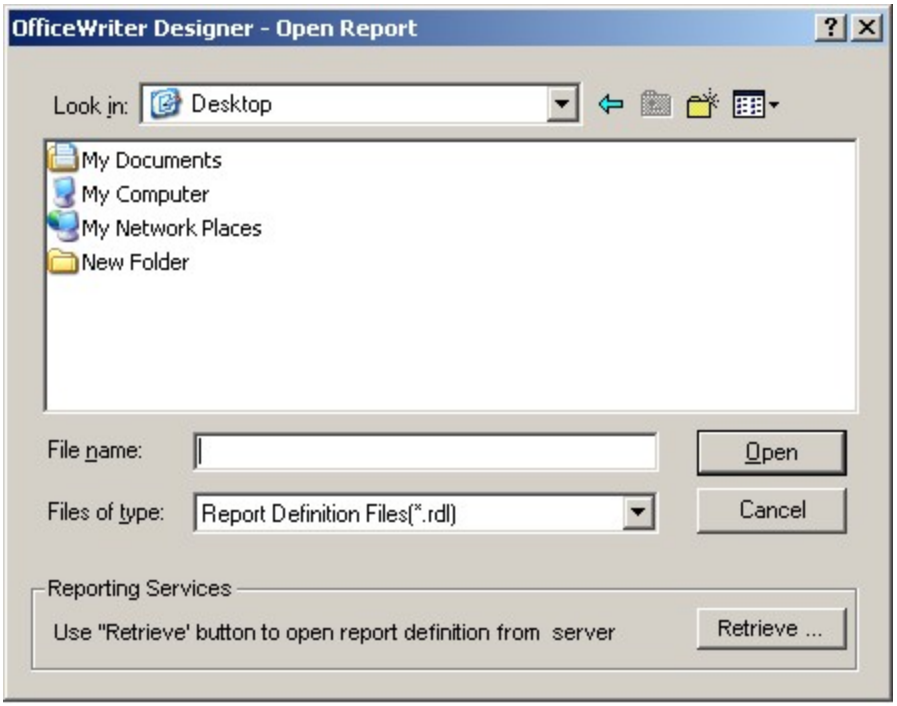
Opening a Report File

An a RDL file is an xml-based report definition file. We will open an RDL file created in Visual Studio. The file contains a database connection and a query. The query fields will appear in a drop-down list on the OfficeWriter toolbar. You will be able to insert these fields as merge fields (data placeholders) in the report template. You will not be able to create additional queries.

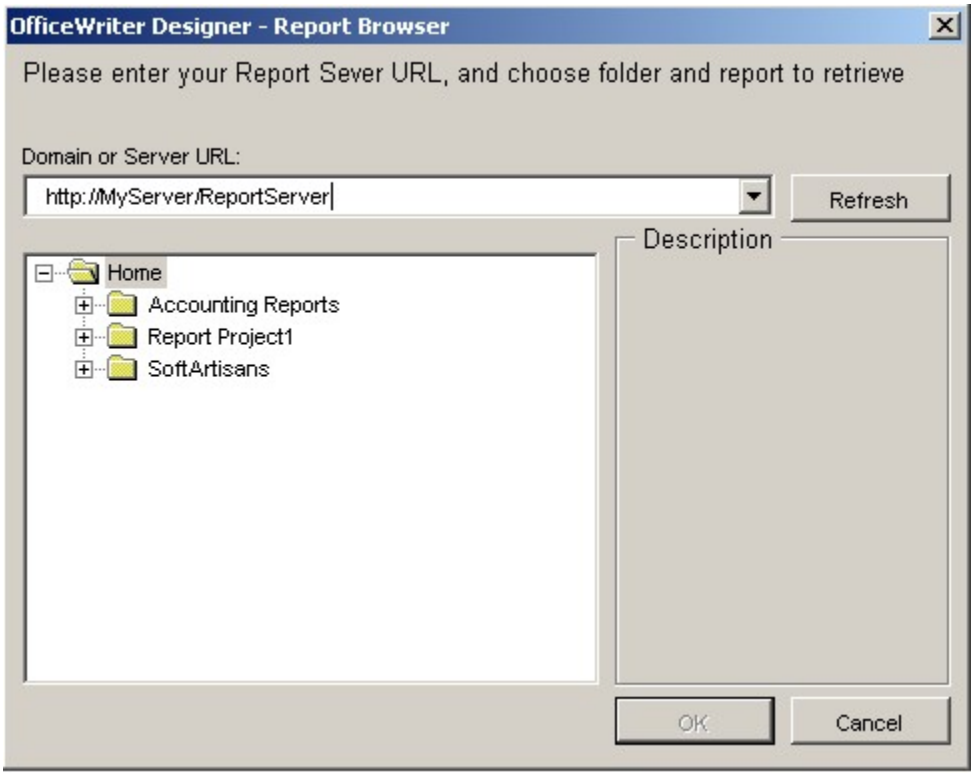
1. Open Microsoft Excel and create a new file.

2. Click the **Open Report** button on the OfficeWriter toolbar.

3. If your report defintion file was saved on a local or network drive, navigate to the folder containing the file, select it, click **Open**, and continue to step 2. If your report defintion file was deployed to Reporting Services, click the **Retrieve** on the bottom right corner of the dialog box, and continue to step 3.

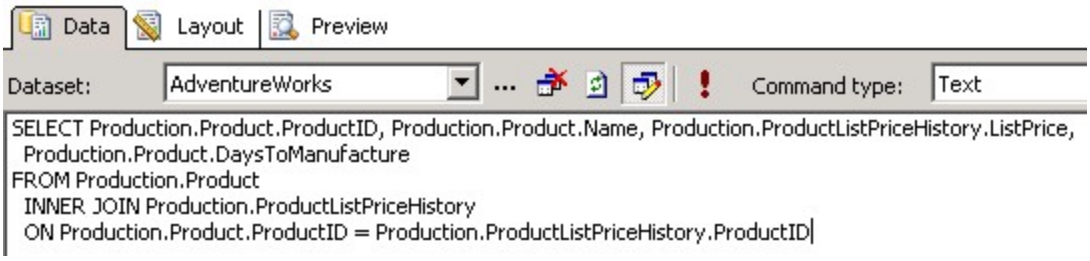


4. In the Report Browser dialog box, type in your report server's URL or Domain name and click **Refresh**. This will load all the available report folders into the list box. Navigate to your report file, select it, and click **Ok**.



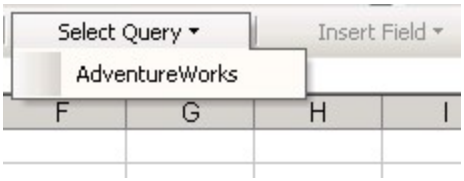
Adding Fields to Your Report

For this demonstration we will use a report file created in Visual Studio containing the following query:



After opening your report in Excel with the OfficeWriter toolbar, you should find your query listed under the **Select Query** button.

1. Click **Select Query** on the OfficeWriter toolbar and select your query from the drop-down list.



2. Place your cursor in cell A2 cell and click inside it.
3. Click **Insert Field** on the OfficeWriter toolbar and select the **ProductID** field. Your template should now look like this:

	A
1	
2	%%=AdventureWorks.ProductID

4. Place your cursor in cell B2 cell and click inside it.
5. Click **Insert Field** again and select the **Name**field. Your template should now look like this:

	A	B
1		
2	%%=AdventureWorks.ProductID	%%=AdventureWorks.Name

6. Place your cursor in cell C2 cell and click inside it.
7. Click **Insert Field** and select the **ListPrice** field.
8. Place your cursor in cell D2 cell and click inside it.
9. Click **Insert Field** and select the **Days to Manufacture** field.
10. In cell A1 type **Product ID**, in cell B1 type **Product Name**, in C1 type **List Price**, and in D1 type **Days to Manufacture**.

Your finished report template should look like this:

	A	B
1	Product ID	Product Name
2	%%=AdventureWorks.ProductID	%%=AdventureWorks.Name

C	D
List Price	Days to Manufacture
%%=AdventureWorks.ListPrice	%%=AdventureWorks.DaysToManufacture

Publish and View Your Report

Before publishing the report on the Reporting Services server, we must save the template locally as an RDL file.

1. From the OfficeWriter Designer toolbar select **Save As**.
2. Navigate to a local folder where you will store the template report file. This will be where you store your work file in case you want to edit it later, **not** a location on the Reporting Services server.

3. Save the template as an RDL file.
4. To publish the report, from the toolbar, select **Publish**.
5. From the Publish dialog box select the drop-down to display the Server or URL.
6. Choose the server on which Reporting Services is installed.
7. Click **Refresh**.
8. Select a folder for which you have publish rights and click **Ok**.
9. If your report published with no errors, you will receive a **Publish Successful** message dialog. Click **Ok** to continue.
10. To view the report, click **View** on the OfficeWriter Designer. The report viewer will open another Excel window with the report results. It should look like this:

	A	B	C	D
1	Product ID	Product Name	List Price	Days to Manufacture
2	707	Sport-100 Helmet, Red	33.6442	0
3	707	Sport-100 Helmet, Red	33.6442	0
4	707	Sport-100 Helmet, Red	34.99	0
5	708	Sport-100 Helmet, Black	33.6442	0
6	708	Sport-100 Helmet, Black	33.6442	0
7	708	Sport-100 Helmet, Black	34.99	0
8	709	Mountain Bike Socks, M	9.5	0
9	710	Mountain Bike Socks, L	9.5	0
10	711	Sport-100 Helmet, Blue	33.6442	0
11	711	Sport-100 Helmet, Blue	33.6442	0
12	711	Sport-100 Helmet, Blue	34.99	0
13	712	AWC Logo Cap	8.6442	0
14	712	AWC Logo Cap	8.6442	0
15	712	AWC Logo Cap	8.99	0
16	713	Long-Sleeve Logo Jersey, S	48.0673	0
17	713	Long-Sleeve Logo Jersey, S	48.0673	0
18	713	Long-Sleeve Logo Jersey, S	49.99	0
19	714	Long-Sleeve Logo Jersey, M	48.0673	0
20	714	Long-Sleeve Logo Jersey, M	48.0673	0
21	714	Long-Sleeve Logo Jersey, M	49.99	0
22	715	Long-Sleeve Logo Jersey, L	48.0673	0
23	715	Long-Sleeve Logo Jersey, L	48.0673	0
24	715	Long-Sleeve Logo Jersey, L	49.99	0
25	716	Long-Sleeve Logo Jersey, XL	48.0673	0
26	716	Long-Sleeve Logo Jersey, XL	48.0673	0
27	716	Long-Sleeve Logo Jersey, XL	49.99	0
28	717	HL Road Frame - Red, 62	1263.46	1
29	717	HL Road Frame - Red, 62	1301.364	1
30	717	HL Road Frame - Red, 62	1431.5	1

11. Select **Close Report View** to return to your report template.

To verify that your report is actually running on Reporting Services:

1. Open a browser and go to the Reporting Services Report Manager (usually installed at http://<server address>/Reports).
2. Navigate to where you published your report.
3. Select the report. Reporting Sevices will display the report but only show you the data set.
4. From the **Select a format** drop-down, choose **Excel designed by OfficeWriter**.

5. Click **Export** and - when prompted - **Open** . Excel will open and display your report the way you created it.

Samples

Download the .rdl file described in this tutorial.

Create a Word Report with Microsoft Query

This tutorial will help you create your first report in Word using the OfficeWriter for Word Designer and Microsoft Query. This demonstration is based on the HRTemplate sample provided with OfficeWriter. The report displays data from the AdventureWorks database, which ships with Reporting Services. We will build a simple employee list and display some basic information about each employee.

By default, OfficeWriter Designer's **Add Query**, **Edit Query**, and **Delete Query** buttons are disabled. These buttons are required for creating queries using Microsoft Query with OfficeWriter. If the query buttons are not available on the OfficeWriter toolbar, reset the registry key **Enable MSQuery** as follows:

1. Open the **Start** menu and select **Run**.
2. Enter regedit and click **Ok**.
3. Open the folder **HKEY_CURRENT_USER\Software\SoftArtisans\OfficeWriter\Designer**.
4. Double-click **Enable MSQuery**. A dialog will open.
5. In the **Value Data** field, enter 1.

Before you start, verify the following:

- Reporting Services is installed on a server you can access, working properly, and you have rights to publish and view reports.
- The AdventureWorks database (which ships with Reporting Services) is installed on the Reporting Services server.
- OfficeWriter with the Reporting Services renderers is installed on the Reporting Services server.
- The OfficeWriter Designer Client is installed on your local PC.

For more information on installing and configuring OfficeWriter Reporting Services Integration, see Installation or your System Administrator.

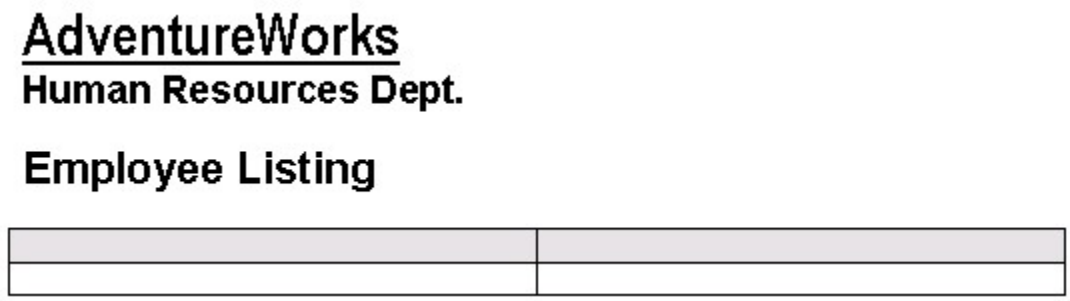
Step 1. Create a Word File

The file you create will become an OfficeWriter Word template.

1. Open Microsoft Word and create a new file.
2. Add a table with two columns and two rows.
3. Optional: Add the following header to the document.

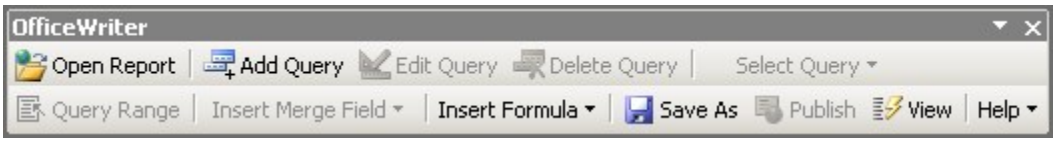
AdventureWorks Human Resources Dept. Employee Listing

This is our sample document before adding data:



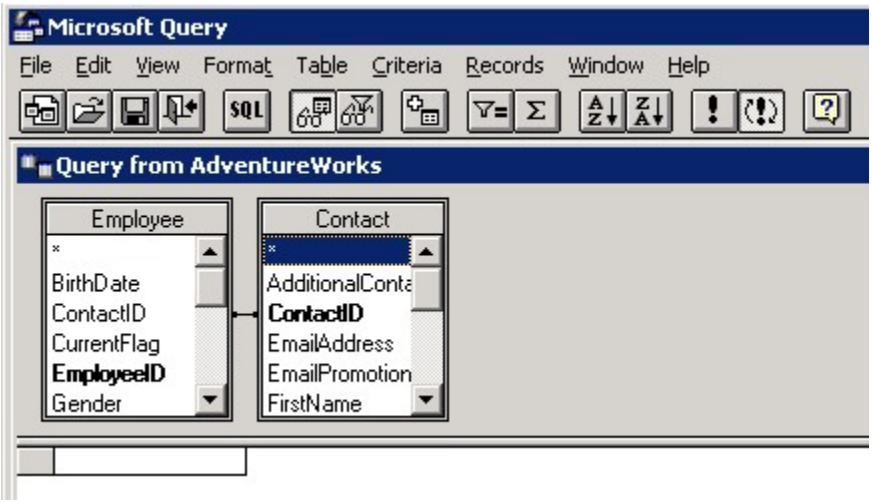
Step 2. Create a Database Query

Now we use OfficeWriter to turn this into a dynamic report. We will be using the OfficeWriter Designer toolbar to set up our report. You should see the Designer under Word's menu bar above your document.



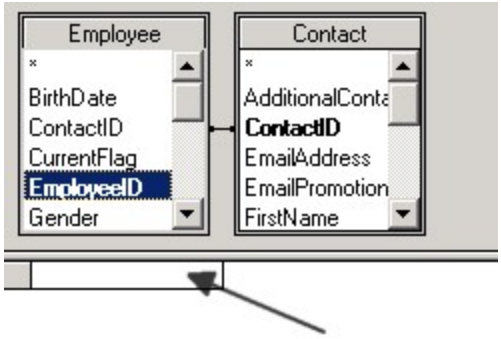
Notice that not all the items on the toolbar are enabled. As we progress, more items will become available.

1. Select **Add Query** from the toolbar.
2. In the dialog box, type in a name for the query (or leave the default name "Query1"). Click **Next**.
3. In the database connection dialog box, click **Add New**. Microsoft Query will open.
4. Select **New Data Source** and click **Ok**.
5. Enter a name for the data source.
6. Click the down arrow on the right side of the step two box and find the **SQL Server** driver.
7. At the step 3 line, press the **Connect** button.
8. In the **SQL Server Login** dialog, pull down the **Server** list with the down arrow and choose the server on which the AdventureWorks database resides.
9. Click **Options**.
10. On the database pulldown, find the AdventureWorks database and select it. Click **Ok**.
11. You will now see your data source in the list. Make sure it is selected and click **Ok**.
12. Now you should see the AdventureWorks database listed next to the Connect button. Click **Ok**.
13. In the **Add Tables** dialog box, find the **Employee** table in the list and select **Add**. Then, find the **Contact** table and select **Add**. Click **Close**. The Employee and Contact tables should now be in MS Query and look like this:

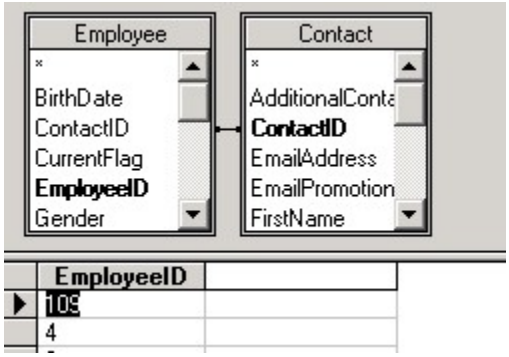


14. In MS Query, scroll down the list of fields in the Employee table until you find the **EmployeeID** field.

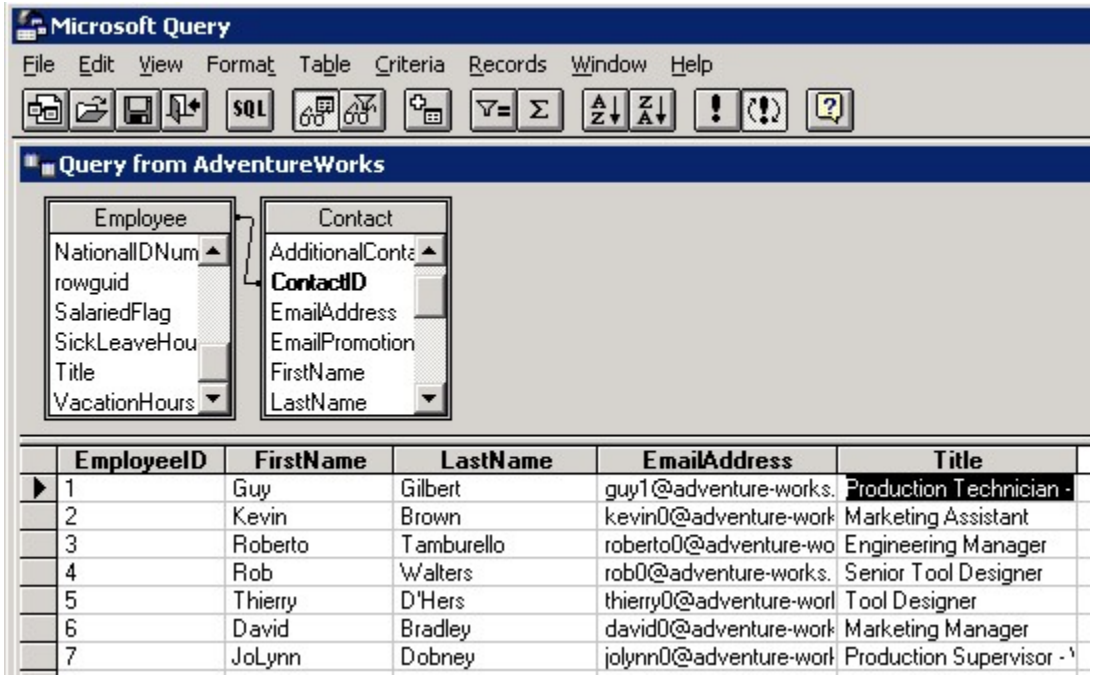
15. Click the **EmployeeID** field and drag it to the small white box under the Employee table (shown by the arrow in the picture below).



It should now look like this:



16. Do the same for **FirstName, LastName, and EmailAddress** from the **Contact** table and then for **Title** from the **Employee** table. The finished query should look like this:



17. From the MS Query menu, select **File -> Return to OfficeWriter Designer** .

Notice that now all the menu items on the OfficeWriter Designer toolbar are active.

Step 3. Add Merge Fields to the Template

A merge field is a placeholder for database values. When the report is published, OfficeWriter will replace the merge fields with data from the database.

1. Place your cursor in the top left cell of the table in your report and click inside it.
2. On the OfficeWriter Designer, click **Insert Merge Field**. You will see all the fields that you added to your query.
3. Select the **LastName** field. Your report should now look like this:

AdventureWorks
Human Resources Dept.

Employee Listing

«Query1.LastName»	

4. After the **Query1.Lastname** field, type in a comma and then a space.
5. Select **Insert Merge Field** again and pick the **FirstName** field. Your report should look like this:

AdventureWorks
Human Resources Dept.

Employee Listing

«Query1.LastName», «Query1.FirstName»	

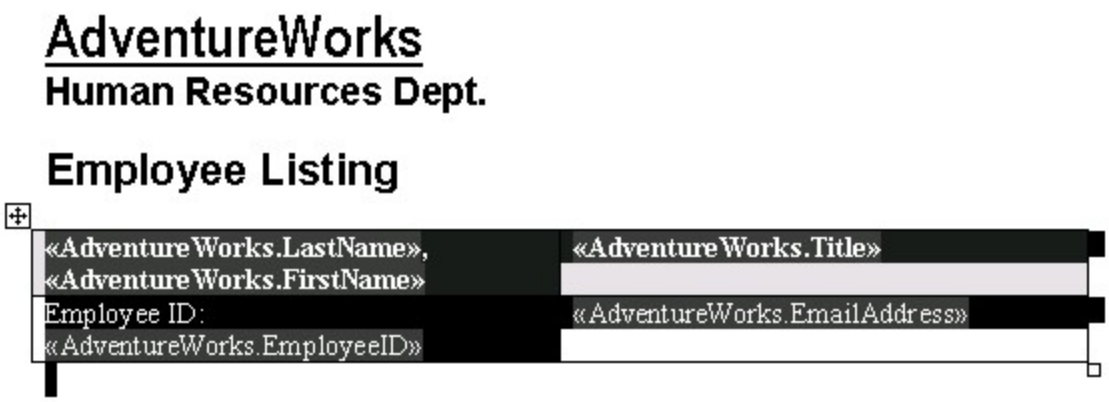
6. Add the rest of the fields. Place your cursor in the top right cell of the table. Select **Insert Merge Field** and pick **Title**. In the bottom left cell, type **Employee ID:** and insert the **EmployeeID** field from the menu. Finally, in the bottom right cell, put the **EmailAddress** field. Your finished report document should look like this:

AdventureWorks
Human Resources Dept.

Employee Listing

«Query1.LastName», «Query1.FirstName»	«Query1.Title»
Employee ID: «Query1.EmployeeID»	«Query1.EmailAddress»

7. Click **Select Query** on the OfficeWriter Designer and choose your query from the list.
8. With your mouse highlight the entire table on your report. Select not only the table, but also include a blank row below the table.



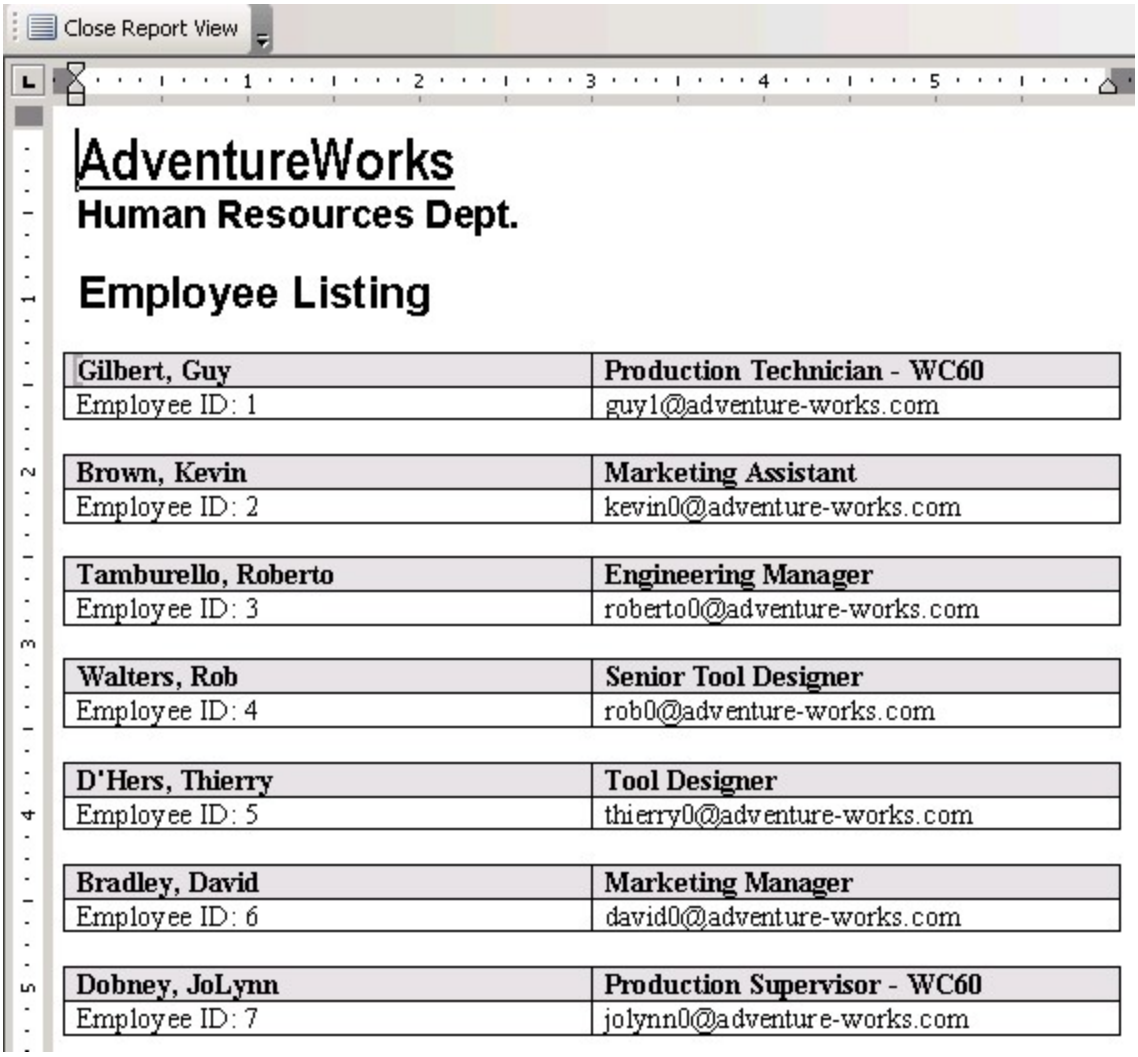
9. Select **Query Range** from the OfficeWriter Designer.
10. Make sure that **Selection** is chosen and click **Ok** .

> Note on step 8: If you highlight a table without highlighting a row after it, the report will include a separate table for each employee without spaces between them. It would look like one long continuous table. Many times you will want to do this, but for this demo, we want to make it look like separate tables.

Step 4. Publish and View Your Report

Before publishing the report on the Reporting Services server, we must save the template locally as an RDL file.

1. From the OfficeWriter Designer toolbar select **Save As**.
2. Navigate to a local folder where you will store the template report file. This will be where you store your work file in case you want to edit it later, **not** a location on the Reporting Services server.
3. Save the template as an RDL file.
4. To publish the report, from the toolbar, select **Publish**.
5. From the Publish dialog box select the drop-down to display the Server or URL.
6. Choose the server on which Reporting Services is installed.
7. Click **Refresh**.
8. Select a folder for which you have publish rights and click **Ok**.
9. If your report published with no errors, you will receive a **Publish Successful** message dialog. Click **Ok** to continue.
10. To view the report, click **View** on the OfficeWriter Designer. The report viewer will open another Word window with the report results. It should look like this:



11. Select **Close Report View** to return to your report template.

To verify that your report is actually running on Reporting Services:

1. Open a browser and go to the Reporting Services Report Manager (usually installed at http://<server address>/Reports).
2. Navigate to where you published your report.
3. Select the report. Reporting Sevices will display the report but only show you the data set. \
4. From the **Select a format** drop-down, choose **Word designed by OfficeWriter**.
5. Click **Export** and - when prompted - **Open** . Word will open and display your report the way you created it.

Samples

Download an RDL file with each result displayed in a separate Word table.

Download an RDL file with all results displayed in one Word table.

Create an Excel Report with Microsoft Query

This tutorial will help you create a report in Excel using the OfficeWriter for Excel Designer and Microsoft Query. The report displays data from the AdventureWorks database, which ships with Reporting Services. We will build a simple product list and display some information about each product.

By default, OfficeWriter Designer's **Add Query**, **Edit Query**, and **Delete Query** buttons are disabled. These buttons are required for creating queries using Microsoft Query with OfficeWriter. If the query buttons are not available on the OfficeWriter toolbar, reset the registry key **Enable MSQuery** as follows:

1. Open the **Start** menu and select **Run**.
2. Enter regedit and click **Ok**.
3. Open the folder **HKEY_CURRENT_USER\Software\SoftArtisans\OfficeWriter\Designer**.
4. Double-click **Enable MSQuery**. A dialog will open.
5. In the **Value Data** field, enter 1.

Before you start, verify the following:

- Reporting Services is installed on a server you can access, working properly, and you have rights to publish and view reports.
- The AdventureWorks database (which ships with Reporting Services) is installed on the Reporting Services server.
- OfficeWriter with the Reporting Services renderers is installed on the Reporting Services server.
- The OfficeWriter Designer Client OfficeWriter is installed on your local PC.

For more information on installing and configuring OfficeWriter Reporting Services Integration, see Installation or your System Administrator.

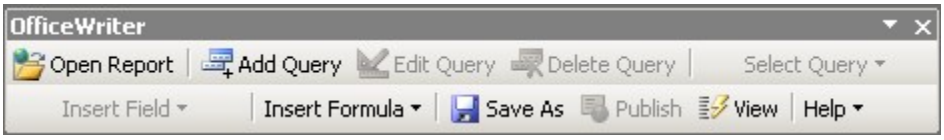
Step 1. Create an Excel File

The file you create will become an OfficeWriter Excel template.

1. Open Microsoft Excel and create a new file.
2. In cell A1, type **Product ID**.
3. In cell B1, type **Product Name**.
4. In cell C1, type **List Price**.
5. In cell D1, type **Days to Manufacture**.

Step 2. Create a Database Query

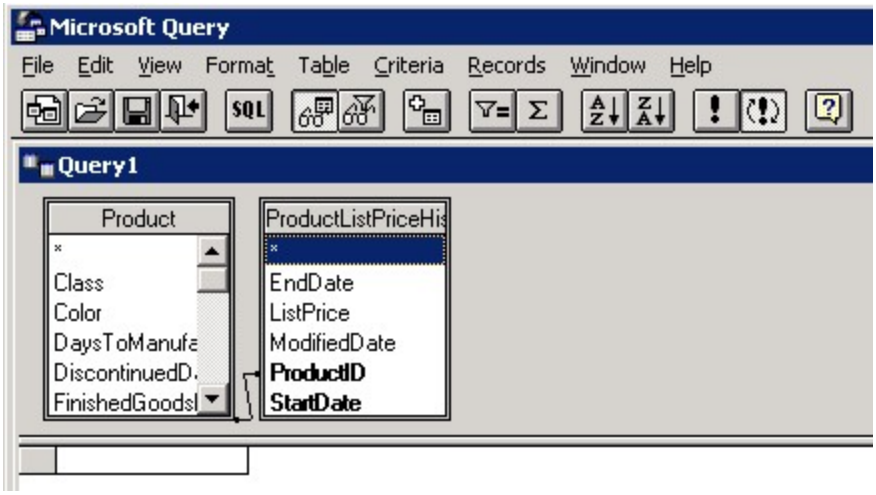
We will be using the OfficeWriter Designer toolbar to create the template. You should see the Designer under Excel's menu bar, above your worksheet.



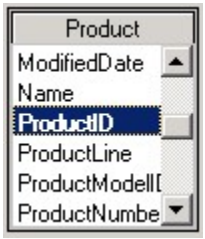
Notice that not all the items on the toolbar are selectable. As we progress, more items will be available.

1. Select **Add Query** from the toolbar.
2. It the dialog box, type in a name for the query (or leave the default name "Query1"). Click **Next**.
3. In the database connection dialog box, click **Add New**. Microsoft Query will open.
4. Select **New Data Source** and click **Ok**.
5. Enter a name for the data source.
6. Click the down arrow on the right side of the step two box and find the **SQL Server** driver.
7. At the step 3 line, press the **Connect** button.
8. In the **SQL Server Login** dialog, pull down the **Server** list with the down arrow and choose the server on which the AdventureWorks database resides.
9. Click **Options**.
10. On the database pulldown, find the AdventureWorks database and select it. Click **Ok**.
11. You will now see your data source in the list. Make sure it is selected and click **Ok**.

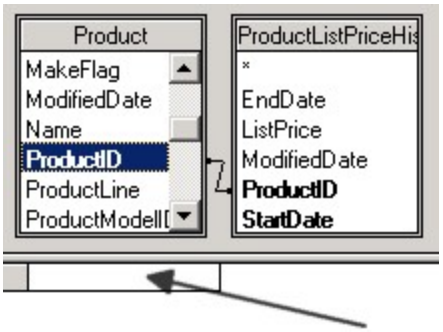
12. In the **Add Tables** dialog box, find the **Product** table in the list and select **Add**. Then, find the **ProductListPriceHistory** table and select **Add**. Click **Close**. The Product and ProductListPriceHistory tables should now be in MS Query and look like this:



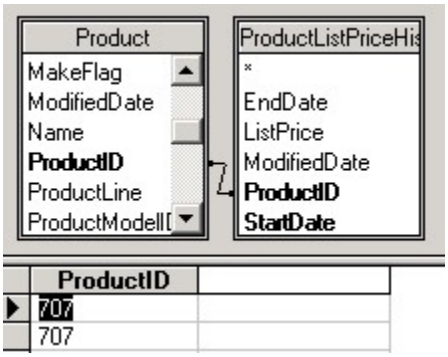
13. In MS Query, scroll down the list of the Product table until you find the **ProductID** field:



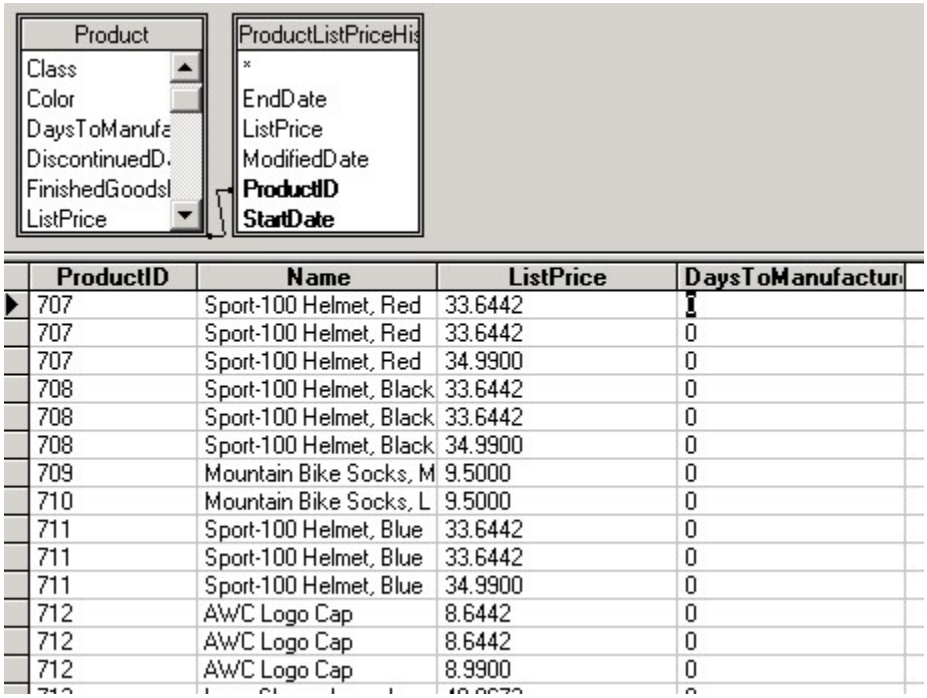
14. Click on the ProductID field and drag it to the small white box under the Product table (show by the arrow in the picture below).



It should now look like this:



15. Do the same for **Name** from the **Product** table, **ListPrice** from the **ProductListPriceHistory** table, and **DaystoManufacture** from the **Product** table. The finished query should look like this:



16. From the MS Query menu, select **File -> Return to OfficeWriter Designer** .

Notice that now all the menu items on the OfficeWriter Designer toolbar are active.

Step 3. Add Data Markers to the Template

A data marker is a placeholder for database values. When the report is published, OfficeWriter will replace the data markers with data from the database.

1. Place your cursor in cell A2 and click inside it.

2. Select **Insert Field** from the OfficeWriter toolbar. You will see all the fields that you added to your query. Select the **ProductID** field. Your template should now look like this:

	A	B	C	D
1	Product ID	Product Name	List Price	Days to Manufacture
2	%%=Query1.ProductID			
3				

3. Place your cursor in cell B2.

4. **Insert Field** again select the **Name** field. Your template should look like this:

	A	B	C	D
1	Product ID	Product Name	List Price	Days to Manufacture
2	%%=Query1.ProductID	%%=Query1.Name		
3				

5. Place your cursor in cell C2.

6. Click **Insert Field** and select **ListPrice**.

7. Place your cursor in cell D2.

8. Click **Insert Field** and select **DaystoManufacture**. Your finished template should look like this:

A	B	C	D
Product ID	Product Name	List Price	Days to Manufacture
%%=Query1.ProductID	%%=Query1.Name	%%=Query1.ListPrice	%%=Query1.DaysToManufacture

Step 4. Publish and View your report

Before publishing the report on the Reporting Services server, we must save the template locally as an RDL file.

1. From the OfficeWriter Designer toolbar select **Save As**.
2. Navigate to a local folder where you will store the template report file. This will be where you store your work file in case you want to edit it later, **not** a location on the Reporting Services server.
3. Save the temlate as an RDL file.
4. To publish the report, from the toolbar, select **Publish**.
5. From the Publish dialog box select the drop-down to display the Server or URL.
6. Choose the server on which Reporting Services is installed.
7. Click **Refresh**.
8. Select a folder for which you have publish rights and click **Ok**.
9. If your report published with no errors, you will receive a **Publish Successful** message dialog. Click **Ok** to continue.
10. To view the report, click **View** on the OfficeWriter Designer. The report viewer will open another Excel window with the report results. It should look like this:

	A	B	C	D
1	Product ID	Product Name	List Price	Days to Manufacture
2	707	Sport-100 Helmet, Red	33.6442	0
3	707	Sport-100 Helmet, Red	33.6442	0
4	707	Sport-100 Helmet, Red	34.99	0
5	708	Sport-100 Helmet, Black	33.6442	0
6	708	Sport-100 Helmet, Black	33.6442	0
7	708	Sport-100 Helmet, Black	34.99	0
8	709	Mountain Bike Socks, M	9.5	0
9	710	Mountain Bike Socks, L	9.5	0
10	711	Sport-100 Helmet, Blue	33.6442	0
11	711	Sport-100 Helmet, Blue	33.6442	0
12	711	Sport-100 Helmet, Blue	34.99	0
13	712	AWC Logo Cap	8.6442	0
14	712	AWC Logo Cap	8.6442	0
15	712	AWC Logo Cap	8.99	0
16	713	Long-Sleeve Logo Jersey, S	48.0673	0
17	713	Long-Sleeve Logo Jersey, S	48.0673	0
18	713	Long-Sleeve Logo Jersey, S	49.99	0
19	714	Long-Sleeve Logo Jersey, M	48.0673	0
20	714	Long-Sleeve Logo Jersey, M	48.0673	0
21	714	Long-Sleeve Logo Jersey, M	49.99	0
22	715	Long-Sleeve Logo Jersey, L	48.0673	0
23	715	Long-Sleeve Logo Jersey, L	48.0673	0
24	715	Long-Sleeve Logo Jersey, L	49.99	0
25	716	Long-Sleeve Logo Jersey, XL	48.0673	0
26	716	Long-Sleeve Logo Jersey, XL	48.0673	0
27	716	Long-Sleeve Logo Jersey, XL	49.99	0
28	717	HL Road Frame - Red, 62	1263.46	1
29	717	HL Road Frame - Red, 62	1301.364	1
30	717	HL Road Frame - Red, 62	1431.5	1

11. Select **Close Report View** to return to your report template.

To verify that your report is actually running on Reporting Services:

1. Open a browser and go to the Reporting Services Report Manager (usually installed at http://<server address>/Reports).
2. Navigate to where you published your report.
3. Select the report. Reporting Sevices will display the report but only show you the data set.
4. From the **Select a format** drop-down, choose **Excel designed by OfficeWriter**.
5. Click **Export** and - when prompted - **Open** . Excel will open and display your report the way you created it.

Samples

Download the .rdl file described in this tutorial.

How to Create Word Reports

- What is an OfficeWriter Word Template?
- The OfficeWriter Designer for Word
- Adding a Template to an Existing Report Definition
- Creating a New Template Report
- Setting Query Range
- Adding Merge Fields
- Formatting Merge Fields
- Publishing Your Report
- Viewing Your Report
- Browsing Reports
- Removing Queries
- Reports with Parameters
- Adding Formulas

What is an OfficeWriter Word Template?

An OfficeWriter Word template is a Word file that contains **merge fields**. A merge field displays a database field name where database values will be inserted. OfficeWriter templates are created with the OfficeWriter Designer.
When you save the template, the OfficeWriter Designer encodes it as a custom XML element in a Reporting Services RDL file. To publish a report, you will submit the RDL file to a Reporting Services server where OfficeWriter is installed. The OfficeWriter renderer on the server regenerates the template, and - using data supplied by Reporting Services - replaces the merge fields in the document with database values.

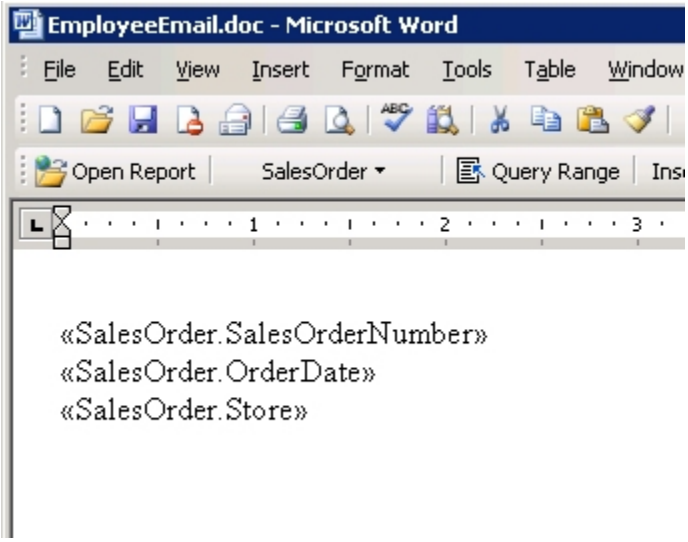
The format of a merge field is:

<<DatabaseQueryName.FieldName>>

For example, this merge field is a placeholder for values from the "Last Name" field in the data set returned by a query called "Employees":

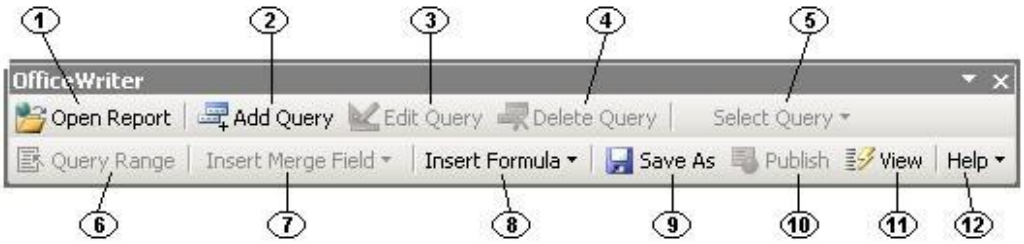
<<Employees.LastName>>

The template shown below contains three merge fields.



The OfficeWriter Designer for Word

You will find the OfficeWriter Designer toolbar under the Word menu bar at the top of your document.



1.	Open Report	The **Open Report** button allows you to open saved report definition files (RDL files). These can be files created with OfficeWriter, Visual Studio, or another tool. You can open RDL files on any drive your computer can access, as well as from any accessible Reporting Services server.
2.	Add Query	The **Add Query** button allows you to add new database queries to your report template. If you opened a report definition (RDL file) that was not created by OfficeWriter Designer (for example, an RDL file created in Visual Studio), the **Add Query** button will not be active.
3.	Edit Query	Click **Edit Query** to modify a query created with OfficeWriter. Your original query will be displayed so you can add or remove fields, change sort order, or edit the SQL statement. If you originally created your report definition using OfficeWriter Designer, you can change your queries at any time. If you opened a report definition (RDL file) that was not created by OfficeWriter Designer (for example, an RDL file created in Visual Studio), the **Edit Query** button will not be active.
4.	Delete Query	Use the **Delete Query** button to remove a query from your report template. If you opened a report definition (RDL file) that was not created by OfficeWriter Designer (for example, an RDL file created in Visual Studio), the **Delete Query** button will not be active.
5.	Select_Query	When working with a report with more than one query, the *Select Query* button displays a pulldown list of all the report's queries. Select the query you wish to work with before adding fields or setting query range.
6.	Query Range	Click **Query Range** to set a query's range to either **Document** or **Selection**. If a query is set to Document range, only the first row of data is returned from the query. When you set a query to Selection range, the query will return all the rows to the report.
7.	Insert Merge Field	The **Insert Merge Field** button places your merge fields (data placeholders) in the document.
8.	Insert Formula	One of the powerful features of OfficeWriter Enterprise Edition is the ability to create and use formulas. The *Insert Formula* button lets you select formulas and insert them in the document.
9.	Save As	After you create or change a report, the **Save As** button allows you to save your report document as an RDL file - an xml-based report definition. If you use Word's menu bar to save your document, you will only save a copy of the Word file itself without any report information.
10.	Publish	Use the **Publish** button to publish your report on the Reporting Services server. Once you do this, your report will be available for viewing both in Word (through the OfficeWriter Designer) and through Reporting Services Report Manager.
11.	View	The **View** button will execute your published report and display the results in another window in Word. If you click this button when you have an unpublished report file open, you will be prompted to publish before viewing. If you open Word and have no active documents open, the **View** button will serve as a report browser, allowing you to view any report on your report server.
12.	Help	Click the **Help** button to open the OfficeWriter Designer documentation.

Adding a Template to an Existing Report Definition

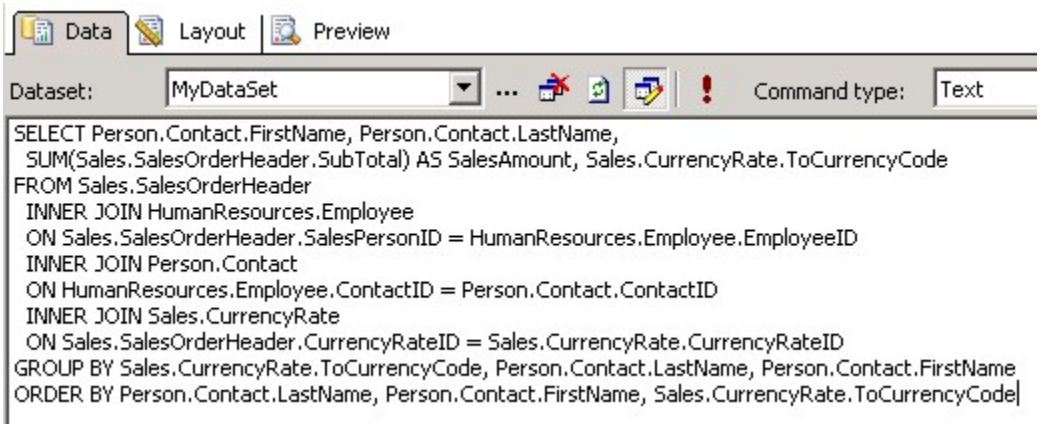
A report definition file (an RDL file) includes a set of layout instructions and a database query that gets report data when the file is executed by Reporting Services. RDL files are xml-based and are saved with the extension .rdl. After creating a report template with OfficeWriter, you save it as an RDL file and publish it on the Reporting Services server.

You can open a saved RDL file in Word and add OfficeWriter template information to it. If the saved report defintion was not created using OfficeWriter, only its database query will be available for use. The query fields will appear in a drop-down list on the OfficeWriter toolbar. You will be able to insert these fields as merge fields (data placeholders) in your report template, and will not be able to create additional queries. Whey you save the file, the OfficeWriter template information will be added to the RDL file. The advantages of adding a template to an existing RDL file are:

- **Two Display Formats** Render the original report design, or view the report as a Word file.
- **Separation of Report Design Roles** A developer may be responsible for creating shared data sources on the server and defining SQL queries in RDL files. A business user can then open an RDL, insert field placeholders from the predefined queries, and design a report.

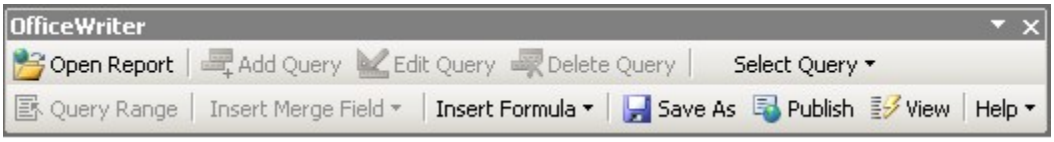
Opening a Saved RDL File

We will open report definition created in Visual Studio and work with it using the OfficeWriter Designer. The report file created in Visual Studio contains the following query:

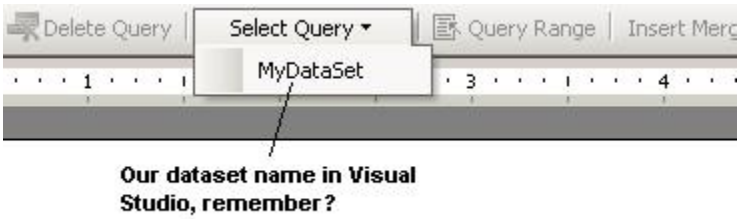


1. Open Word.
2. From the OfficeWriter Designer toolbar, select **Open Report**.
3. Navigate to the .rdl report file created in VS.NET and open it.

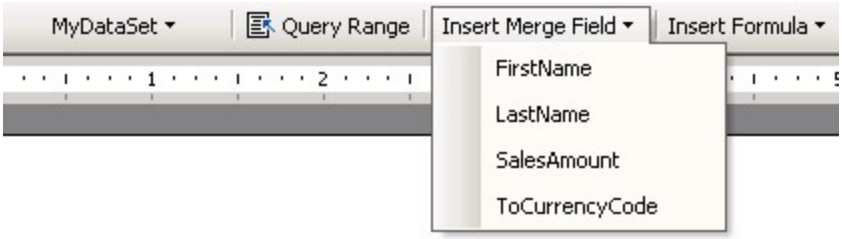
Once your report is open, you will notice the OfficeWriter Designer toolbar has changed. You do not have access to **Add Query**, **Edit Query**, or **Delete Query** because you opened a report definition file that was not created with OfficeWriter.



From this point on, all the other OfficeWriter functionality is accessible. To test this, choose **Select Query** from the OfficeWriter Designer toolbar. You should see the query created in Visual Studio in the list. Choose this query.



Click **Insert Merge Field** to reveal the fields created in Visual Studio.



Adding Merge Fields to the File

1. Insert a three-column, two-row table in the document.
2. Enter table headers as follows:

Sales Rep	Currency Code	Sales Amount

3. Place the cursor in the cell beneath **Sales Rep**.
4. Click **Insert Merge Field** and select **LastName**.
5. Enter a comma and a space after the merge field you inserted.
6. Click **Insert Merge Field** and select **FirstName**.
7. Place the cursor in the cell beneath **Currency Code**.
8. Click **Insert Merge Field** and select **ToCurrencyCode**.
9. Place the cursor in the cell beneath **Sales Amount**.
10. Click **Insert Merge Field** and select **SalesAmount**.

    The report should now look like this:

Sales Rep	Currency Code	Sales Amount
«MyDataSet.LastName», «MyDataSet.FirstName»	«MyDataSet.ToCurrencyCode»	«MyDataSet.SalesAmount»

Publishing and Viewing the Report

1. From the OfficeWriter Designer toolbar select **Save As**.
2. Navigate to a local folder where you will store the template report file. This will be where you store your work file in case you want to edit it later, **not** a location on the Reporting Services server.
3. Save the template as an RDL file.
4. To publish the report, from the toolbar, select **Publish**.
5. From the Publish dialog box select the drop-down to display the Server or URL.
6. Choose the server on which Reporting Services is installed.
7. Click **Refresh**.
8. Select a folder for which you have publish rights and click **Ok**.
9. If your report published with no errors, you will receive a **Publish Successful** message dialog. Click **Ok** to continue.
10. To view the report, click **View** on the OfficeWriter Designer. The report viewer will open another Word window with the report results. It

should look like this:

Sales Rep	Currency Code	Sales Amount
Abbas, Syed	AUD	219088.8836

Notice that the report only contains one row. This is because of the query range setting is **Document**, not **Selection**.

> **Document** range queries return only the first row of the query result. **Selection** range queries return all rows in the query result.

Let's change the query range to Selection.

1. Click **Select Query** on the OfficeWriter toolbar and select **MyDataSet**.
2. Highlight the second row of the table.

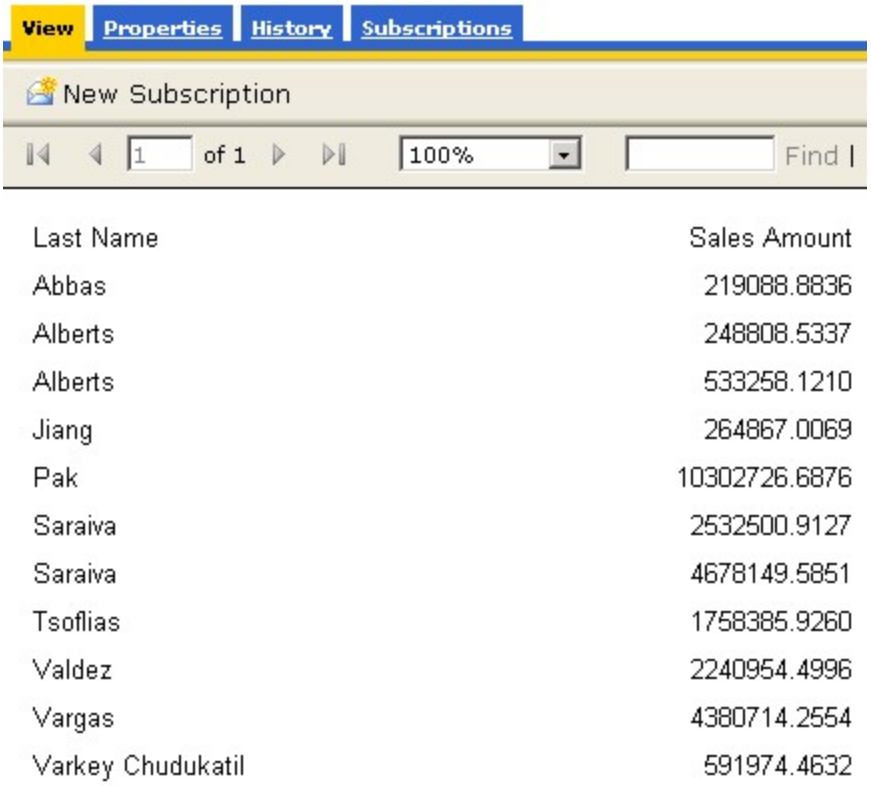
Sales Rep	Currency Code	Sales Amount
«MyDataSet.LastName», «MyDataSet.FirstName»	«MyDataSet.ToCurrencyCode»	«MyDataSet.SalesAmount»

3. Click **Query Range** on the OfficeWriter toolbar.
4. Make sure that **Selection** is chosen. Click **Ok**.
5. Publish the report and click **View**. The report will display all the rows in the query result.

Sales Rep	Currency Code	Sales Amount
Abbas, Syed	AUD	219088.8836
Alberts, Amy	EUR	248808.5337
Alberts, Amy	GBP	533258.1210
Jiang, Stephen	CAD	264867.0069
Pak, Jae	CAD	10302726.6876
Saraiva, José	CAD	2532500.9127
Saraiva, José	GBP	4678149.5851
Tsoflias, Lynn	AUD	1758385.9260
Valdez, Rachel	EUR	2240954.4996
Vargas, Garrett	CAD	4380714.2554
Varkey Chudukatil, Ranjit	EUR	591974.4632

View the Report in Reporting Services

We saw how our report looks in Word using the OfficeWriter Designer **View** button. But what happens if we go right to Reporting Services Report Manager and view the report from there? In your browser, type the path to the Report Manager (Usually http://<YourReportServer>/Reports). Navigate to the report and view it.



What is different? Why do we have two fields on our report when in OfficeWriter Designer we had three? The report was originally designed in Visual Studio, not OfficeWriter Designer. When the report renders, or displays, in Reporting Services Report Manager, it will display the way it was originally designed in Visual Studio.

To see the report as you designed it with OfficeWriter:

1. From the **Select a format** drop-down list, choose **Word designed by Officewriter**.
2. Click **Export**.
3. You will be prompted to save or open. To save the report as a Word file, click **Save**. To view the report, click **Open**.

Samples

Download the .rdl file described in this section.

Creating a New Template Report

In Adding a Template to an Existing Report Definition, we saw how you can add OfficeWriter template information to a saved RDL file. In that case, the database query was defined before OfficeWriter opened the file in Word. This section will explain how to develop a report from start to finish in Word with OfficeWriter and Microsoft Query.
By default, OfficeWriter Designer's **Add Query**, **Edit Query**, and **Delete Query** buttons are disabled. These buttons are required for creating queries using Microsoft Query with OfficeWriter. If the query buttons are not available on the OfficeWriter toolbar, reset the registry key **Enable MSQuery** as follows:

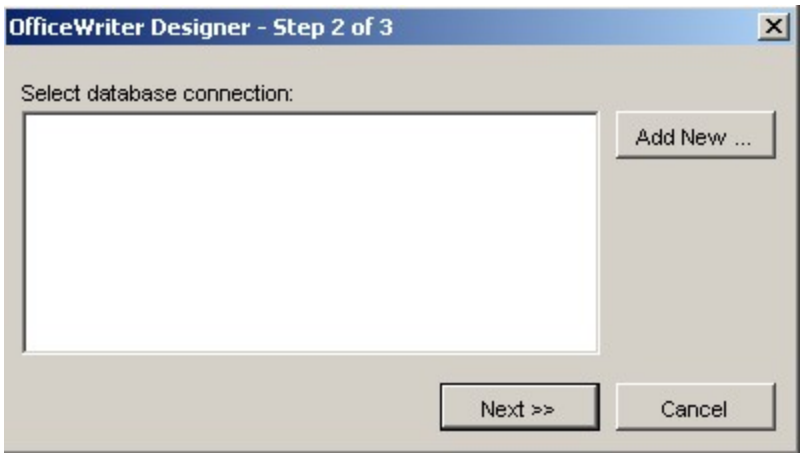
1. Open the **Start** menu and select **Run**.
2. Enter regedit and click **Ok**.
3. Open the folder **HKEY_CURRENT_USER\Software\SoftArtisans\OfficeWriter\Designer**.
4. Double-click **Enable MSQuery**. A dialog will open.
5. In the **Value Data** field, enter 1.

Creating a Data Source

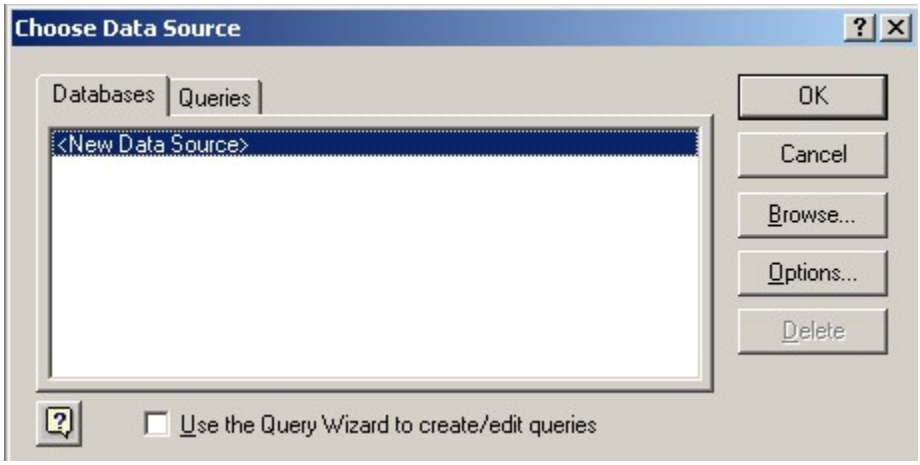
1. Open Word and create a new blank document.

2. Click **Add Query** on the OfficeWriter Designer toolbar.
3. In the dialog box, type in a name for the query (or leave the default name "Query1"). Click **Next**.

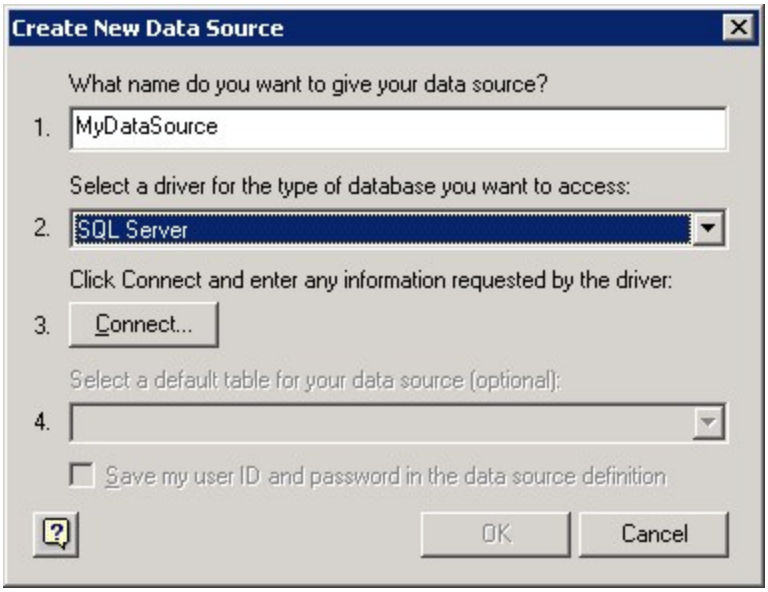
4. Click **Add New** to add a new database connection.



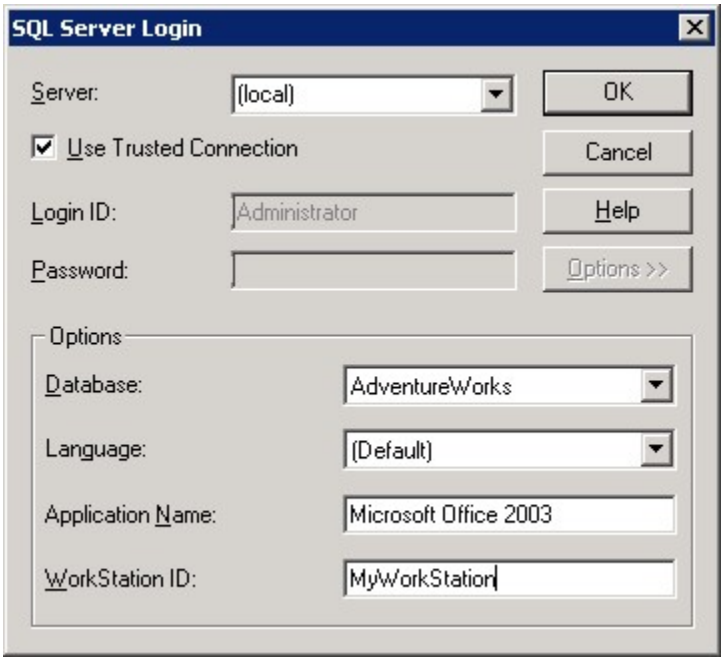
5. Select **New Data Source** and click **Ok**.



6. Enter a data source name and select **SQL Server** from the drop-down list of database drivers. Click **Connect**.

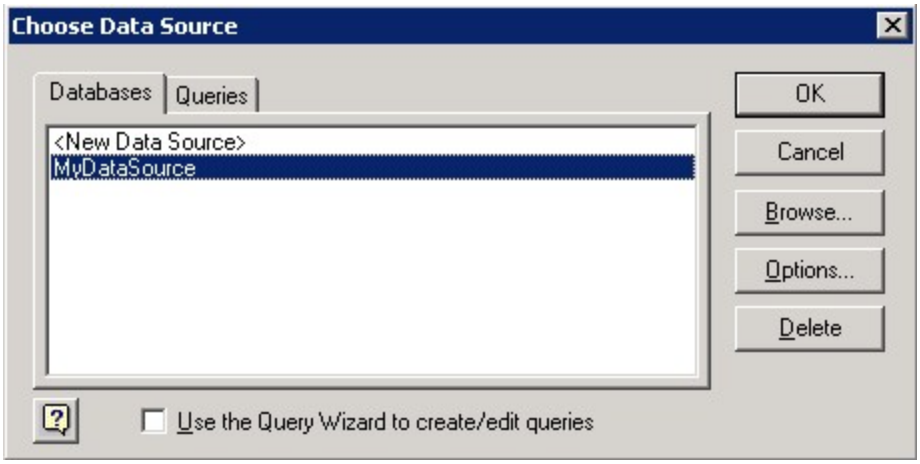


7. From the drop-down list of server names, select the server where the AdventureWorks database is installed. Click **Options** and select AdventureWorks as the default database. Click **Ok**.



8. You should now be back at the **Create New Data Source** screen. Click Ok.

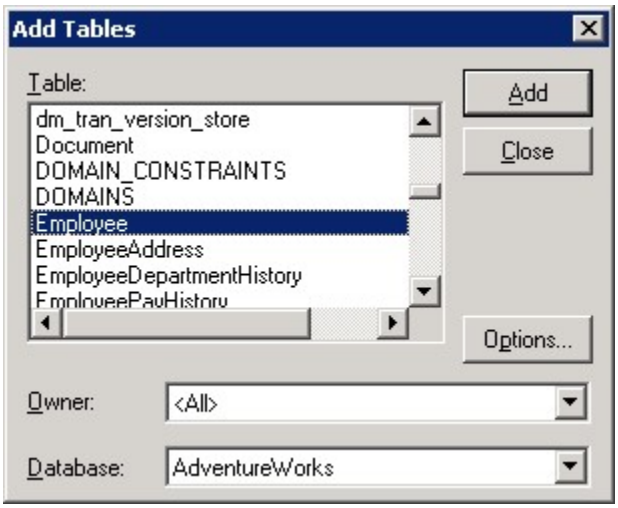
9. You will see your new data source in the **Choose Data Source**dialog. Select it and click **Ok** to open Microsoft Query.



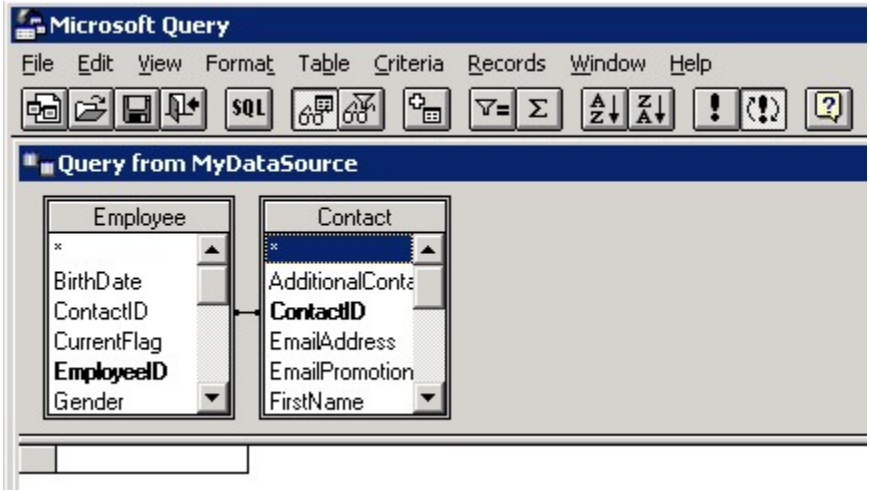
Building a Query

Next, we will build a query that will get the data for our report from the database. OfficeWriter Designer uses Microsoft Query to create queries. When we finished creating our sample Data Source above, Microsoft Query opened.

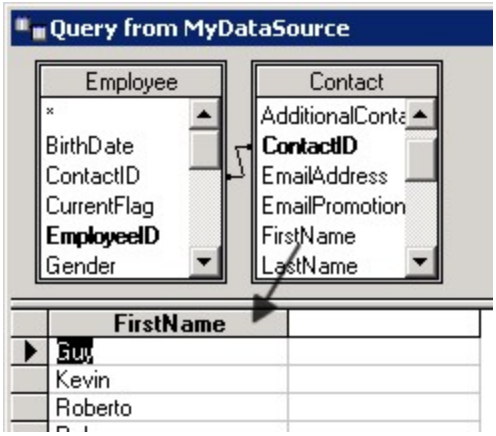
1. In the **Add Tables** dialog box, find the **Employee** table in the list and select **Add**. Then, find the **Contact** table and select **Add**.



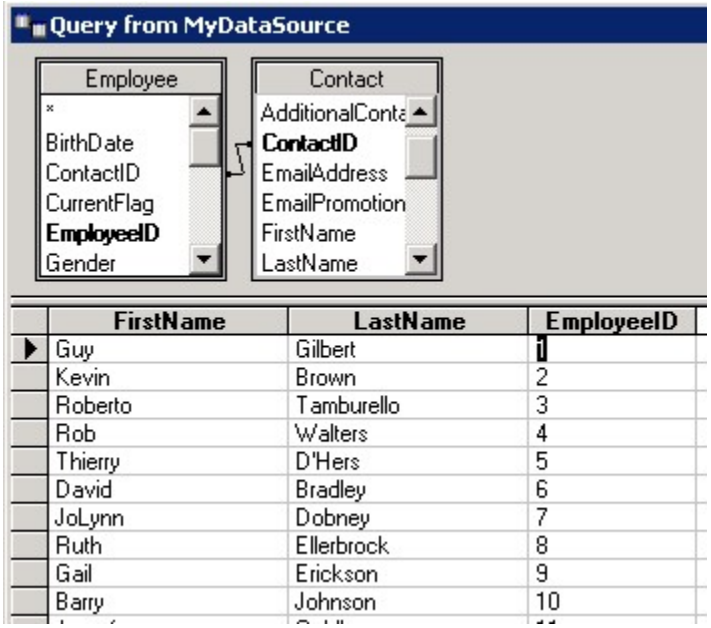
2. Click **Close**. The Employee and Contact tables should now be in MS Query.



3. Add the **FirstName** and **LastName** fields to your query by dragging them from the **Contact** table box to the space below, as shown. Do the same with **EmployeeID** from the **Employee** table.

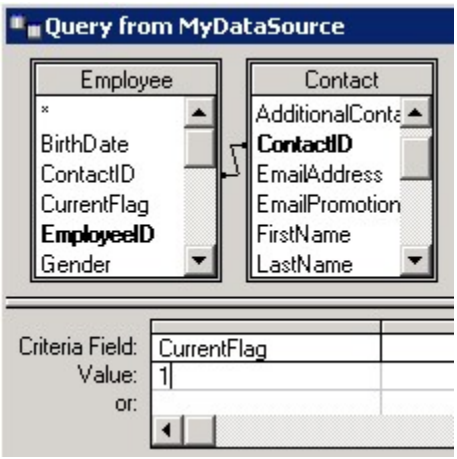


Your query should now look like this:



4. We will add a filter so that only current employees are returned from our query. Click **Show/Hide Criteria** on the Microsoft Query toolbar.

5. Pull down the **Criteria Field** list and select **Employee.CurrentFlag** as shown. Enter the value 1.



6. From Microsoft Query's **File** menu, select **Return to OfficeWriter Designer**.

Adding Merge Fields

A merge field is a placeholder for database values. When the report is published, OfficeWriter will replace the merge fields with data from the database.

1. Click **Select Query** on the OfficeWriter toolbar and make sure that the query you just created is selected.
2. Place your cursor at the top left of your document.
3. Click **Insert Merge Field** on the OfficeWriter toolbar and select **EmployeeID** to insert the field in the document.

   «Query1.EmployeeID»

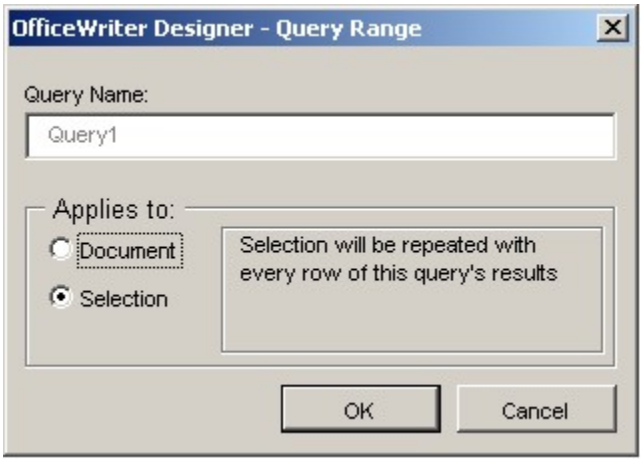
4. Press the Tab key to add a space after the field you inserted.
5. Click **Insert Merge Field** on the OfficeWriter toolbar and select **Lastname**.
6. Type a comma and a space after the Lastname merge field.
7. Click **Insert Merge Field** on the OfficeWriter toolbar and select **Firstname**.
8. Press Enter. Your report should look like this:

   «Query1.EmployeeID» «Query1.LastName», «Query1.FirstName»

9. Highlight the line in your document that contains the merge fields, and a blank line below the line of merge fields.

   «Query1.EmployeeID» «Query1.LastName», «Query1.FirstName»

10. Select Query Range from the OfficeWriter toolbar.
11. Make sure that **Selection** is chosen and click **Ok**.



> Note on step 9: If you highlight the line of merge fields without highlighting a line after it, the report will repeat the fields for each row of data on the same line in the document. Since we want each row of data to appear on a new line in the document, we must select the blank line below the merge fields. This ensures that a line break is contained in the query range.

Saving Your Template

Do not use Word's **File/Save** menu item to save your template. Use the **Save As** button on the OfficeWriter toolbar to save your template as a report definition file in RDL format.

1. From the OfficeWriter Designer toolbar select **Save As**.
2. Navigate to a local folder where you will store the template report file. This will be where you store your work file in case you want to edit it later, **not** a location on the Reporting Services server.
3. Save the template as an RDL file.

Next, publish and view your report. Your results should look like this:

1	Gilbert, Guy
2	Brown, Kevin
3	Tamburello, Roberto
4	Walters, Rob
5	D'Hers, Thierry
6	Bradley, David
7	Dobney, JoLynn
8	Ellerbrock, Ruth
9	Erickson, Gail
10	Johnson, Barry
11	Goldberg, Jossef
12	Duffy, Terri
13	Higa, Sidney
14	Maxwell, Taylor
15	Ford, Jeffrey
16	Brown, Jo

Samples

Download the .rdl file created in this section.

Setting Query Range

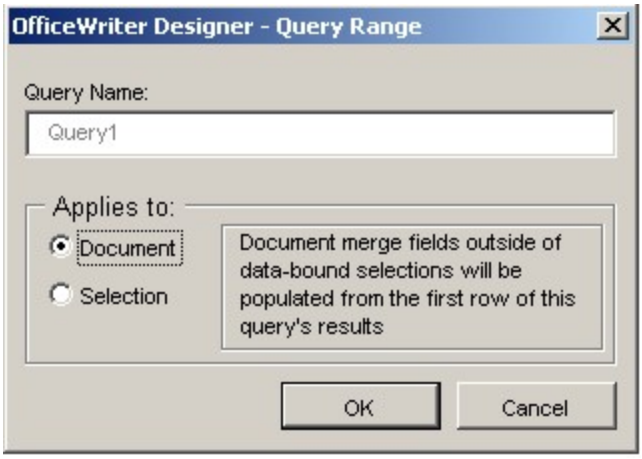
A query's range may be either **Document** or **Selection**. If a query is set to Document range, only the first row of data is returned from the query. If a query is bound to a Selection within the document - a text fragment, list, or table row - the query will return all the rows to the report and the selected text will be repeated for each row returned from the database.

How to Set Query Range to Document

To set a query's range to Document:

1. From the OfficeWriter Designer's **Select Query** drop-down, select the query.
2. Click the OfficeWriter Designer's **Query Range** button.
3. In the dialog, select **Document**.
4. Click **Ok**.

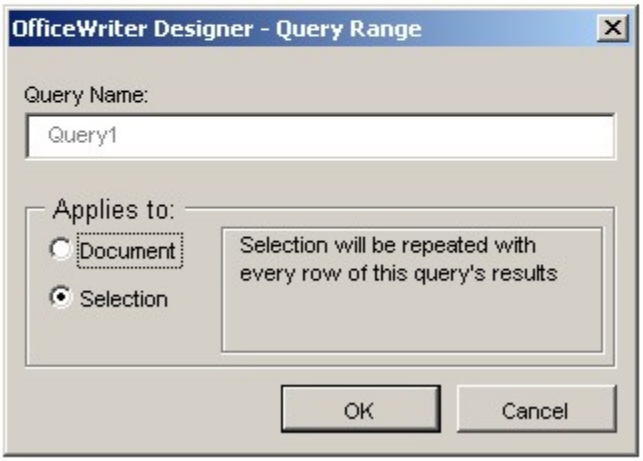
You may also set the query range to document when you first create the query. When you click **Add Query** the first screen you are presented with is the **Query Range** dialog box. Select **Document** from this screen.



How to Set Query Range to Selection

To set a query's range to Selection:

1. Add merge fields to your report.
2. From the OfficeWriter Designer's **Select Query** drop-down, select the query.
3. Highlight the merge fields that you want to include in the selection.
4. Click the OfficeWriter Designer's **Query Range** button.
5. In the dialog, choose **Selection**.
6. Click **Ok**.



Examples

Here are the results of a Document range query:

Abingdon

Here are the results of the same query, with the query range set to Selection:

Abingdon
Albany
Alexandria
Alhambra
Alpine
Altadena
Altamonte Springs
Anacortes
Arlington
Ascheim
Atlanta
Auburn
Augsburg
Augusta
Aujan Mournede
Aurora
Austell
Austin
Bad Soden
Baldwin Park
Ballard
Baltimore
Barrie
Barstow
Basingstoke Hants
Baytown
Beaverton
Bell Gardens

Selection Limitations

When you set a query to Selection range, the following Word features cannot be included in the selected text fragment, list, or table row:

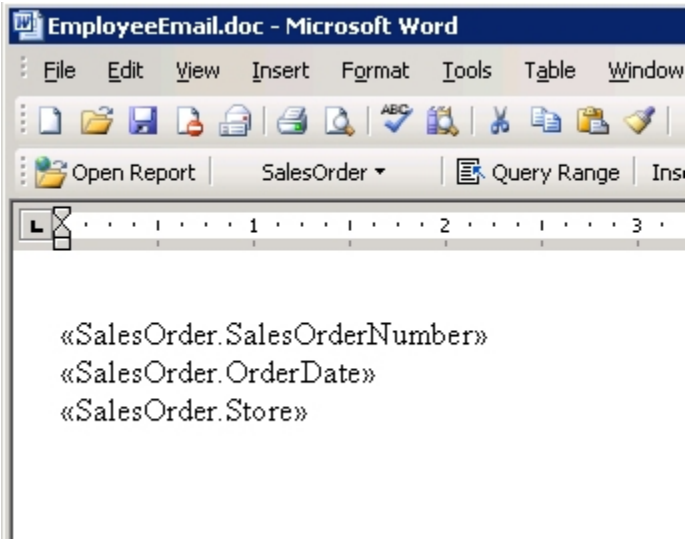
- Nested selections (Only one data source may be assigned to a single selection.)
- Overlapping selections
- Comments
- Drawing Objects
- Text Boxes
- Footnote and endnote references
- Table and picture indexes
- Single cell in a table
- Smart tags (smart tags will be removed from the document)
- Selections in headers, footers, footnotes, comments, text boxes, etc.

Adding Merge Fields

An OfficeWriter Word template is a Word file that contains **merge fields**. A merge field is a placeholder for database values. When the report is published, OfficeWriter will replace the merge fields with data from the database. The format of a merge field is:

<<DatabaseQueryName.FieldName>>
For example, this merge field is a placeholder for values from the "Last Name" field in the data set returned by a query called "Employees":

<<Employees.LastName>>
The template shown below contains three merge fields.



A query's range may be either **Document** or **Selection**. If a query is set to Document range, only the first row of data is returned from the query. If a query is bound to a Selection within the document - a text fragment, list, or table row - the query will return all the rows to the report and the selected text will be repeated for each row returned from the database.

Adding Selection Merge Fields

1. Place your cursor at the point in the document where you want to insert the merge field.
2. On the OfficeWriter toolbar, click **Insert Merge Field** and select a field.
3. Repeat steps 1 and 2 to insert additional merge fields.
4. Highlight the set of merge fields that you want to repeat for each row of data returned by the query.
5. Select **Query Range** from the OfficeWriter toolbar.
6. Make sure that **Selection** is chosen and click **Ok**.

Adding Document Merge Fields

1. From the OfficeWriter Designer's **Select Query** drop-down, select a query.
2. Click **Query Range**.
3. In the dialog, select **Document**. Click **Ok**.
4. Place your cursor at the point in the document where you want to insert the merge field.
5. On the OfficeWriter toolbar, click **Insert Merge Field** and select a field.
6. Repeat steps 1 and 2 to insert additional merge fields.

Formatting Merge Fields

When you create a merge field in Microsoft Word, you can apply formatting to the field. For example, you can set a merge field's format to "Uppercase" to display the field's value in uppercase letters. OfficeWriter supports most text, date, and time formats available in Microsoft Word.

- General Text Formatting Options
- Date and Time Formatting Options

This section explains how to apply merge field formatting by adding format switches to the field codes. You can also apply all standard formatting (bold, italic, underline, etc.) to merge fields from Word's Format menu or toolbar.

General Text Formatting Options

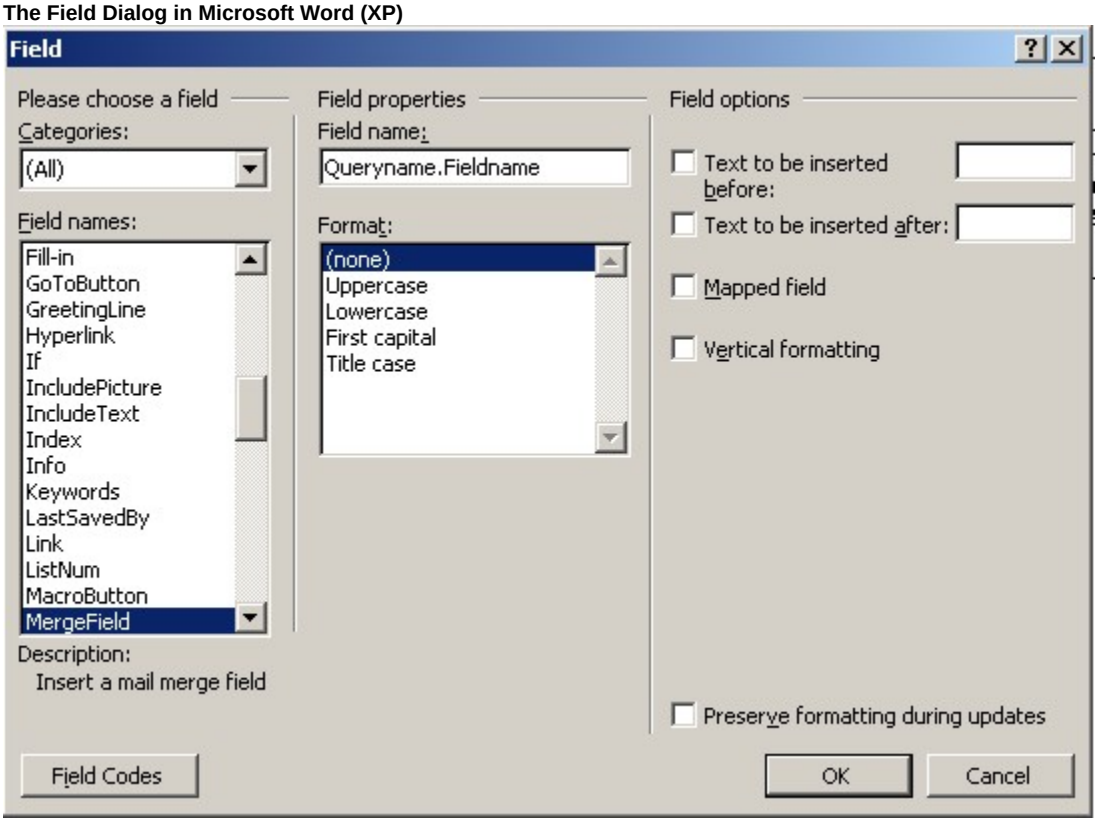
After you've added a merge field using the OfficeWriter toolbar's *Insert Merge Field* button, you may apply formatting. There are two ways to add field code formatting: from the dialog box Word provides or by typing the codes directly into the merge field.
To type the codes directly into the field tag, you must make sure the field codes are visible. If the field displayed in the report does not begin with "{MERGEFIELD", click the field and press SHIFT+F9 or right-click the field and select **Toggle Field Codes**. This will toggle viewing the entire field tag or an abbreviation. Once you have the entire tag visible you can type the codes below at the end of the tag as shown.

The following text formatting options can be set within Microsoft Word's Field dialog, or by entering formatting codes within the merge field:

- **Uppercase**
  Displays the merge field's value in uppercase letters.
- **Lowercase**
  Displays the merge field's value in lowercase letters.
- **First capital**
  Capitalizes the first letter of the first word in the field.
- **Title case**
  Capitalizes the first letter of each word in the field.
- **Text Before**
  Inserts a specified phrase before the merge field value.
- **Text After**
  Inserts a specified phrase after the merge field value.

Let's look at adding codes via the Word dialog box.

The Field Dialog in Microsoft Word (XP)



To set a merge field's formatting to Uppercase, Lowercase, Title case, or First capital using the Field dialog:

- Right-click the merge field and select **Edit Field**.
- From the **Format** list select a format. For example, select **Uppercase**.

To display text before and/or after a merge field value:

- Right-click the merge field and select **Edit Field**.
- Check **Text to be inserted before** and/or **Text to be inserted after**.
- In the Text Before text box, enter a phrase to display before the merge field value, and/or, in the Text After text box, enter a phrase to display after the merge field value.

You can also set these formatting options by entering special codes in the merge field. To view and edit a merge field's codes, right-click the field and select *Toggle Field Codes* or click on the field and press SHIFT+F9. (You can display the entire report's codes by pressing ALT+F9). A field without special formatting looks like this: {MERGEFIELD FieldName}

Format	Field Codes	Example
Uppercase	{MERGEFIELD *FieldName* * Upper}	{MERGEFIELD ProductName * Upper}
Lowercase	{MERGEFIELD *FieldName* * Lower}	{MERGEFIELD ProductName * Lower}
First capital	{MERGEFIELD *FieldName* * FirstCap}	{MERGEFIELD ProductName * FirstCap}
Title case	{MERGEFIELD *FieldName* * Caps}	{MERGEFIELD ProductName * Caps}
Text Before	{MERGEFIELD *FieldName* \b "*Text to insert before*"}	{MERGEFIELD OrderDate \b "Order Date: "}
Text After	{MERGEFIELD *FieldName* \f "*Text to insert after*"}	{MERGEFIELD OrderDate \f " (Order Date)"}

Date and Time Formatting Options

Using field codes, you can apply date/time formatting to merge fields that will bind to database fields of types Date, Time, and Timestamp, or to an object of type System.DateTime. The general format for applying date/time codes is: {MERGEFIELD FieldName \@ "Formatting Pattern"}

Date/Time Format Code	Description	Field Code Example	Output Example
Day			
d	Displays the day of the month as a number. Single digit day numbers will not include a leading zero.	{MERGEFIELD Date \@ "M/d/yyyy"}	4/7/2003
dd	Displays the day of the month as a number. Single digit day numbers will include a leading zero.	{MERGEFIELD Date \@ "dd MMMM yyyy"}	07 April 2003
ddd	Displays a three-letter abbreviation for the day of the week.	{MERGEFIELD Date \@ "ddd, d-MMM-yy"}	Mon, 7-Apr-03
dddd	Displays the full name of the day of the week.	{MERGEFIELD Date \@ "dddd, MMMM d, yyyy"}	Monday, April 7, 2003
Month (Use uppercase M for months, lowercase m for minutes)			
M	Displays the month as a number. Single digit month numbers will not include a leading zero.	{MERGEFIELD Date \@ "M/d/yy"}	4/7/03
MM	Displays the month as a number. Single digit month numbers will include a leading zero.	{MERGEFIELD Date \@ "yyyy-MM-dd"}	2003-O4-07
MMM	Displays a three-letter month abbreviation.	{MERGEFIELD Date \@ "MMM-yy"}	Apr-03
MMMM	Displays the full month name	{MERGEFIELD Date \@ "MMMM d, yyyy"}	April 7, 2003
Year			
yy	Displays a two-digit year number. For years 1-9, the year number will include a leading zero.	{MERGEFIELD Date \@ "MMM-yy"}	Apr-03

yyyy	Displays a four digit year number	{MERGEFIELD Date \@ "MMMM d, yyyy"}	April 7, 2003
Hours			
h	Use lowercase h to display times based on the 12-hour clock. Lowercase h displays single-digit hours as single-digit numbers, without a leading zero.	{MERGEFIELD Time \@ "h:mm"}	6:05
hh	Use lowercase hh to display times based on the 12-hour clock. Lowercase hh displays single-digit hours with a leading zero.	{MERGEFIELD Time \@ "hh:mm am/pm"}	06:05 am
H	Use uppercase H to display times based on the 24-hour clock. Uppercase H displays single-digit hours as single-digit numbers, without a leading zero.	{MERGEFIELD Time \@ "H:mm"}	7:05
HH	Use uppercase HH to display times based on the 24-hour clock. Uppercase HH displays single-digit hours with a leading zero.	{MERGEFIELD Time \@ "HH:mm"}	18:30
Minutes (Use lowercase m for minutes, uppercase M for months)			
m	Displays single-digit minutes without a leading zero.	{MERGEFIELD Time \@ "m 'minutes'"}	2 minutes
mm	Displays single-digit minutes with a leading zero.	{MERGEFIELD Time \@ "hh:mm am/pm"}	06:05 am
AM & PM			
AM/PM	Displays uppercase AM or PM.	{MERGEFIELD Time \@ "hh:mm AM/PM"}	08:30 PM
am/pm	Displays lowercase am or pm.	{MERGEFIELD Time \@ "hh:mm am/pm"}	07:55 am
Other Text			
'*text*'	To display text within a date or time, enclose the text in single quotation marks.	{MERGEFIELD Time \@ "hh:mm 'EST'"}	06:15 EST
character	To include a character, such as - (hyphen), in a date or time, do not enclose in quotation marks.	{MERGEFIELD Date \@ "MMM-yy"}	Apr-03

Publishing Your Report

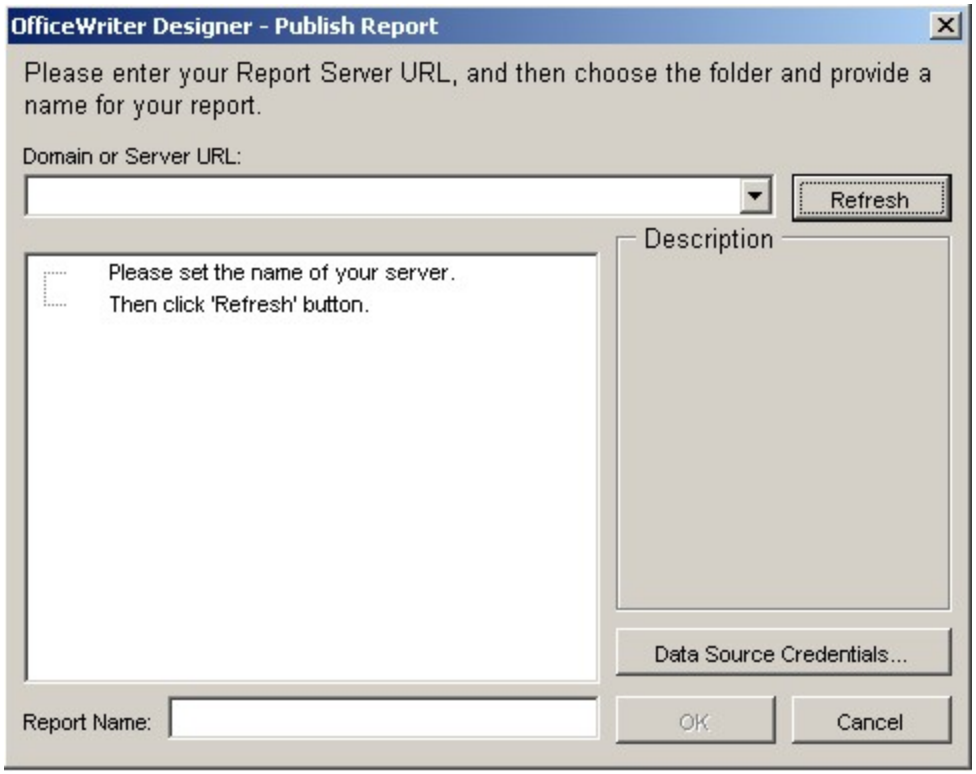
Saving your report and publishing it are two different things. Saving will save a copy of the report definition file locally. Publishing will copy and deploy the file to the Reporting Services server. After you publish, open the Reporting Services Report Manager (Usually http://<MyReportServer>/Reports). You will see your report with other published reports. From the Report Manager you change Reporting Services report settings (security, etc.).

Before publishing the report on the Reporting Services server, you must save the template locally as an RDL file:

1. From the OfficeWriter Designer toolbar select **Save As**.
2. Navigate to a local folder where you will store the template report file. This will be where you store your work file in case you want to edit it later, **not** a location on the Reporting Services server.
3. Save the template as an RDL file.

To publish your report:

1. From the OfficeWriter Designer, select **Publish**. The **Publish Report** dialog will open.



2. In the **Domain or Server URL** field, enter the path to your Reporting Services server (for example http://MyReports/ReportServer).
3. Click **Refresh**. OfficeWriter will display the folders available on the server.
4. Navigate to the destination folder for your report.
5. In the **Report Name** field (at the bottom of the **Publish Report** dialog), enter a name for your report.
6. Optional: Click **Data Source Credentials** to specify how the report will link to the data. You may also do this from the Reporting Services Report Manager after you publish your report. See the Reporting Services documentation for the meaning of the different data source credentials options.
7. Click **Ok**. If your report was already published on the server, you will be asked to overwrite it. When the report is published, you will receive a message box telling you that publishing was successful.

You are now ready to view your report.

Viewing Your Report

After a report is published you can view it using the OfficeWriter Designer toolbar, or from Reporting Services Report Manager.

Viewing a Report with OfficeWriter Designer

1. If the template for the report that you want to view is not already open in Microsoft Word:
    a. Open Word.
    b. From the OfficeWriter Designer toolbar, select **Open Report**.

c. Navigate to the report definition file that you created with OfficeWriter and open it.

2. Click the **View** button on the OfficeWriter Designer toolbar. The report will open in another Word window.
3. Click **Close Report View** to return to your template.

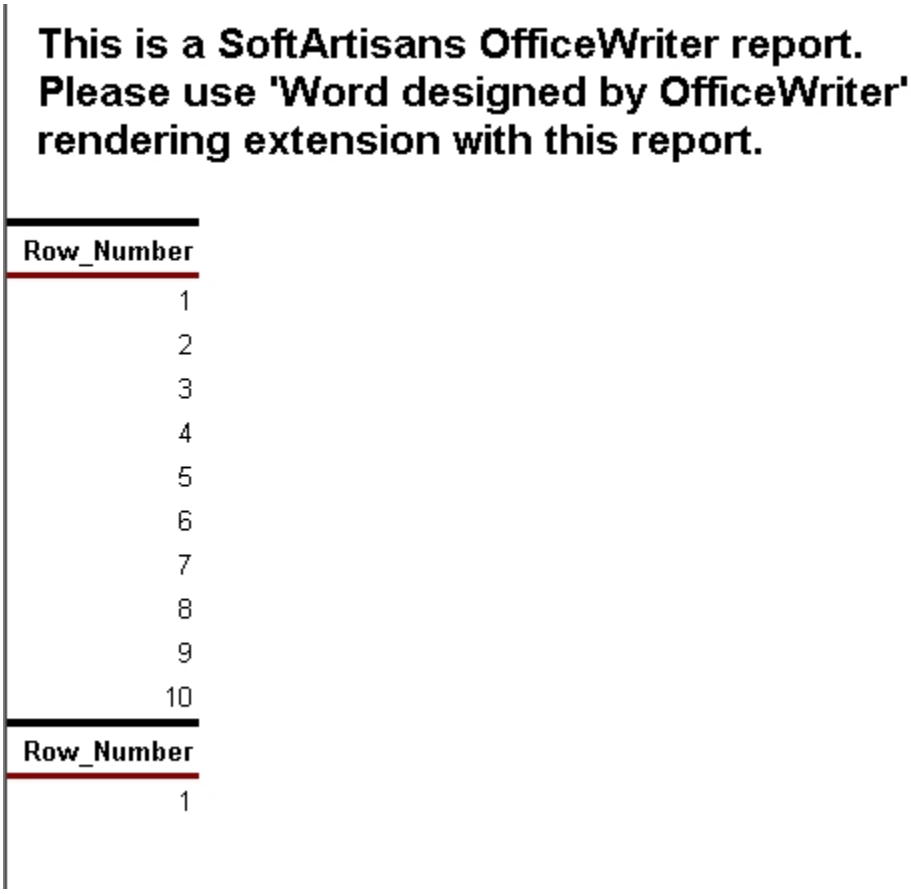
Report Browsing

Another way to view a report is through **Report Browsing**:

1. In Microsoft Word, close all active documents.
2. Click the **View** button on the OfficeWriter Designer toolbar.
3. Navigate to the report definition file that you created with OfficeWriter and open it.
4. Click the **View** button on the OfficeWriter Designer toolbar. The report will open in another Word window.
5. Click **Close Report View** to return to your template.

Viewing a Report in Reporting Services

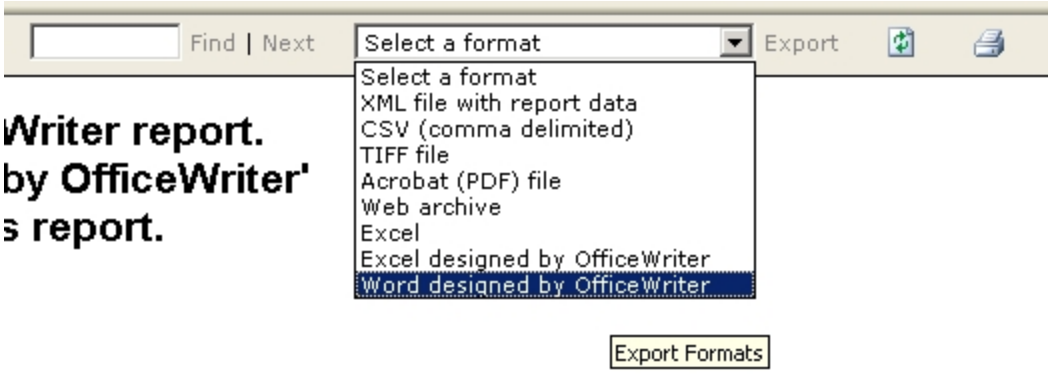
The third way to view a report is from Reporting Services Report Manager. To do this, open your browser and navigate to the Report Manager (usually http://<ReportServer>/Reports). Navigate to your report and open it. Reports created in OfficeWriter Designer will display a message telling you to render the report using the Word (.doc) designed by OfficeWriter extension.



What you see on the screen is not the report layout as you designed it in Word using OfficeWriter. It is only a listing of the raw data returned from your report's queries. If the report definition was originally created with Visual Studio (or another tool) and modified with OfficeWriter, you will see the original layout, not the OfficeWriter layout.

To see the report as you designed it with OfficeWriter:

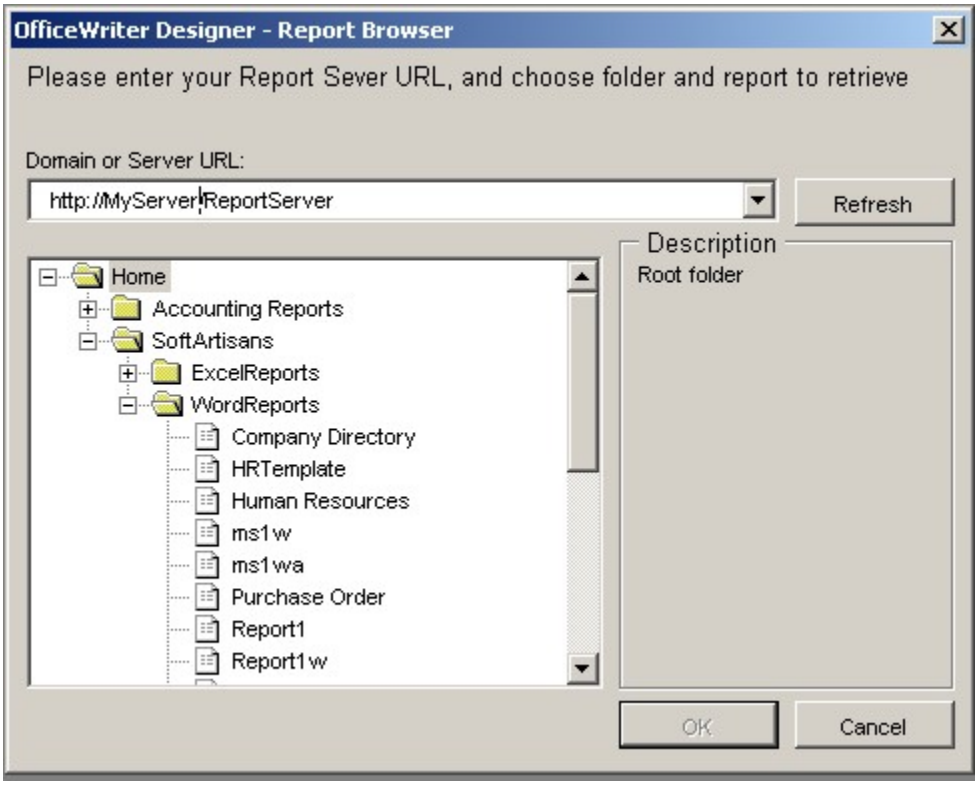
1. From the **Select a format** drop-down list, choose **Word (.doc) designed by Officewriter**.



2. Click **Export**.
3. You will be prompted to save or open. To save the report as a Word file, click **Save**. To view the report, click **Open**.

Browsing Reports

OfficeWriter Designer for Word not only gives you the ability to create your reports in Word, but it also gives you the ability to view any of those reports without leaving Word. To use the OfficeWriter Designer toolbar as a report browser from Word, simply close all active documents. Then press the **View** button on the OfficeWriter Designer toolbar. You will see the **Report Browser** dialog box.



Type in the server name or url for your Reporting Services Report Server. Click **Refresh** and then navigate to the report you wish to see. Click **Ok** to view your report.

> If you created your report in Visual Studio and then modified it with OfficeWriter Designer for Word, only the modifications will be displayed. In this case, whatever you designed in Word is what you will see using the **View** button.

Removing Queries

OfficeWriter Designer not only allows you to add and change queries, it also lets you remove them from your report. However, you may only remove queries from reports you created with OfficeWriter Designer. If your report was originally created with Visual Studio, you cannot remove or edit queries from within OfficeWriter Designer.

To remove a query from an OfficeWriter report:

- Open the report file.
- Using the the **Select Query** button on OfficeWriter Designer toolbar, choose the query you want to remove.
- Select **Delete Query** from the toolbar.
- You will be prompted to confirm that you want to delete the query. Click **Yes** to confirm.

> Deleting a query will remove it from your report. However, it will not delete merge fields or formulas associated with the query. You must manually remove any reference to the query from your report or you will receive an error when you try to view your report.

Reports with Parameters

OfficeWriter and Reporting Services allow you to use parameters to filter the data returned by your database query, and display a subset of the data in your report.

What is a parameter?

A parameter is a value that filters data. For example, you have a sales report that lists each sales group and each sales rep within that group. However, you only want to see one sales group at a time. If you use the sales group field as a parameter, when the report is executed, you will be prompted to select a group. The report will only display data for the group that you selected.

A single report can include multiple parameters.
To use parameters, you must first define them. Defining parameters differs depending on whether you set them up in OfficeWriter Designer or in Visual Studio. We will explore both so you can determine which is best for you.

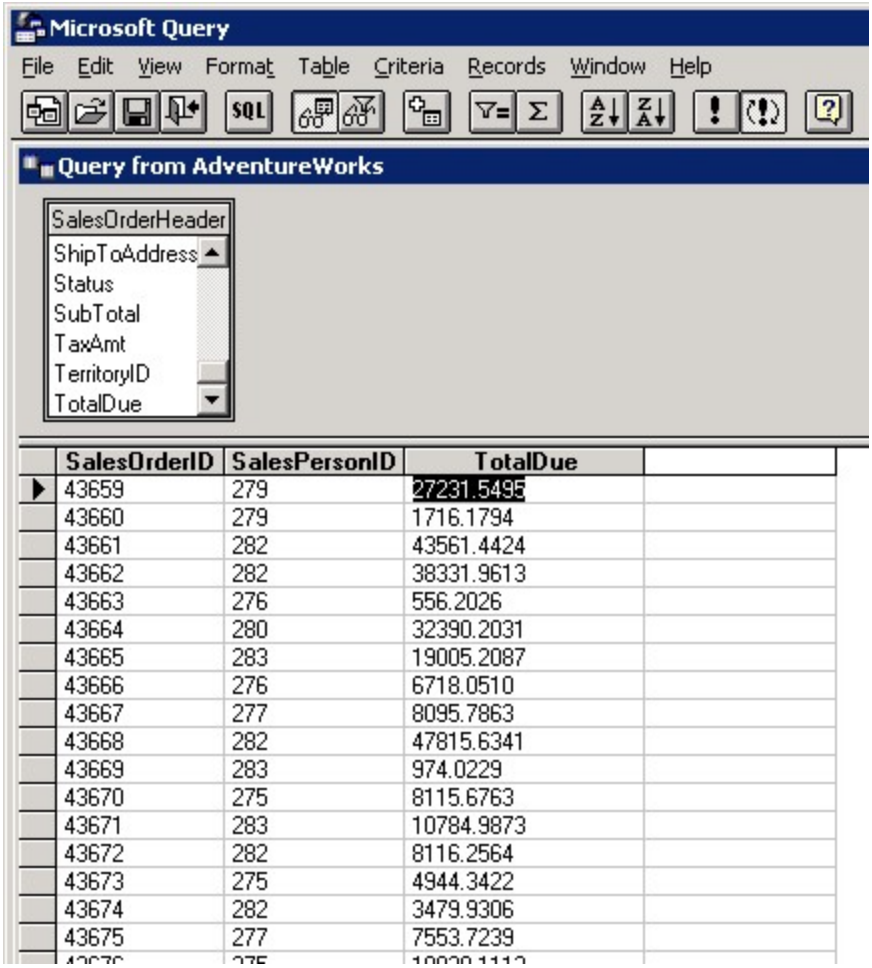
Defining Parameters with OfficeWriter

OfficeWriter uses Microsoft Query to add parameters to a report.

> If Microsoft Query cannot display a query graphically, it will not allow you to define a parameter for the query. For example, if a query contains the TOP keyword, which cannot be represented graphically, Microsoft Query will warn you that the query cannot be shown graphically and will not allow you to add parameters to the query.

Let's add a parameter to a sample query. The sample will use the AdventureWorks sample database, which ships with Reporting Services.

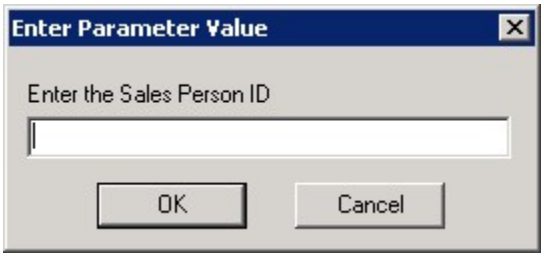
1. Open Microsoft Word and create a new document.
2. Click **Add Query** on the OfficeWriter toolbar.
3. Follow steps 2-12 of Create a Database Query.
4. In the **Add Tables** dialog box, find the **SalesOrderHeader** table in the list and select **Add**. Click **Close**.
5. In Microsoft Query, drag the following fields to the query: **SalesOrderID**, **SalesPersonID**, and **TotalDue**.



6. Click the **Hide/Show Criteria** button on the Microsoft Query toolbar to open the criteria table.

7. Click within the top left cell in the criteria table and select **SalesPersonID** from the drop-down list.
8. In **Value** cell beneath **SalesPersonID**, type*[Enter the Sales Person ID]*. This is the text that will be used to prompt the user.

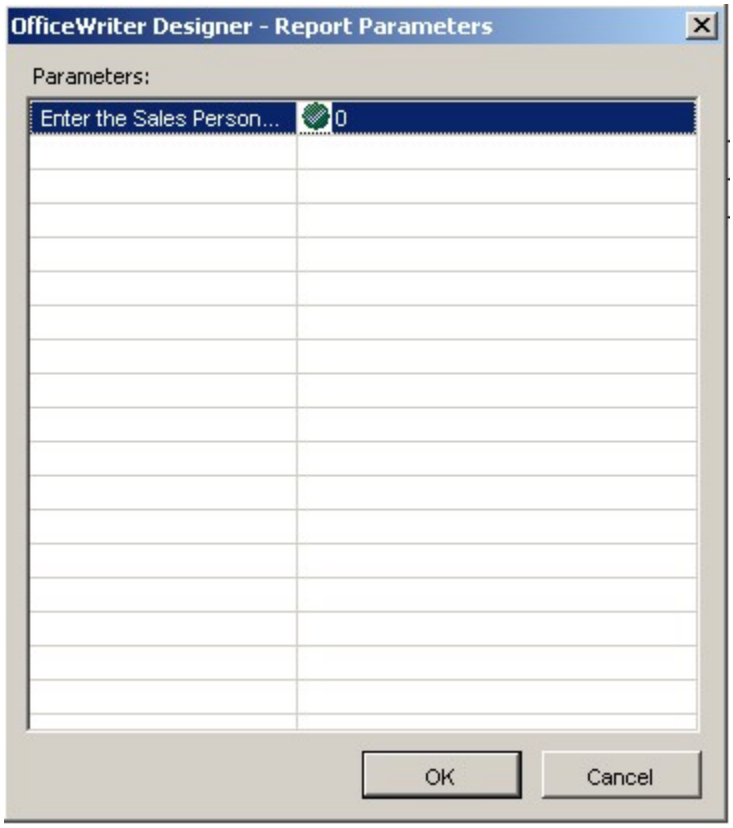
9. Microsoft Query will prompt you to enter the default value for the parameter. Enter a sales person ID value.



10. From the **File** menu, select *Return to OfficeWriter Designer*.
11. Using OfficeWriter Designer's **Insert Merge Field** button, add the fields to your report.
12. Set the query range to **Selection**.

13. Publish the report.

14. Click **View** on the OfficeWriter toolbar. You will be asked to enter a parameter value.



15. Replace the 0 with 280. Every row displayed in the report will have SalesPersonID number 280.

Sales Order ID	Sales Person ID	Total Due
43664	280	32390.2031
43860	280	14603.7393
43866	280	5403.8208
43867	280	43499.5830
43877	280	27308.9192
43894	280	43077.1098
43895	280	43115.5616
43911	280	26197.5398
44109	280	18364.2006
44285	280	76802.3808
44483	280	4000.9786
44501	280	26128.8674
44511	280	13471.6989
44513	280	57801.3112
44523	280	98696.0560
44540	280	51315.1022
44541	280	67393.9099
44554	280	984.7764
44563	280	63320.1589
44771	280	92392.1106
45041	280	556.2026
45042	280	53896.0778
45267	280	4592.3356
45283	280	37643.1378
45295	280	21607.8799
45296	280	32240.4897
45303	280	27041.7149
45318	280	39861.5048

Defining Parameters in Visual Studio

When you create data sources and queries in Visual Studio, you can also define parameters.

When a report with a parameter is opened, OfficeWriter will prompt the user to enter a parameter value. If the parameter was defined with OfficeWriter and Microsoft Query, a list of values that may be entered will not be displayed. The user will have to know the value - for example, a sales rep ID number - to enter it. If the parameter was defined in Visual Studio, OfficeWriter will display a list of valid values. These may be the actual values (for example, sales rep IDs) or meaningful labels (for example, sales rep names).

1. Open Visual Studio and create an empty report project containing an empty report.

2. Click the **Data** tab and set up a data source that points to the AdventureWorks database.

3. Enter the query as shown below. It is the same query we used in the example in the previous section. This will be our main query.

Data | Layout | Preview

Dataset: AdventureWorks

```
SELECT SalesOrderID, SalesPersonID, TotalDue
FROM Sales.SalesOrderHeader
```

SalesOrderID	SalesPersonID	TotalDue
43659	279	27231.5495
43660	279	1716.1794
43661	282	43561.4424
43662	282	38331.9613
43663	276	556.2026
43664	280	32390.2031
43665	283	19005.2087
43666	276	6718.0510

4. We want the report user to select a sales rep name from a list rather than remember an id number. So, we must create a new query that we will use to display the list of names. The query requires only two fields. The first is the id or field that will be used in the main query (SalesPersonID in the example above). The second is the field that will be displayed to the user. Use the following query (dataset), which we called SalesPersonList.

Data | Layout | Preview

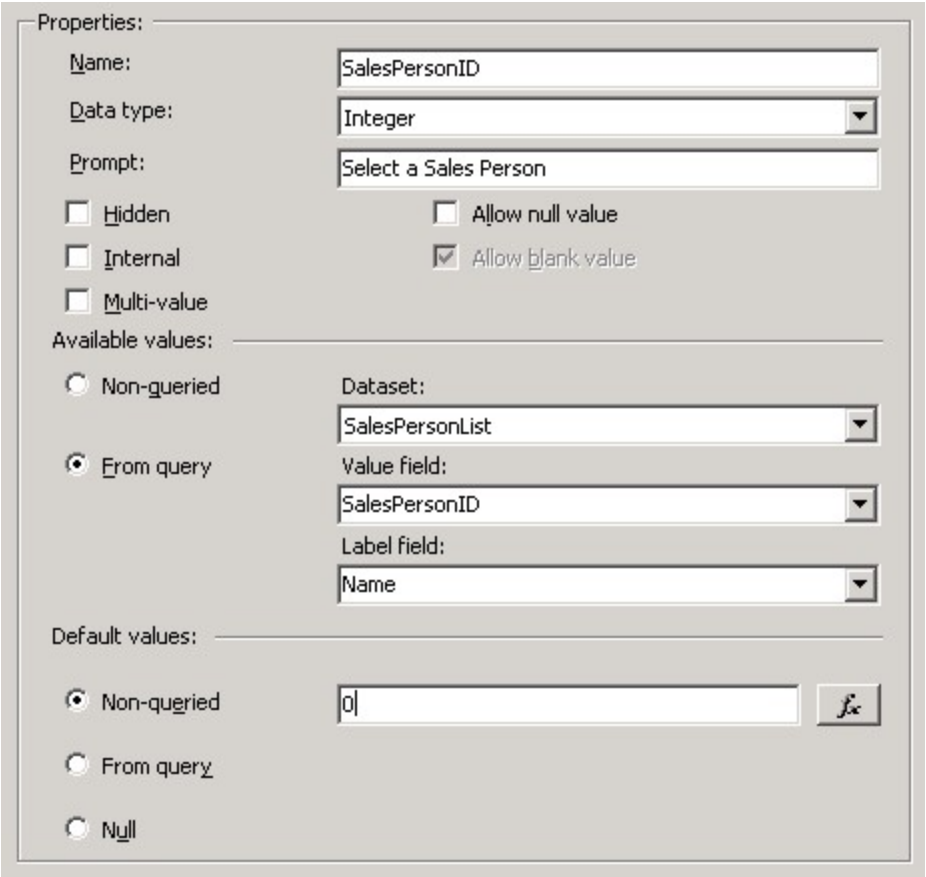
Dataset: SalesPersonList Command type:

```
SELECT Sales.SalesPerson.SalesPersonID, Person.Contact.LastName + ', ' +
  Person.Contact.FirstName + ' ' + Person.Contact.MiddleName As Name
FROM Sales.SalesPerson
  INNER JOIN HumanResources.Employee
  ON Sales.SalesPerson.SalesPersonID = HumanResources.Employee.EmployeeID
  INNER JOIN Person.Contact
  ON HumanResources.Employee.ContactID = Person.Contact.ContactID
ORDER BY Person.Contact.LastName, Person.Contact.FirstName, Person.Contact.MiddleName
```

SalesPersonID	Name
288	Abbas, Syed E
284	Alberts, Amy E
280	Ansman-Wolfe,...
275	Blythe, Michael G
283	Campbell, David R
277	

The AdventureWorks database stores its sales reps in the Sales.SalesPerson table. To get the names of the sales reps, however, we must join the Sales.SalesPerson table with the HumanResources.Employee and Person.Contact tables.

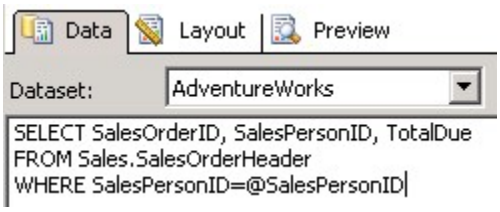
5. From the Visual Studio menu bar select **Report/Report Parameters** and click **Add** to create a new parameter. Fill in the dialog as shown:



Properties	
Name	The name of the report parameter, which is used when accessing the parameter through a query or formula
Prompt	The text used to prompt the user to select a value for the parameter
Data Type	The data type of the field you will be using as a parameter (not the data type of the value displayed to the user)
Dataset	The dataset that will populate the list of possible parameter values
Value field	The field that will be used as a parameter
Label Field	The field that the user will see when selecting a parameter from a list
Non-queried	The default value when no parameter has been selected

Note: For available and default values, you may use queried or non-queried values, i.e., you can base your values on a query or a list. Each will work with OfficeWriter Designer.

6. Click **Ok** to save the parameter.
7. Click the **Data** tab and select the first dataset we created, AdventureWorks.
8. Go back to the main query and add the parameter to the query. Include '@' before the parameter name, as shown:



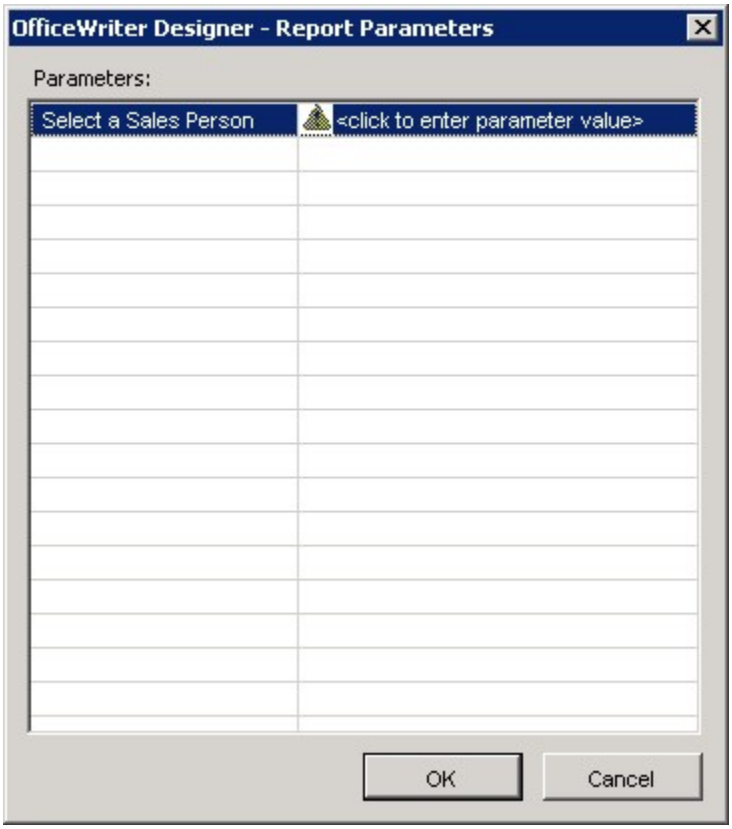
9. Save the report definition file in a location you can access with OfficeWriter Designer and close Visual Studio.

We will now open the report definition file created in Visual Studio and create a report with OfficeWriter Designer.

1. Open Microsoft Word.
2. Click **Open Report** on the OfficeWriter toolbar.
3. Navigate to the report file you just created in Visual Studio and open it.
4. Click **Select Query** on the OfficeWriter toolbar. You will see the two queries created in Visual Studio. Select AdventureWorks, the main query.
5. Using the **Insert Merge Field** button, place all the merge fields in the report, as shown:

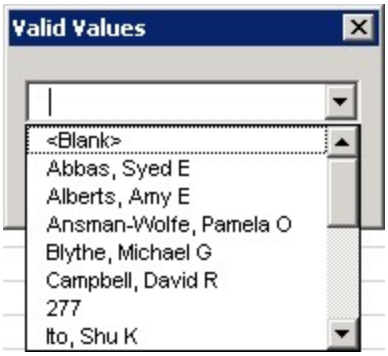
Sales Order ID	Sales Person ID	Total Due
«AdventureWorks. SalesOrderID»	«AdventureWorks. SalesPersonID»	«AdventureWorks. TotalDue»

6. Highlight the row containing the merge fields.
7. Click Query Range and choose **Selection**.
8. Publish and View the report. The **Report Parameters** dialog will open.



When we defined the parameter with Microsoft Query, the **Report Parameters** dialog did not instruct the user to click to enter a parameter value. When you click to enter a value, the **Valid Values** dialog will open.

9. Select a name from the drop-down list of valid parameter values. These are actually labels, not the values. When you select a name, the corresponding ID will be entered in the **Report Parameters** dialog.



10. In the **Report Parameters**, click **Ok**. The report displayed will contain only records for the sales rep that you selected.

Sales Order ID	Sales Person ID	Total Due
43664	280	32390.2031
43860	280	14603.7393
43866	280	5403.8208
43867	280	43499.5830
43877	280	27308.9192
43894	280	43077.1098
43895	280	43115.5616
43911	280	26197.5398
44109	280	18364.2006
44285	280	76802.3808
44483	280	4000.9786
44501	280	26128.8674
44511	280	13471.6989
44513	280	57801.3112
44523	280	98696.0560
44540	280	51315.1022
44541	280	67393.9099
44554	280	984.7764
44563	280	63320.1589
44771	280	92392.1106

Selective Filtering

One of the restrictions of using simple parameter selection is that you are **required** to select a parameter. What if sometimes you do not want to limit your report? What if you want a report with multiple parameters and you don't want to be required to select a value for each? For example, you have a report with Sales Person and Product parameters. If you are required to select one of each, you can never see all the product sales for one rep or all the sales for one product.

If you want to design a query that returns all the records if no parameter value is chosen, define a default value in the selection list query and add an OR to the WHERE clause of the main query comparing the parameter to its default value.

For example, in the example above, the selection list query was:

```
SELECT Sales.SalesPersonID.Person.Contact.LastName + ', ' +
  Person.Contact.FirstName + ' ' + Person.Contact.MiddleName AS Name
FROM Sales.SalesPerson
  INNER JOIN HumanResources.Employee
  ON Sales.SalesPerson.SalesPersonID = HumanResources.Employee.EmployeeID
  INNER JOIN Person.Contact
  ON HumanResources.Employee.ContactID = Person.Contact.ContactID
ORDER BY Person.Contact.LastName, Person.Contact.FirstName,
  Person.Contact.MiddleName
```

To define a default value, change the query to:

```
SELECT 0 AS SalesPersonID, 'All' AS Name,
  0 AS SortOrder
UNION
SELECT Sales.SalesPersonID.Person.Contact.LastName + ', ' +
  Person.Contact.FirstName + ' ' + Person.Contact.MiddleName AS Name,
  1 AS SortOrder
FROM Sales.SalesPerson
  INNER JOIN HumanResources.Employee
  ON Sales.SalesPerson.SalesPersonID = HumanResources.Employee.EmployeeID
  INNER JOIN Person.Contact
  ON HumanResources.Employee.ContactID = Person.Contact.ContactID
ORDER BY SortOrder, Name
```

The second query adds a sales person record called 'All' with a value of zero. When you do this, make sure that you select a value that is not in your table, or you will have a duplicate key value. Zero is not in the Employee table in the EmployeeID field, therefore it can be used. Adding the SortOrder field insures that this extra entry will display at the top of the list. Also be sure that the key value for the added entry (zero in this case) is set as the default value for the parameter on the Visual Studio Report Parameter screen.

To change the main query so that it will return all the records if no parameter is chosen, change the WHERE clause of the query from **'WHERE SalesPersonID=@SalesPersonID'** to **'WHERE (SalesPersonID=@SalesPersonID OR @SalesPersonID=0)'** (remember, zero was our default value).

Samples

Download an .rdl file created with Microsoft Query and OfficeWriter.

Download an .rdl file created with Visual Studio and OfficeWriter.

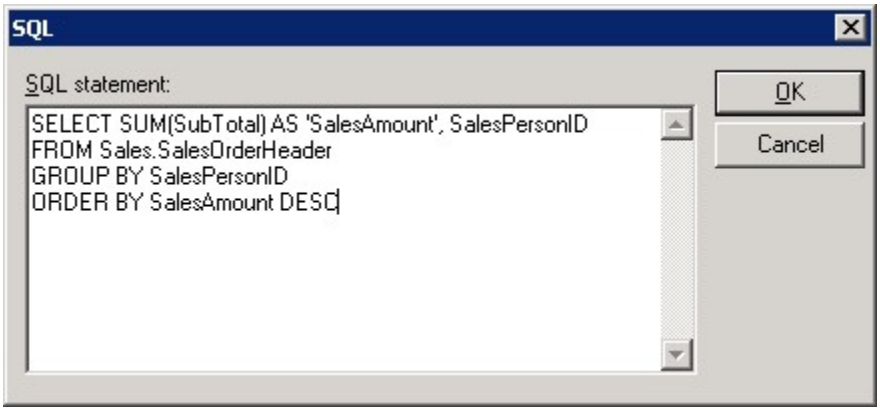
Download an .rdl file with selective filtering.

Adding Formulas

OfficeWriter Enterprise Edition allows you to create custom formulas. The formulas can be based on query results, report parameters, or they may access a set of global variables that Reporting Services contains. We will explore formulas by building a simple report and then adding formulas. Please read the Quick Start how to add queries and fields to reports if you do not already know how to do this.

This sample is based on the AdventureWorks sample database that is shipped with Reporting Services.

1. Open Microsoft Word and create a new document.
2. Click OfficeWriter Designer's **Add Query** button.
3. Follow steps 2-12 of Create a Database Query.
4. In the **Add Tables** dialog box, find the **SalesOrderHeader** table in the list and select **Add**. Click **Close**.
5. Click the SQL button on the Microsoft Query toolbar, and enter the following query:

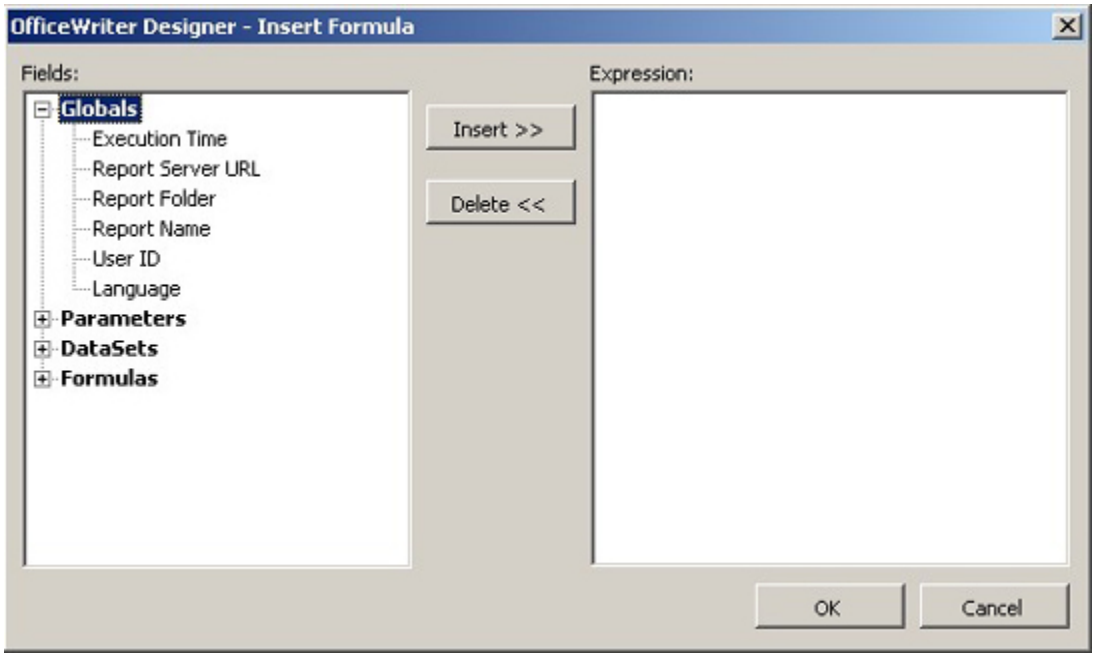


6. Click **Ok**.
7. From the **File** menu, select *Return to OfficeWriter Designer*.

Reporting Services Global Variables

Reporting Services contains global variables that you can access if you have OfficeWriter Enterprise Edition. To access the global variables:

1. On the OfficeWriter toolbar, click **Insert Formula** and select **Build New Formula**.
2. In the **Insert Formula** dialog, click the **+** next to **Globals** to open the list of Reporting Services global variables.



You will see six global variables:

Execution Time	The report's execution time
Report Server URL	The URL of the server running the report
Report Folder	The folder on the Report Server containing the report
Report Name	The Name of the report
User ID	The ID of the user logged on
Language	The report language

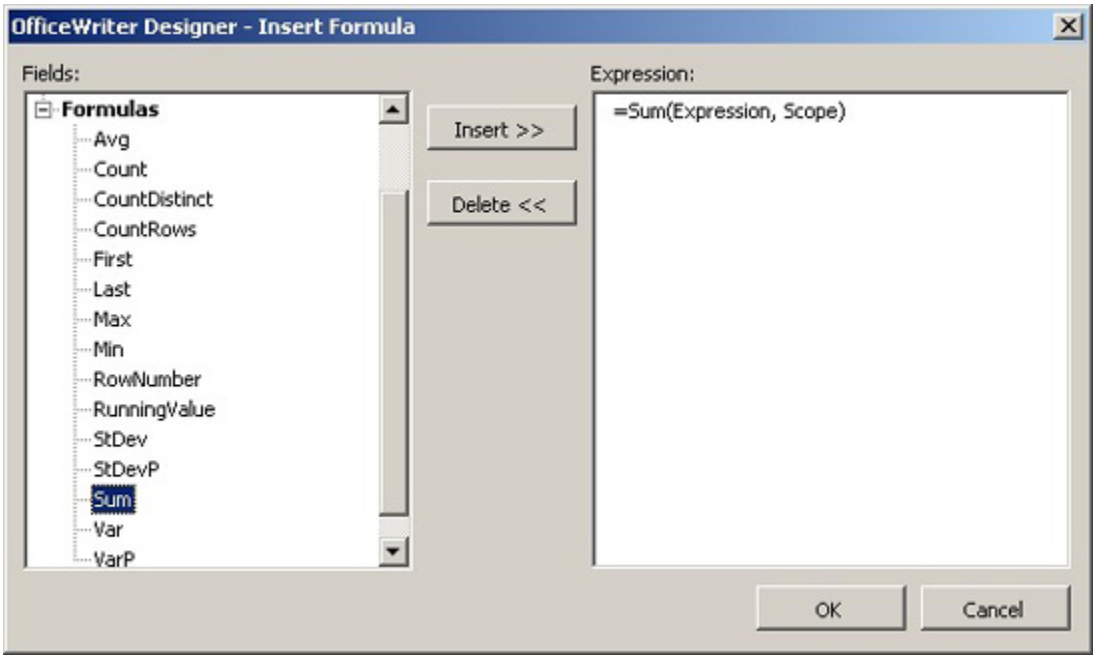
1. Select **Execution Time** from the list.
2. Click **Insert** and **Ok**.
3. At the top of your document, type Execution Time: followed by a space.
4. Click **Insert Formula** and select **=Globals!ExecutionTime**. The formula will be inserted in the document.
5. Press Enter a few times to put some space between the formula and what we will do next.
6. Click **Select Query** on the OfficeWriter toolbar and select the query created above.
7. Insert a two-column, three-row table in the page.
8. In the left column's first row, type **Sales Person ID**.
9. In the right column's first row, type **Sales Amount**.
10. Place your cursor in the second row of the left column.
11. Select **Insert Merge Field** from the OfficeWriter toolbar and choose **SalesPersonID**.

12. Place your cursor in the second row of the right column.
13. Select **Insert Merge Field** from the OfficeWriter toolbar and choose **SalesAmount**.
14. In the third row of the left column, type **Total**.

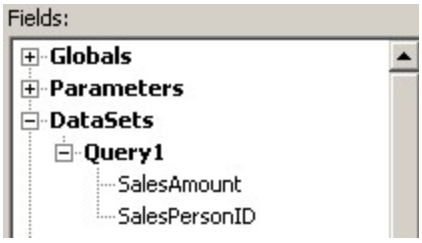
Execution Time: «=Globals!ExecutionTime»

Sales Person ID	Sales Amount
«Query1.SalesPersonID»	«Query1.SalesAmount»
Total	

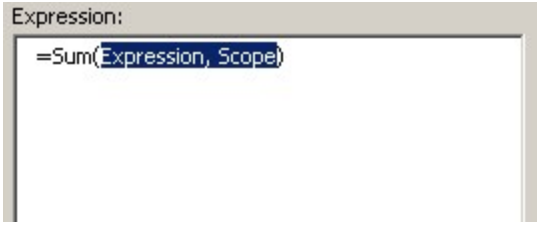
15. Click **Insert Formula** on the OfficeWriter toolbar and select **Build New Formula**.
16. Click the **+** to expand the **Formulas** list.
17. Scroll down, select **SUM**, and click insert.



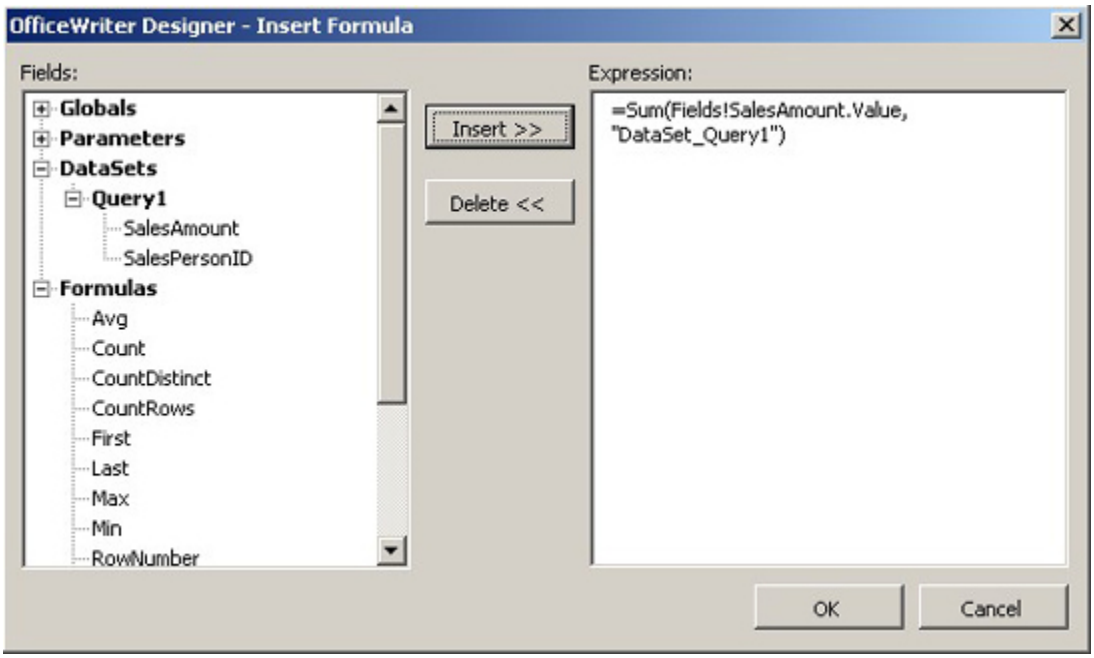
18. Click the **+** to expand the **DataSets** list.
19. Find your query and click its **+** to open it.



20. In the **Expression** list on the right, highlight everything inside the SUM parentheses, as shown.



21. Click **SalesAmount** and **Insert**. Your formula should now look like this:



22. Click **Ok** to return to your document.
23. Place your cursor in the third row of the right column of your table.
24. Select **Insert Formula** from the toolbar and choose your new formula.

Execution Time: «=Globals!ExecutionTime»

Sales Person ID	Sales Amount
«Query1.SalesPersonID»	«Query1.SalesAmount»
Total	«=Sum(Fields!SalesAmount.Value, »

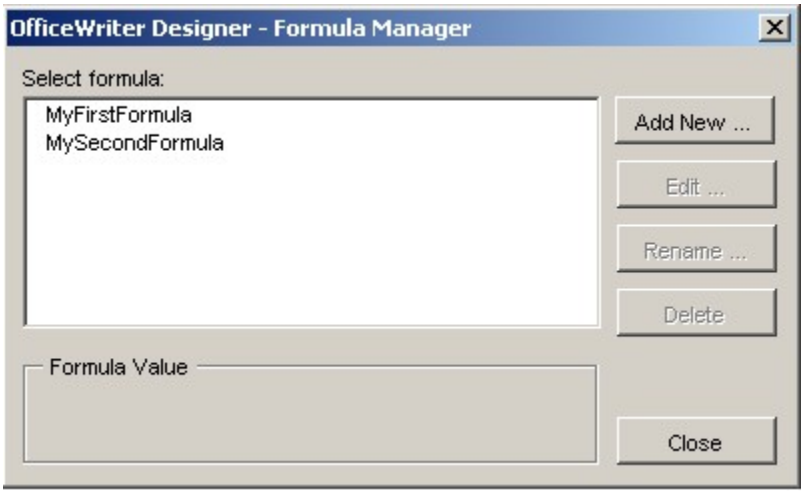
25. Click **Select Query** on the OfficeWriter toolbar and select your query.
26. Highlight the second row of the table.
27. Click **Query Range** on the OfficeWriter toolbar and make sure **Selection** is chosen. Click **Ok**.
28. Publish the report.
29. Click **View** on the OfficeWriter toolbar. Your report should look like this:

Execution Time: 11/11/2005 9:40:32 AM

Sales Person ID	Sales Amount
	29358677.2207
276	12647729.8280
277	12157927.1912
275	11252038.7650
285	10302726.6876
279	8714865.9695
281	7929164.9665
282	7210650.4978
286	5505602.6747
283	4551897.6610
278	4380714.2554
280	4029938.3561
287	2814958.8942
289	2241204.0424
290	1758385.9260
268	1369624.6494
284	891983.6435
288	219088.8836
Total	127337180.1126

Managing Formulas

Officewriter Designer gives you the ability to manage and maintain formulas you've built. The Formula Manager allows you to change, delete, and build new formulas. To start the Formula Manager, click the **Insert Formula** button on the OfficeWriter toolbar and select **Manage Formulas**.



To build a new formula from the Formula Manager screen:

1. Click the **Add New...** button. This will bring you to the Formula Builder screen described in the previous section.
2. Follow the directions above to create and use a new formula.

To change an existing formula:

1. Highlight the formula you want to change.
2. Click the **Edit** button. This brings you to the Formulas Builder screen described above.
3. Make the changes to the formula.

4. Click **Ok** to save the updated formula.

To delete a formula:

1. Highlight the formula you want to delete.
2. Click the **Delete** button.
3. Click **Yes** to confirm deletion.
4. Click **Close** to return to the report document.
5. ***Important:*** _You must manually review your report document and remove any reference to the deleted formula._

To rename a formula:

1. Highlight the formula you want to rename.
2. Click **Rename**.
3. On the Formula Name screen, type in a new name and click **Ok**.

Note: The formula name is only used to help you maintain formulas. It is not used anywhere in your report document.

How to Create Excel Reports

- What is an OfficeWriter Excel Template?
- The OfficeWriter Designer for Excel
- Adding a Template to an Existing Report
- Creating a New Template
- Grouping And Nesting
- Adding Data Markers
- Publishing Your Excel Report
- Viewing Your Excel Report
- Browsing Excel Reports
- Removing Queries from an Excel Report
- Excel Reports with Parameters
- Adding Formulas to an Excel Report
- Working With Charts
- Working With PivotTables
- Working With PivotCharts

What is an OfficeWriter Excel Template?

An OfficeWriter Excel template is an Excel workbook that contains **data markers**. A data marker is a cell value beginning with %%= that specifies a database column to insert in the spreadsheet column containing the marker. OfficeWriter templates are created with the OfficeWriter Designer.

When you save the template, the OfficeWriter Designer encodes it as a custom XML element in a Reporting Services RDL file. To publish a report, you will submit the RDL file to a Reporting Services server where OfficeWriter is installed. The OfficeWriter renderer on the server regenerates the template, and - using data supplied by Reporting Services - replaces the data markers in the document with database values.

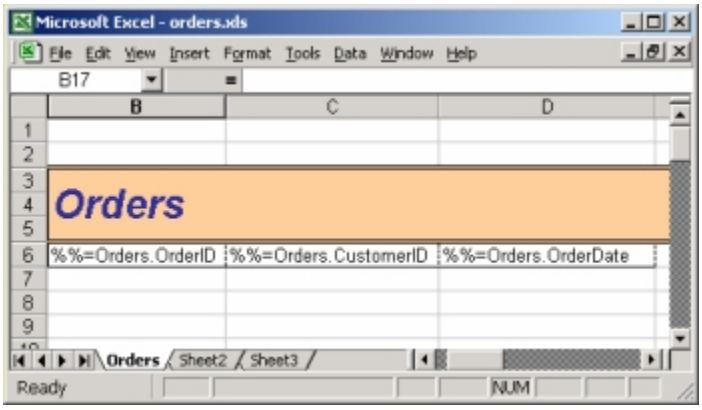
The format of a merge field is:

%%=DatabaseQueryName.FieldName

For example, this data marker is a placeholder for values from the "Last Name" field in the data set returned by a query called "Employees":

%%=Employees.LastName

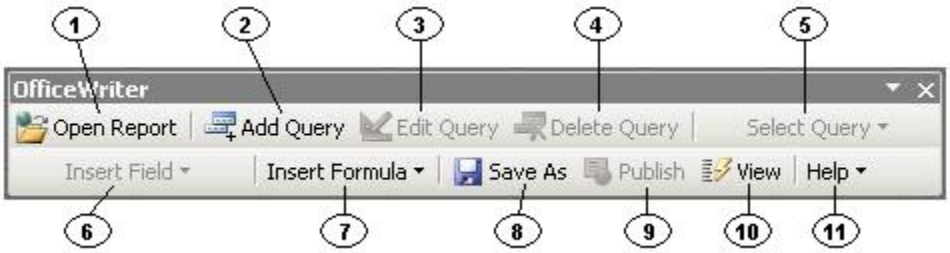
The template shown below contains three data markers.



For additional information about creating OfficeWriter Excel Templates, see the ExcelWriter Documentation.

The OfficeWriter Designer for Excel

You will find the OfficeWriter Designer toolbar under the Excel menu bar, above your worksheet.



1.	Open Report	The **Open Report** button allows you to open saved report definition files (RDL files). These can be files created with OfficeWriter, Visual Studio, or another tool. You can open RDL files on any drive your computer can access, as well as from any accessible Reporting Services server.
2.	Add Query	The **Add Query** button allows you to add new database queries to your report template. If you opened a report definition (RDL file) that was not created by OfficeWriter Designer (for example, an RDL file created in Visual Studio), the **Add Query** button will not be active.
3.	Edit Query	Click **Edit Query** to modify a query created with OfficeWriter. Your original query will be displayed so you can add or remove fields, change sort order, or edit the SQL statement. If you originally created your report definition using OfficeWriter Designer, you can change your queries at any time. If you opened a report definition (RDL file) that was not created by OfficeWriter Designer (for example, an RDL file created in Visual Studio), the **Edit Query** button will not be active.
4.	Delete Query	Use the **Delete Query** button to remove a query from your report template. If you opened a report definition (RDL file) that was not created by OfficeWriter Designer (for example, an RDL file created in Visual Studio), the **Delete Query** button will not be active.
5.	Select_Query	When working with a report with more than one query, the *Select Query* button displays a pulldown list of all the report's queries. Select the query you wish to work with before adding fields.
6.	Insert Field	The **Insert Merge Field** button places your data markers (data placeholders) in the worksheet.
7.	Insert Formula	One of the powerful features of OfficeWriter Enterprise Edition is the ability to create and use formulas. The *Insert Formula* button lets you select formulas and insert them in a worksheet.

8.	Save As	After you create or change a report template, the **Save As** button allows you to save it as an RDL file - an xml-based report definition. If you use Excel's menu bar to save your document, you will only save a copy of the Excel file itself without any report information.
9.	Publish	Use the **Publish** button to publish your report on the Reporting Services server. Once you do this, your report will be available for viewing both in Excel (through OfficeWriter Designer) and through Reporting Services Report Manager.
10.	View	The **View** button will execute your published report and display the results in another window in Excel. If you click this button when you have an unpublished report file open, you will be prompted to publish before viewing. If you open Excel and have no active worksheets open, the **View** button will serve as a report browser, allowing you to view any report on your report server.
11.	Help	Click the **Help**button to open the OfficeWriter Designer documentation.

Adding a Template to an Existing Report

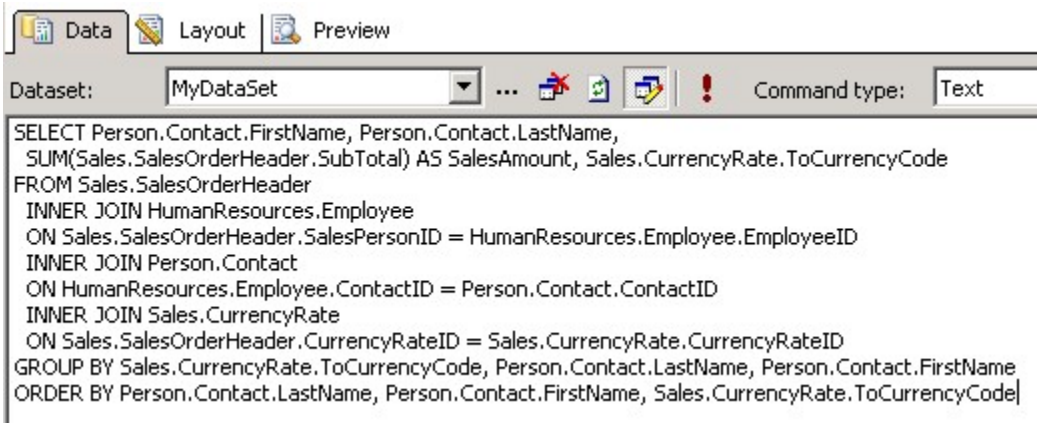
A report definition file (an RDL file) includes a set of layout instructions and a database query that gets report data when the file is executed by Reporting Services. RDL files are xml-based and are saved with the extension .rdl. After creating a report template with OfficeWriter, you save it as an RDL file and publish it on the Reporting Services server.

You can open a saved RDL file in Excel and add OfficeWriter template information to it. If the saved report defintion was not created using OfficeWriter, only its database query will be available for use. The query fields will appear in a drop-down list on the OfficeWriter toolbar. You will be able to insert these fields as merge fields (data placeholders) in your report template, and will not be able to create additional queries. Whey you save the file, the OfficeWriter template information will be added to the RDL file. The advantages of adding a template to an existing RDL file are:

- **Two Display Formats**
  Render the original report design, or view the report as an Excel file.
- **Separation of Report Design Roles**
  A developer may be responsible for creating shared data sources on the server and defining SQL queries in RDL files. A business user can then open an RDL, insert field placeholders from the predefined queries, and design a report.

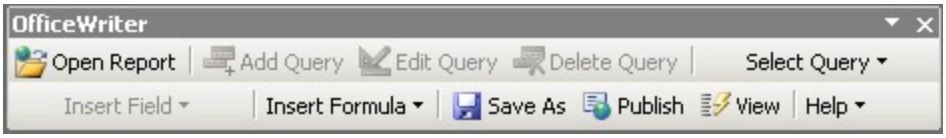
Opening a Saved RDL File

We will open report definition created in Visual Studio and work with it using the OfficeWriter Designer. The report file created in Visual Studio contains the following query:

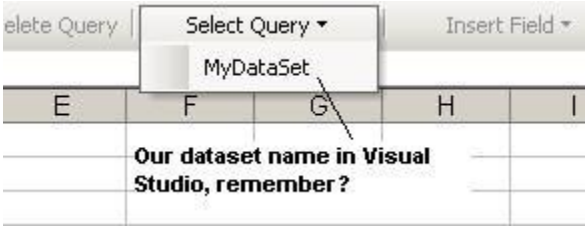


1. Open Excel.
2. From the OfficeWriter Designer toolbar, select **Open Report**.
3. Navigate to the .rdl report file created in Visual Studio and open it.

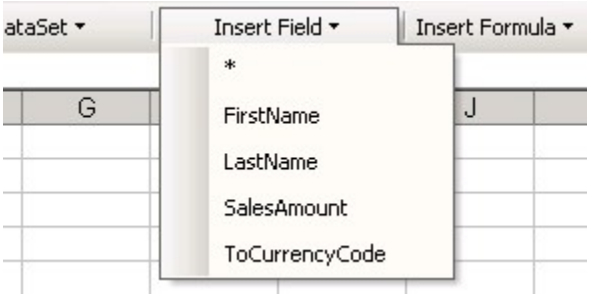
Once your report is open, you will notice the OfficeWriter Designer toolbar has changed. You do not have access to **Add Query**, **Edit Query**, or **Delete Query** because you opened a report definition file that was not created with OfficeWriter.



From this point on, all the other OfficeWriter functionality is accessible. To test this, choose **Select Query** from the OfficeWriter Designer toolbar. You should see the query created in Visual Studio in the list. Choose this query.



Click **Insert Merge Field** to reveal the fields created in Visual Studio.



Adding Data Markers to the File

1. In cells A1, B1, C1, and D1 respectively, enter the field headers **Rep Last Name**, **Rep First Name**, **Currency Code**, and **Sales Amount**.

	A	B	C	D
1	Rep Last Name	Rep First Name	Currency Code	Sales Amount
2				

2. Place the cursor in cell A2.
3. Click **Insert Field** on the OfficeWriter toolbar and select **LastName**.
4. Place the cursor in cell B2.
5. Click **Insert Field** on the OfficeWriter toolbar and select **FirstName**.
6. Place the cursor in cell C2.
7. Click **Insert Field** on the OfficeWriter toolbar and select **CurrencyCode**.
8. Place the cursor in cell D2.
9. Click **Insert Field** on the OfficeWriter toolbar and select **SalesAmount**.

   The report should look like this:

	A	B
1	Rep Last Name	Rep First Name
2	%%=MyDataSet.LastName	%%=MyDataSet.FirstName

C	D
Currency Code	Sales Amount
%%=MyDataSet.ToCurrencyCode	%%=MyDataSet.SalesAmount

Publishing and Viewing the Report

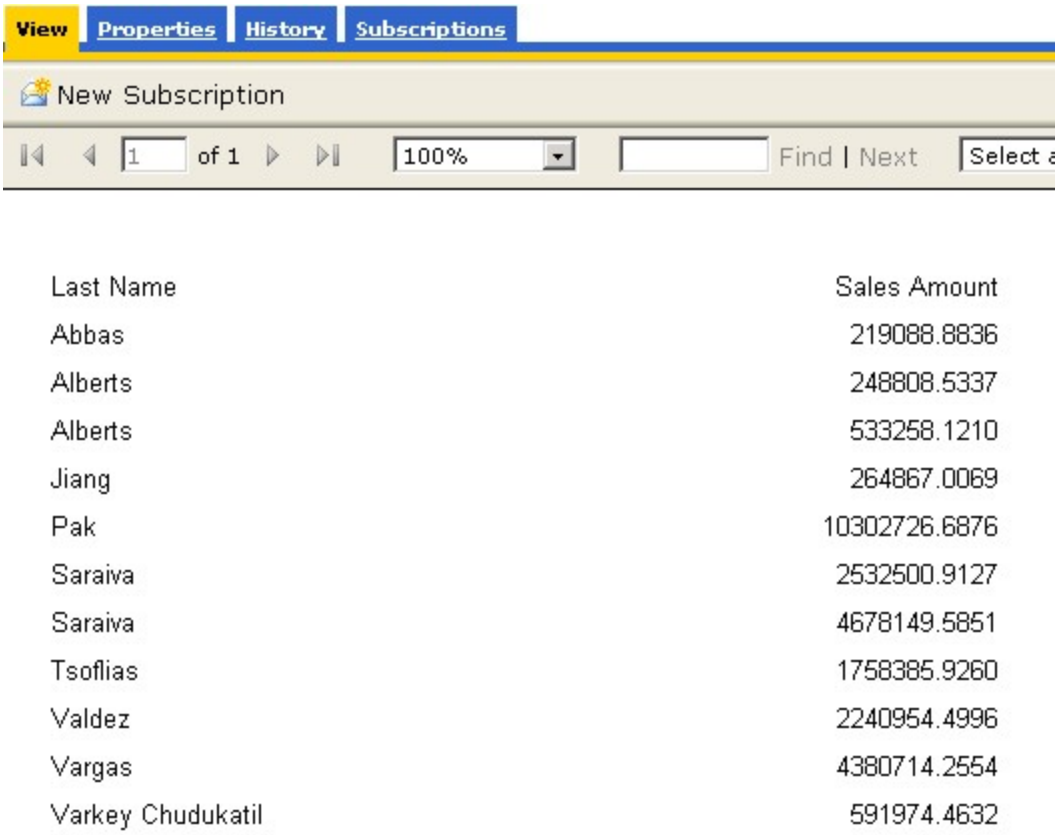
1. From the OfficeWriter Designer toolbar select **Save As**.
2. Navigate to a local folder where you will store the template report file. This will be where you store your work file in case you want to edit it later, **not** a location on the Reporting Services server.
3. Save the temlate as an RDL file.
4. To publish the report, from the toolbar, select **Publish**.
5. From the Publish dialog box select the drop-down to display the Server or URL.
6. Choose the server on which Reporting Services is installed.
7. Click **Refresh**.
8. Select a folder for which you have publish rights and click **Ok**.
9. If your report published with no errors, you will receive a **Publish Successful** message dialog. Click **Ok** to continue.
10. To view the report, click **View** on the OfficeWriter Designer. The report viewer will open another Excel window with the report results. It should look like this:

	A	B	C	D
1	Rep Last Name	Rep First Name	Currency Code	Sales Amount
2	Abbas	Syed	AUD	219088.8836
3	Alberts	Amy	EUR	248808.5337
4	Alberts	Amy	GBP	533258.121
5	Jiang	Stephen	CAD	264867.0069
6	Pak	Jae	CAD	10302726.69
7	Saraiva	José	CAD	2532500.913
8	Saraiva	José	GBP	4678149.585
9	Tsoflias	Lynn	AUD	1758385.926
10	Valdez	Rachel	EUR	2240954.5
11	Vargas	Garrett	CAD	4380714.255
12	Varkey Chudukatil	Ranjit	EUR	591974.4632

11. Select **Close Report View** to return to your report template.

View the Report in Reporting Services

We saw how our report looks in Excel using the OfficeWriter Designer **View** button. But what happens if we go right to Reporting Services Report Manager and view the report from there? In your browser, type the path to the Report Manager (Usually http://<YourReportServer>/Reports). Navigate to the report and view it.



What is different? Why do we have two fields on our report when in OfficeWriter Designer we had four? The report was originally designed in Visual Studio, not OfficeWriter Designer. When the report renders, or displays, in Reporting Services Report Manager, it will display the way it was originally designed in Visual Studio.

To see the report as you designed it with OfficeWriter:

1. From the **Select a format** drop-down list, choose **Excel designed by Officewriter**.
2. Click **Export**.
3. You will be prompted to save or open. To save the report as an Excel file, click **Save**. To view the report, click **Open**.

Samples

Download the .rdl file described in this section.

Creating a New Template

In Adding a Template to an Existing Report Defintion, we saw how you can add OfficeWriter template information to a saved RDL file. In that case, the database query was defined before OfficeWriter opened the file in Word. This section will explain how to develop a report from start to finish in Excel with OfficeWriter and Microsoft Query.

By default, OfficeWriter Designer's **Add Query**, **Edit Query**, and **Delete Query** buttons are disabled. These buttons are required for creating queries using Microsoft Query with OfficeWriter. If the query buttons are not available on the OfficeWriter toolbar, reset the registry key **Enable MSQuery** as follows:

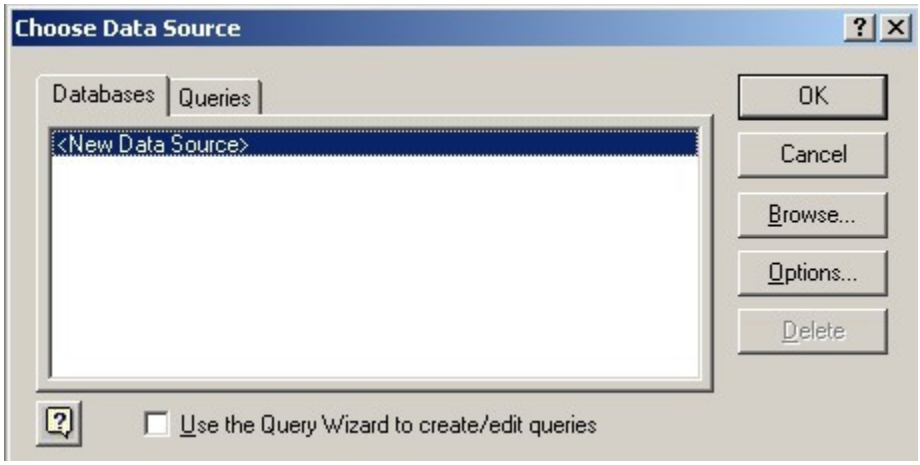
1. Open the **Start** menu and select **Run**.
2. Enter regedit and click **Ok**.
3. Open the folder **HKEY_CURRENT_USER\Software\SoftArtisans\OfficeWriter\Designer**.
4. Double-click **Enable MSQuery**. A dialog will open.
5. In the **Value Data** field, enter 1.

Creating a Data Source

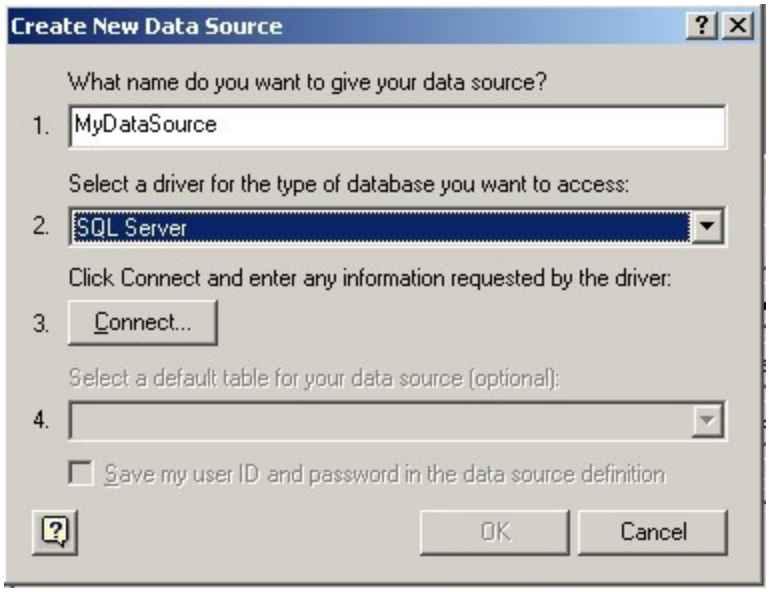
1. Open Excel.
2. Click **Add Query** on the OfficeWriter Designer toolbar.
3. In the dialog box, type in a name for the query (or leave the default name "Query1"). Click **Next**.

4. Click **Add New** to add a new database connection.

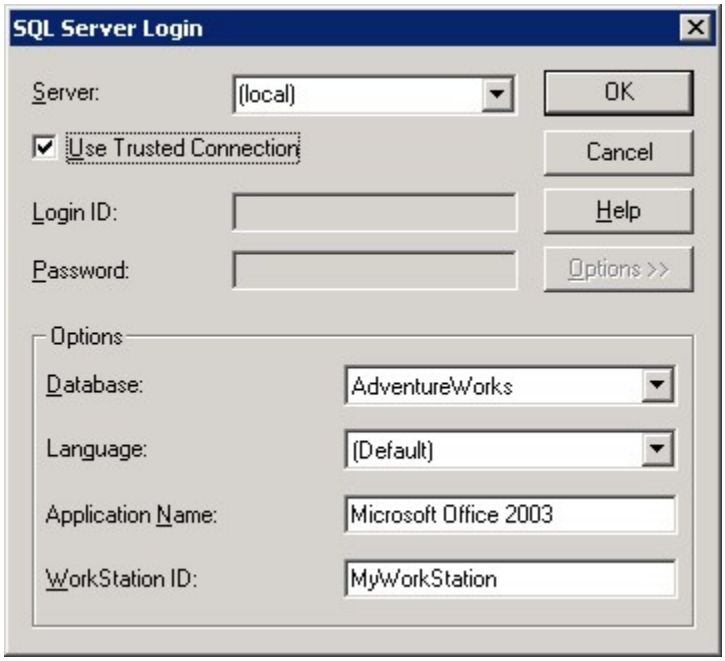
5. Select **New Data Source** and click **Ok**.



6. Enter a data source name and select **SQL Server** from the drop-down list of database drivers. Click **Connect**.

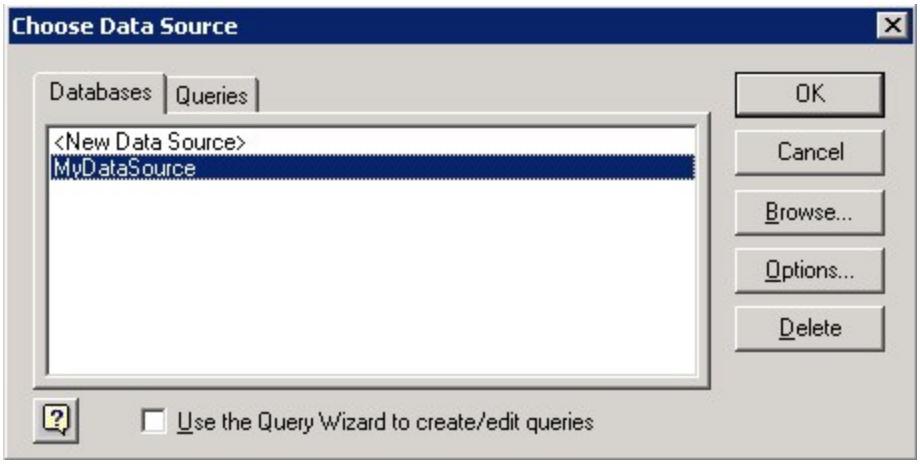


7. From the drop-down list of server names, select the server where the AdventureWorks database is installed. Click **Options** and select AdventureWorks as the default database. Click **Ok**.



8. You should now be back at the **Create New Data Source** screen. Click Ok.

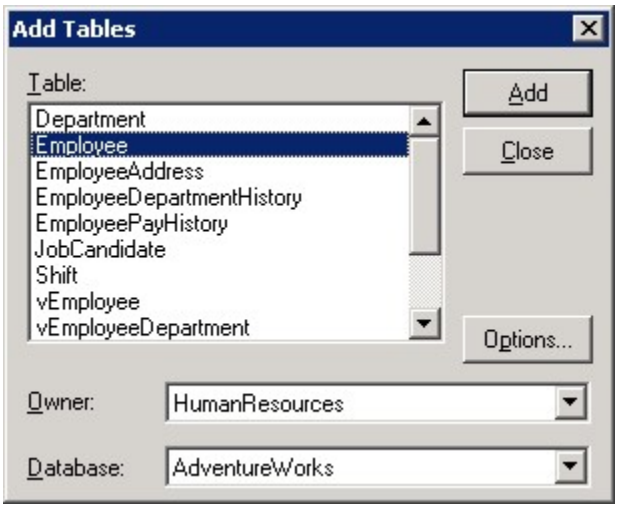
9. You will see your new data source in the **Choose Data Source** dialog. Select it and click **Ok** to open Microsoft Query.



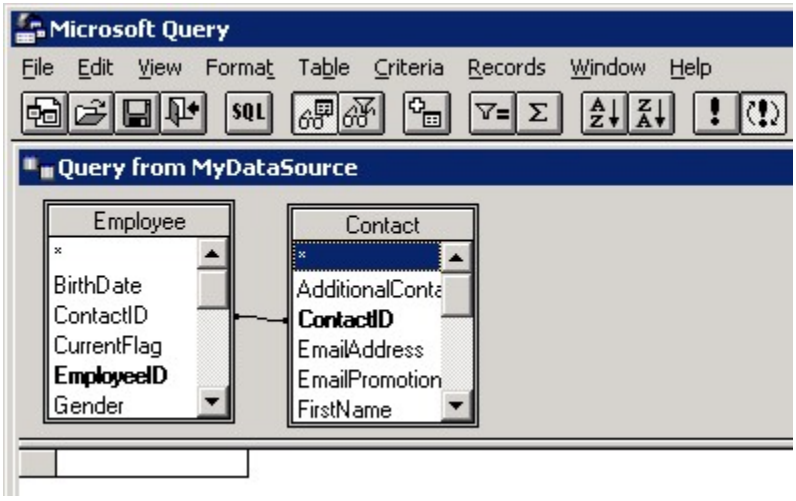
Building a Query

Next, we will build a query that will get the data for our report from the database. OfficeWriter Designer uses Microsoft Query to create queries. When we finished creating our sample Data Source above, Microsoft Query opened.

1. In the **Add Tables** dialog box, find the **HumanResources.Employee** and **Person.Contact** table in the list and select **Add**.

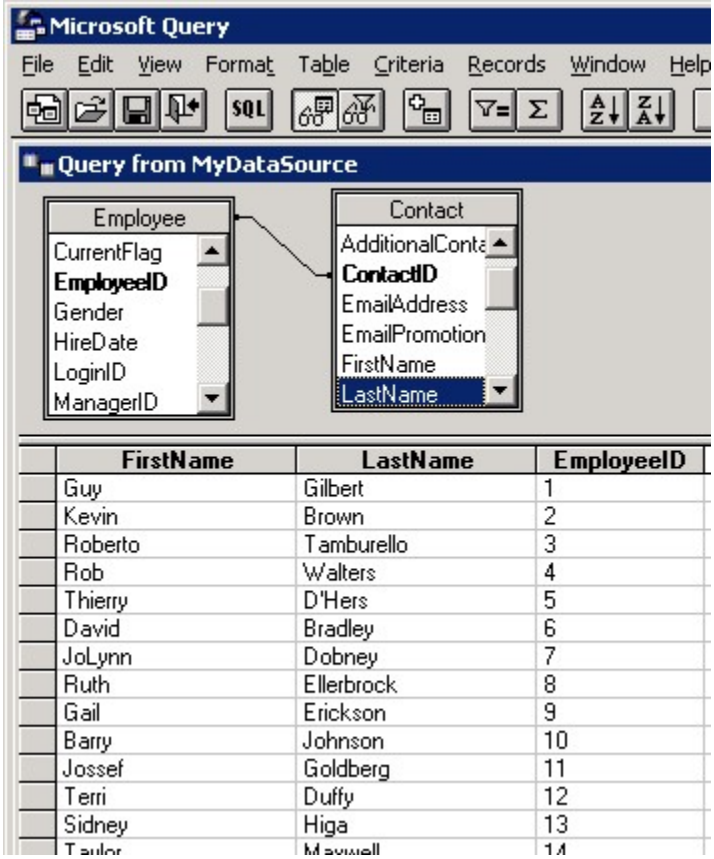


2. Click **Close**. The Employee and Contact tables should now be in MS Query.



3. Add the **Contact.FirstName**, **Contact.LastName**, and **Employee.EmployeeID** fields to your query by double-clicking on the items. When you do, the columns will be added to the query.

Your query should now look like this:

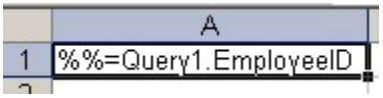


4. From Microsoft Query's **File** menu, select **Return to OfficeWriter Designer** .

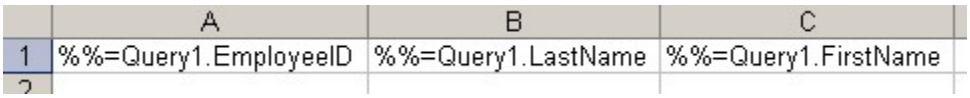
Adding Data Markers

A data marker is a placeholder for database values. When the report is published, OfficeWriter will replace the data markers with data from the database.

1. Click **Select Query** on the OfficeWriter toolbar and make sure that the query you just created is selected.
2. Place your cursor in cell A1.
3. Click **Insert Field** on the OfficeWriter toolbar and select **EmployeeID** to insert the field in cell A1.



4. Place your cursor in cell B1.
5. Click **Insert Field** on the OfficeWriter toolbar and select **Lastname**.
6. Place your cursor in cell C1.
7. Click **Insert Field** on the OfficeWriter toolbar and select **Firstname**. Your report should look like this:



Saving and Publishing

Do not use Excel's **File/Save** menu item to save your template. Use the **Save As** button on the OfficeWriter toolbar to save your template as a report definition file in RDL format.

1. From the OfficeWriter Designer toolbar select **Save As**.
2. Navigate to a local folder where you will store the template report file. This will be where you store your work file in case you want to edit it later, **not** a location on the Reporting Services server.
3. Save the template as an RDL file.

Next, publish and view your report. Your results should look like this:

	A	B	C
1	1	Gilbert	Guy
2	2	Brown	Kevin
3	3	Tamburello	Roberto
4	4	Walters	Rob
5	5	D'Hers	Thierry
6	6	Bradley	David
7	7	Dobney	JoLynn
8	8	Ellerbrock	Ruth
9	9	Erickson	Gail
10	10	Johnson	Barry
11	11	Goldberg	Jossef
12	12	Duffy	Terri
13	13	Higa	Sidney
14	14	Maxwell	Taylor
15	15	Ford	Jeffrey
16	16	Brown	Jo
17	17	Hartwig	Doris
18	18	Campbell	John
19	19	Glimp	Diane
20	20	Selikoff	Steven

Samples

Download the .rdl file described in this section.

Grouping And Nesting

Grouping and Nesting

In addition to data markers, ExcelTemplate uses Grouping and Nesting markers to format flat data as it is brought into a spreadsheet. The **%%group**, **%%endgroup**, **%%header**, and **%%footer** markers are used to signify the beginning and ending of the grouping formatting and the group header and footer sections; their rows will not be included in the worksheet. The **%%value(data marker)** marker allows you to include a data marker value in the header or footer of a group, while the **(hide)** modifier, described below, allow you to remove a field from the data marker rows if its values are repeated in the header and footer rows.

> Grouping and Nesting Markers are only evaluated in Office Open XML (.xlsx) files. Grouping and Nesting Markers placed in BIFF8 (.xls) templates will not be evaluated.

Grouping and Nesting Marker Descriptions

%%group	Signifies the beginning of a grouping block. Place this marker in the column of the field by which you wish to group. Grouping and Nesting formatting will be applied to the rows from this marker to the **%%endgroup** marker. This row will not be displayed in the output spreadsheet. The group marker is required for grouping functionality to work.
%%header	Signifies the beginning of the header rows for a particular column in a grouping block. This marker should be placed in a row directly under the row containing the **%%group** markers or other header rows and above the data marker row in the column. All rows between this marker's row and the data marker row, or the next header marker, will be repeated for each new value in the grouping field. The row containing the **%%header marker** will not be displayed in the output spreadsheet. Header markers are optional.

%%value(data marker)	The **%%value(data marker)** marker is used to include the values of a data marker row in the header or footer of a group. The current value of the field whose data marker is placed as a modifier for this marker will be brought into the header or footer, replacing the **%%value()** marker. Value markers are optional.
%%footer	Placed below the data marker rows, this marker signifies the beginning of the footer rows for a particular column in a grouping block. All rows between this marker's row and the **%%endgroup** marker row or the next footer marker will be repeated once for each new value in the grouping field. The row containing the **%%footer** marker will not be displayed in the output spreadsheet. Footer markers are optional.
%%endgroup	Signifies the end of a grouping block. Place this marker in the same column as the **%%group** marker of the group you are ending. The row containing the **%%footer** marker will not be displayed in the output spreadsheet. Only one endgroup marker is required, no matter how many group markers are in the first row of the grouping block.

Example

Below is an example of a grouping block in a template spreadsheet.

%%group				
%%header				
%%value(data.#1)				
%%=data.#1(hide)	%%=data.#2	%%=data.#3	%%=data.#4	%%=data.#5
%%footer				
Subtotal row				
%%endgroup				

For the data to be grouped correctly, they must be in a flat format and sorted hierarchically by grouping categories. For the grouping block above, for example, you could use the following data table:

First category	first row	2	4	3
First category	second row	3	4	7
First category	third row	3	5	2
Second category	first row	5	2	9
Second category	second row	4	3	1
Second category	third row	8	5	5

ExcelTemplate's BindData method should bring the data in as displayed below:

First category				
	first row	2	4	3
	second row	3	4	7
	third row	3	5	2
Subtotal row				
Second category				
	first row	5	2	9
	second row	4	3	1
	third row	8	5	5
Subtotal row				

Adding Data Markers

An OfficeWriter Excel template is an Excel workbook that contains **data markers**. A data marker is a cell value beginning with %%= that specifies

a database column to insert in the spreadsheet column containing the marker. OfficeWriter templates are created with the OfficeWriter Designer. When you save the template, the OfficeWriter Designer encodes it as a custom XML element in a Reporting Services RDL file. To publish a report, you will submit the RDL file to a Reporting Services server where OfficeWriter is installed. The OfficeWriter renderer on the server regenerates the template, and - using data supplied by Reporting Services - replaces the data markers in the document with database values.

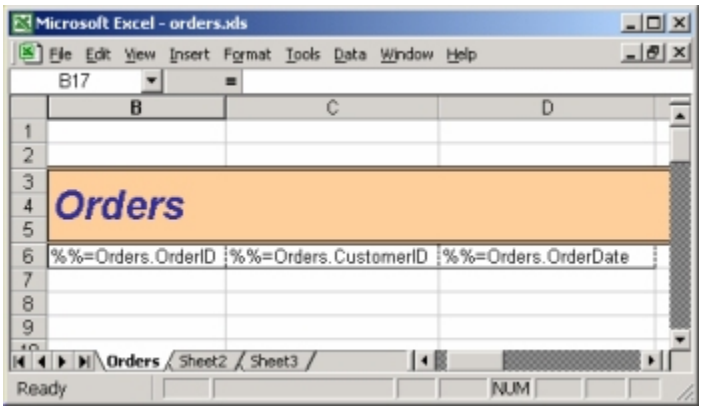
The format of a merge field is:

%%=DatabaseQueryName.FieldName

For example, this data marker is a placeholder for values from the "Last Name" field in the data set returned by a query called "Employees":

%%=Employees.LastName

The template shown below contains three data markers.



To add data markers to a worksheet:

1. Click the **Select Query** drop-down on the OfficeWriter toolbar and select a query.
2. Click the **Insert Field** drop-down and select a field. To insert all fields, select *.
3. Repeat step 2 to add additional data markers.
4. Optional: Apply formatting (bold, italic, underline, etc.) to data markers using Excel's Format menu or toolbar.

Publishing Your Excel Report

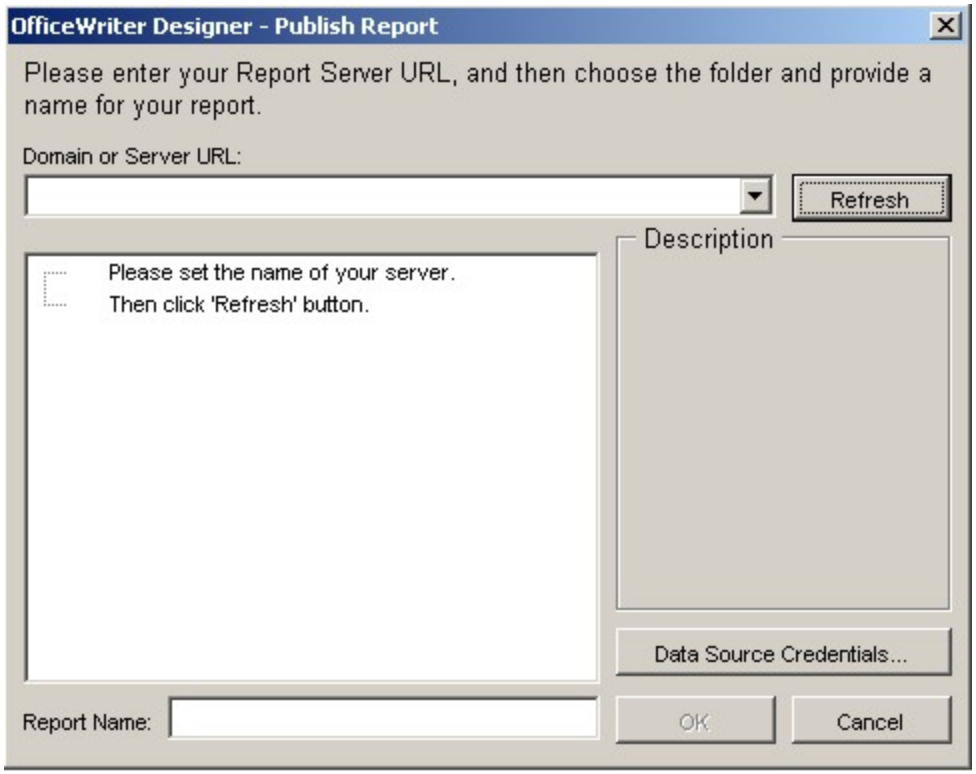
Saving your report and publishing it are two different things. Saving will save a copy of the report definition file locally. Publishing will copy and deploy the file to the Reporting Services server where they will be available for rendering. After you publish, open the Reporting Services Report Manager (Usually http://<MyReportServer>/Reports). You will see your report with other published reports. From the Report Manager you change Reporting Services report settings (security, etc.).

To save your report to disk:

1. From the OfficeWriter Designer toolbar select **Save As**.
2. Navigate to a local folder where you will store the template report file. This will be where you store your work file in case you want to edit it later, **not** a location on the Reporting Services server.
3. Save the template as an RDL file.

To publish your report to Reporting Services:

1. From the OfficeWriter Designer, select **Publish**. The **Publish Report** dialog will open.



2. In the **Domain or Server URL** field, enter the path to your Reporting Services server (for example http://MyReports/ReportServer).
3. Click **Refresh**. OfficeWriter will display the folders available on the server.
4. Navigate to the destination folder for your report.
5. In the **Report Name** field (at the bottom of the **Publish Report** dialog), enter a name for your report.
6. Optional: Click **Data Source Credentials** to specify how the report will link to the data. You may also do this from the Reporting Services Report Manager after you publish your report. See the Reporting Services documentation for the meaning of the different data source credentials options.
7. Click **Ok**. If your report was already published on the server, you will be asked to overwrite it. When the report is published, you will receive a message box telling you that publishing was successful.

You are now ready to view your report.

Viewing Your Excel Report

After a report is published you can view it using the OfficeWriter Designer toolbar, or from Reporting Services Report Manager.

Viewing a Report with OfficeWriter Designer

1. If the template for the report that you want to view is not already open in Microsoft Excel:
    a. Open Excel.
    b. From the OfficeWriter Designer toolbar, select **Open Report**.

c. Navigate to the report definition file that you created with OfficeWriter and open it.

2. Click the **View** button on the OfficeWriter Designer toolbar. The report will open in another Excel window.
3. Click **Close Report View** to return to your template.

Report Browsing

Another way to view a report is through **Report Browsing**:

1. In Microsoft Excel, close all active documents.
2. Click the **View** button on the OfficeWriter Designer toolbar.
3. Navigate to the report definition file that you created with OfficeWriter and open it.
4. Click the **View** button on the OfficeWriter Designer toolbar. The report will open in another Excel window.
5. Click **Close Report View** to return to your template.

Viewing a Report in Reporting Services

The third way to view a report is from Reporting Services Report Manager. To do this, open your browser and navigate to the Report Manager (usually http://<ReportServer>/Reports). Navigate to your report and open it. Reports created in OfficeWriter Designer will display a message telling you to render the report using the Excel (.xls) designed by OfficeWriter extension.

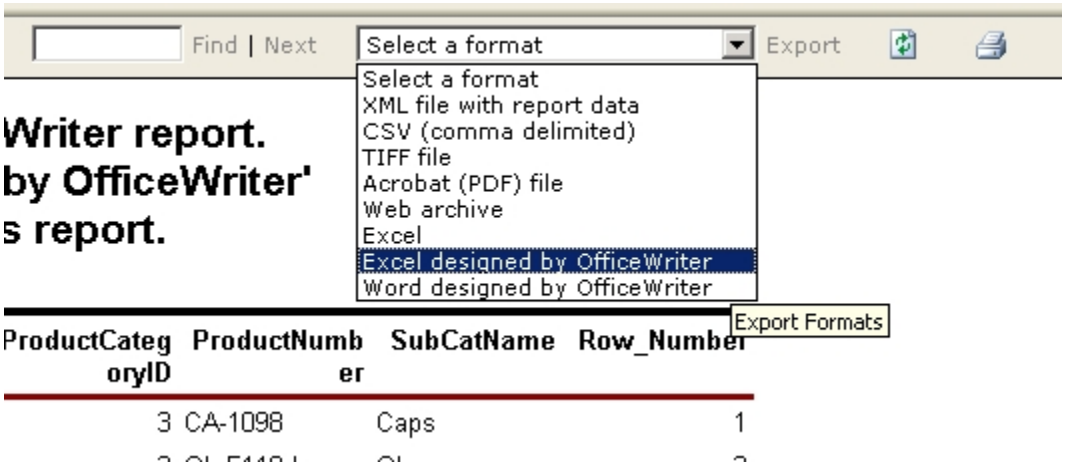
This is a SoftArtisans OfficeWriter report. Please use 'Excel designed by OfficeWriter' rendering extension with this report.

CatName	ListPrice	Name	ProductCategoryID	ProductNumber	SubCatName
Clothing	8.9900	AWC Logo Cap	3	CA-1098	Caps
Clothing	37.9900	Full-Finger Gloves, L	3	GL-F110-L	Gloves
Clothing	37.9900	Full-Finger Gloves, M	3	GL-F110-M	Gloves
Clothing	37.9900	Full-Finger Gloves, S	3	GL-F110-S	Gloves
Clothing	24.4900	Half-Finger Gloves, L	3	GL-H102-L	Gloves
Clothing	24.4900	Half-Finger Gloves, M	3	GL-H102-M	Gloves
Clothing	24.4900	Half-Finger Gloves, S	3	GL-H102-S	Gloves
Clothing	49.9900	Long-Sleeve Logo Jersey, L	3	LJ-0192-L	Jerseys
Clothing	49.9900	Long-Sleeve Logo Jersey, M	3	LJ-0192-M	Jerseys

What you see on the screen is not the report layout as you designed it in Excel using OfficeWriter. It is only a listing of the raw data returned from your report's queries. If the report definition was originally created with Visual Studio (or another tool) and modified with OfficeWriter, you will see the original layout, not the OfficeWriter layout.

To see the report as you designed it with OfficeWriter:

1. From the **Select a format** drop-down list, choose **Excel (.xls) designed by Officewriter**.

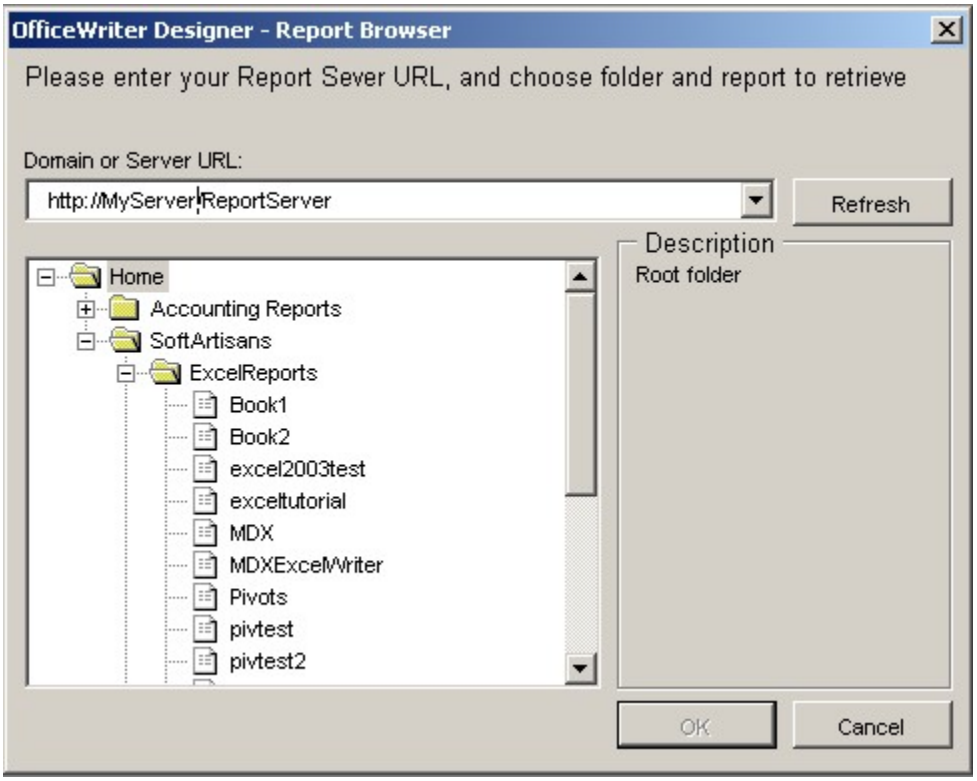


2. Click **Export**.

3. You will be prompted to save or open. To save the report as an Excel file, click **Save**. To view the report, click **Open**.

Browsing Excel Reports

OfficeWriter Designer for Excel not only gives you the ability to create your reports in Excel, but it also gives you the ability to view any of those reports without leaving Excel. To use the OfficeWriter Designer toolbar as a report browser from Excel, simply close all active worksheets. Then press the **View** button on the OfficeWriter Designer toolbar. You will see the **Report Browser** dialog box.



Type in the server name or url for your Reporting Services Report Server. Click **Refresh** and then navigate to the report you wish to see. Click **Ok** to view your report.

> If you created your report in Visual Studio and then modified it with OfficeWriter Designer for Excel, only the modifications will be displayed. In this case, whatever you designed in Excel is what you will see using the **View** button.

Removing Queries from an Excel Report

OfficeWriter Designer not only allows you to add and change queries, it also lets you remove them from your report. However, you may only remove queries from reports you created with OfficeWriter Designer. If your report was originally created with Visual Studio, you cannot remove or edit queries from within OfficeWriter Designer.

To remove a query from an OfficeWriter report:

- Open the report file.
- Using the the **Select Query** button on OfficeWriter Designer toolbar, choose the query you want to remove.
- Select **Delete Query** from the toolbar.
- You will be prompted to confirm that you want to delete the query. Click **Yes** to confirm.

> Deleting a query will remove it from your report. However, it will not delete merge fields or formulas associated with the query. You must manually remove any reference to the query from your report or you will receive an error when you try to view your report.

Excel Reports with Parameters

OfficeWriter and Reporting Services allow you to use parameters to filter the data returned by your database query, and display a subset of the data in your report.

What is a parameter?

A parameter is a value that filters data. For example, you have a sales report that lists each sales group and each sales rep within that group. However, you only want to see one sales group at a time. If you use the sales group field as a parameter, when the report is executed, you will be prompted to select a group. The report will only display data for the group that you selected.

A single report can include multiple parameters.
To use parameters, you must first define them. Defining parameters differs depending on whether you set them up in OfficeWriter Designer or in Visual Studio. We will explore both so you can determine which is best for you.

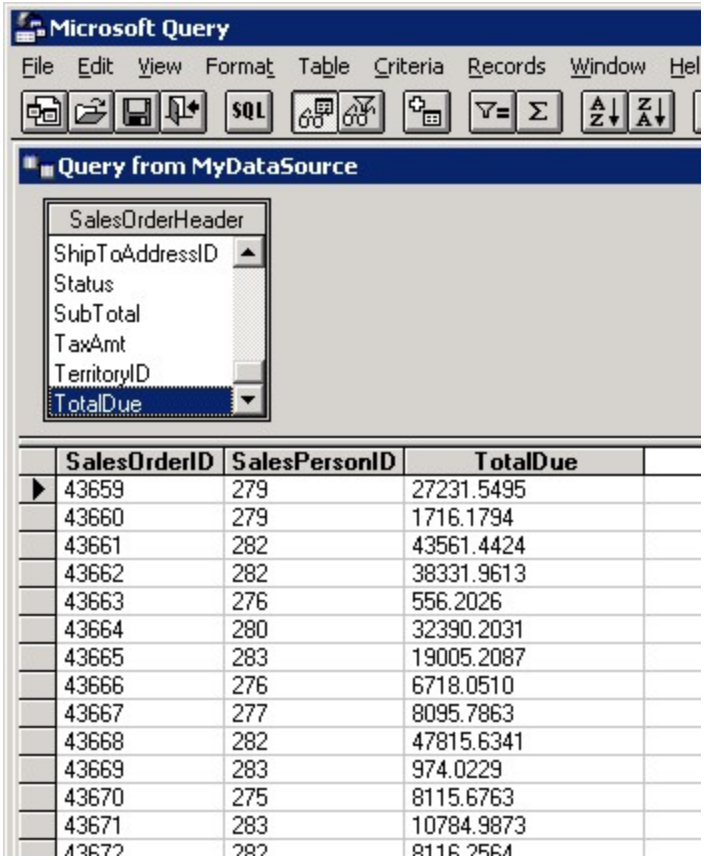
Defining Parameters with OfficeWriter

OfficeWriter uses Microsoft Query to add parameters to a report.

> If Microsoft Query cannot display a query graphically, it will not allow you to define a parameter for the query. For example, if a query contains the TOP keyword, which cannot be represented graphically, Microsoft Query will warn you that the query cannot be shown graphically and will not allow you to add parameters to the query.

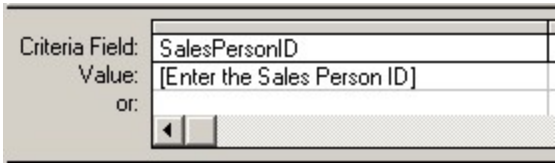
Let's add a parameter to a sample query. The sample will use the AdventureWorks2000 sample database, which ships with Reporting Services.

1. Open Microsoft Excel.
2. Click **Add Query** on the OfficeWriter toolbar.
3. Follow steps 2-11 of Create a Database Query.
4. In the **Add Tables** dialog box, find the **SalesOrderHeader** table in the list and select **Add**. Click **Close**.
5. In Microsoft Query, drag the following fields to the query: **SalesOrderID**, **SalesPersonID**, and **TotalDue**.

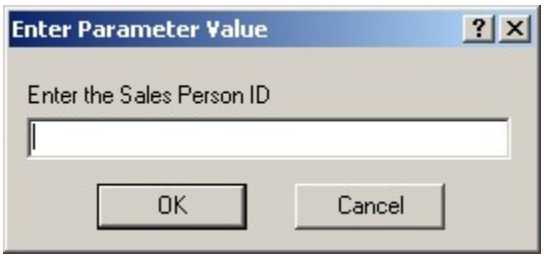


6. Click the **Hide/Show Criteria** button on the Microsoft Query toolbar to open the criteria table.

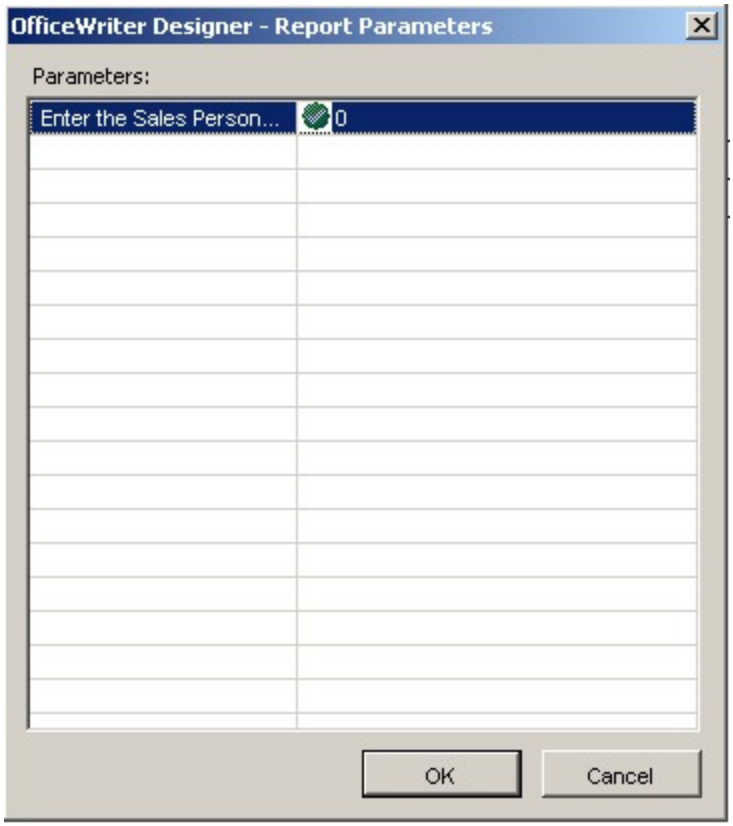
7. Click within the top left cell in the criteria table and select * SalesPersonID* from the drop-down list.
8. In **Value** cell beneath **SalesPersonID**, type **[Enter the Sales Person ID]**. This is the text that will be used to prompt the user.



9. Microsoft Query will prompt you to enter the default value for the parameter. Enter a sales person ID value.



10. From the **File** menu, select *Return to OfficeWriter Designer*.
11. Using OfficeWriter Designer's **Insert Field** button, add the fields to your report.
12. Publish the report.
13. Click **View** on the OfficeWriter toolbar. You will be asked to enter a parameter value.



14. Replace the 0 with 280. Every row displayed in the report will have SalesPersonID number 280.

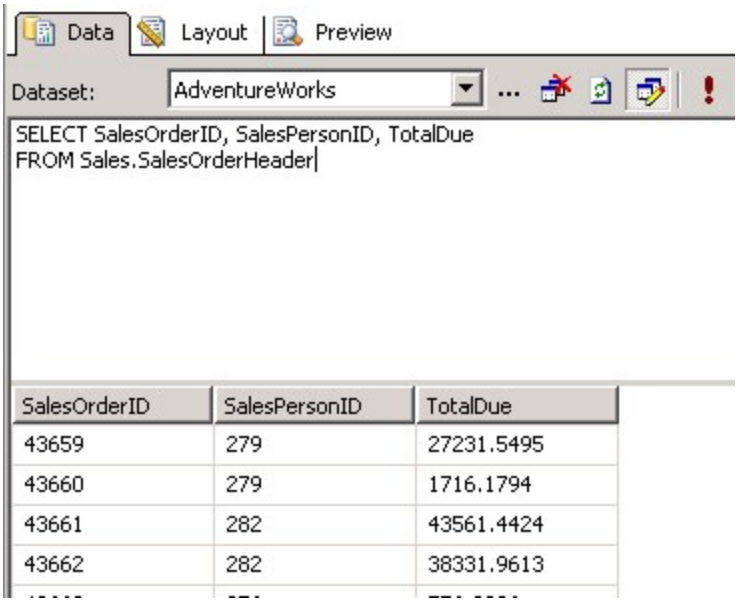
	A	B	C
1	Sales Order ID	Sales Person ID	Total Due
2	43664	280	32390.2031
3	43860	280	14603.7393
4	43866	280	5403.8208
5	43867	280	43499.583
6	43877	280	27308.9192
7	43894	280	43077.1098
8	43895	280	43115.5616
9	43911	280	26197.5398
10	44109	280	18364.2006
11	44285	280	76802.3808
12	44483	280	4000.9786
13	44501	280	26128.8674
14	44511	280	13471.6989
15	44513	280	57801.3112
16	44523	280	98696.056
17	44540	280	51315.1022
18	44541	280	67393.9099
19	44554	280	984.7764
20	44563	280	63320.1589
21	44771	280	92392.1106
22	45041	280	556.2026
23	45042	280	53896.0778
24	45267	280	4592.3356
25	45283	280	37643.1378
26	45295	280	21607.8799
27	45296	280	32240.4897
28	45303	280	27041.7149
29	45318	280	39861.5048
30	45320	280	13512.6737

Defining Parameters in Visual Studio .NET

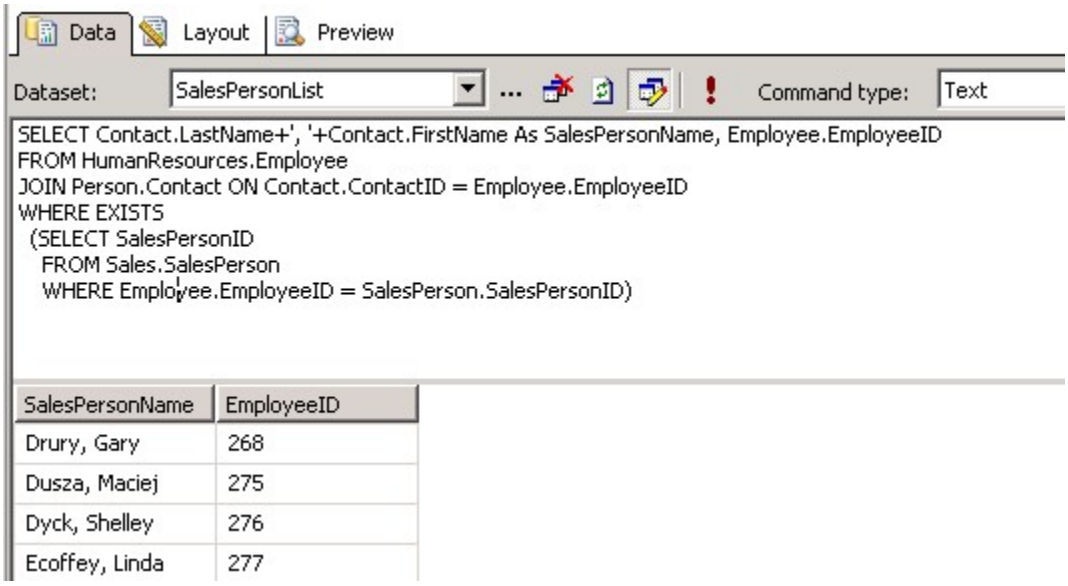
When you create data sources and queries in Visual Studio .NET, you can also define parameters.

When a report with a parameter is opened, OfficeWriter will prompt the user to enter a parameter value. If the parameter was defined with OfficeWriter and Microsoft Query, a list of values that may be entered will not be displayed. The user will have to know the value - for example, a sales rep ID number - to enter it. If the parameter was defined in Visual Studio .NET, OfficeWriter will display a list of valid values. These may be the actual values (for example, sales rep IDs) or meaningful labels (for example, sales rep names).

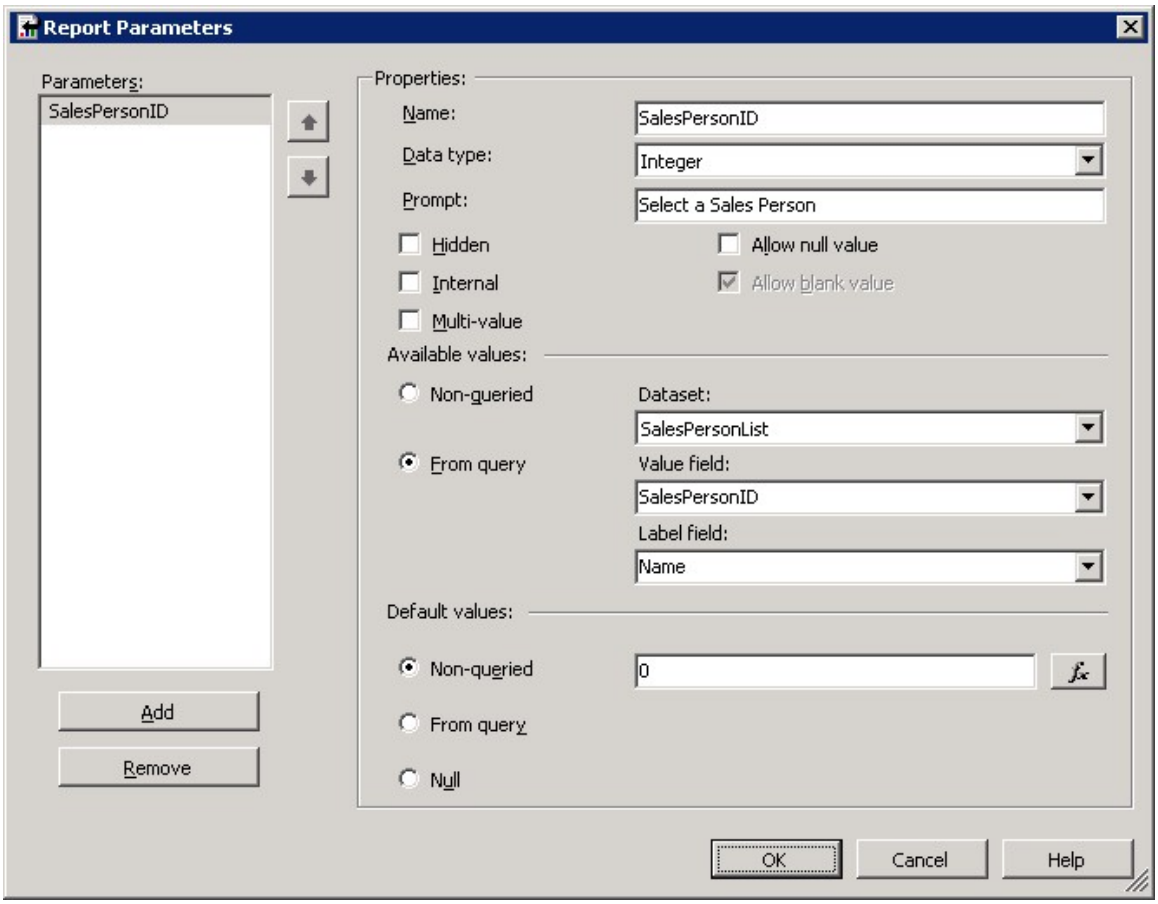
1. Open Visual Studio and create an empty report project containing an empty report.
2. Click the **Data** tab and set up a data source that points to the AdventureWorks database.
3. Enter the query as shown below. It is the same query we used in the example in the previous section. This will be our main query.



4. We want the report user to select a sales rep name from a list rather than remember an id number. So, we must create a query that we will use to display the list of names. The query requires only two fields. The first is the name of the sales person. This field will be displayed to the user for selection before the report is rendered. The second field is the employee id, which will be passed to the WHERE clause of the main query to narrow down our results for one specific sales person. This query returns the names and employee ids of all AdventureWorks employees who are also sales people:



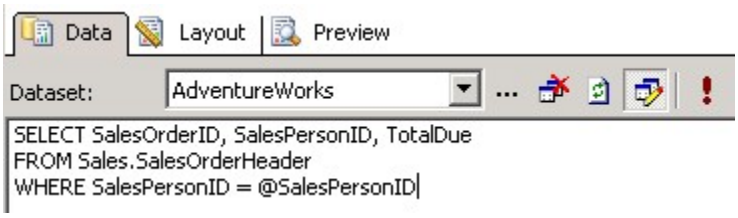
5. While in **Layout** view in Visual Studio, select **Report/Report Parameters** from the menu bar and click **Add** to create a new parameter. Fill in the dialog as shown:



Properties	
Name	The name of the report parameter, which is used when accessing the parameter through a query or formula
Prompt	The text used to prompt the user to select a value for the parameter
Data Type	The data type of the field you will be using as a parameter (not the data type of the value displayed to the user)
Dataset	The dataset that will populate the list of possible parameter values
Value field	The field that will be used as a parameter
Label Field	The field that the user will see when selecting a parameter from a list
Non-queried	The default value when no parameter has been selected

Note: For available and default values, you may use queried or non-queried values, i.e., you can base your values on a query or a list. Each will work with OfficeWriter Designer.

6. Click **Ok** to save the parameter.
7. Click the **Data** tab and select the first dataset we created, AdventureWorks2000.
8. Go back to the main query and add the parameter to the query. Include '@' before the parameter name, as shown:



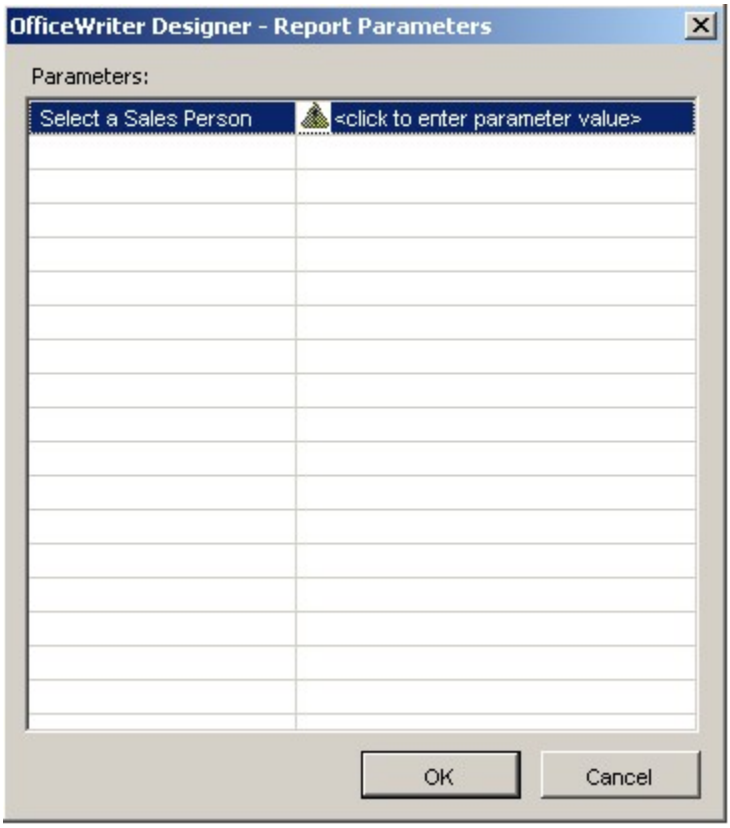
9. Save the report definition file in a location you can access with OfficeWriter Designer and close Visual Studio.

We will now open the report definition file created in Visual Studio and create a report with OfficeWriter Designer.

1. Open Microsoft Excel.
2. Click **Open Report** on the OfficeWriter toolbar.
3. Navigate to the report file you just created in Visual Studio and open it.
4. Click **Select Query** on the OfficeWriter toolbar. You will see the two queries created in Visual Studio .NET. Select AdventureWorks2000, the main query.
5. Using the **Insert Field** button, place all the fields in the report, as shown:

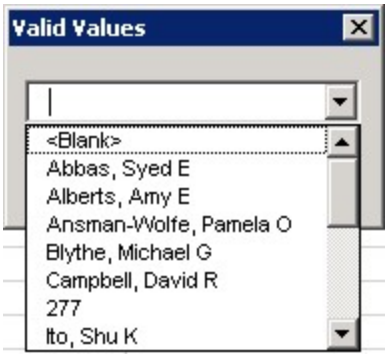
	A	B	C
1	Sales Order ID	Sales Person ID	Total Due
2	%%=AdventureWorks.SalesOrderID	%%=AdventureWorks.SalesPersonID	%%=AdventureWorks.TotalDue

6. Publish and View the report. The **Report Parameters** dialog will open.



When we defined the parameter with Microsoft Query, the **Report Parameters** dialog did not instruct the user to click to enter a parameter value. When you click to enter a value, the **Valid Values** dialog will open.

7. Select a name from the drop-down list of valid parameter values. These are actually labels, not the values. When you select a name, the corresponding ID will be entered in the **Report Parameters** dialog.



8. In the **Report Parameters**, click **Ok**. The report displayed will contain only records for the sales rep that you selected.

	A	B	C
1	Sales Order ID	Sales Person ID	Total Due
2	43664	280	32390.2031
3	43860	280	14603.7393
4	43866	280	5403.8208
5	43867	280	43499.583
6	43877	280	27308.9192
7	43894	280	43077.1098
8	43895	280	43115.5616
9	43911	280	26197.5398
10	44109	280	18364.2006
11	44285	280	76802.3808
12	44483	280	4000.9786
13	44501	280	26128.8674
14	44511	280	13471.6989
15	44513	280	57801.3112
16	44523	280	98696.056
17	44540	280	51315.1022
18	44541	280	67393.9099
19	44554	280	984.7764
20	44563	280	63320.1589
21	44771	280	92392.1106
22	45041	280	556.2026
23	45042	280	53896.0778
24	45267	280	4592.3356
25	45283	280	37643.1378
26	45295	280	21607.8799
27	45296	280	32240.4897
28	45303	280	27041.7149
29	45318	280	39861.5048
30	45320	280	13512.6737

Selective Filtering

One of the restrictions of using simple parameter selection is that you are **required** to select a parameter. What if sometimes you do not want to limit your report? What if you want a report with multiple parameters and you don't want to be required to select a value for each? For example, you have a report with Sales Person and Product parameters. If you are required to select one of each, you can never see all the product sales for one rep or all the sales for one product.

If you want to design a query that returns all the records if no parameter value is chosen, define a default value in the selection list query and add an OR to the WHERE clause of the main query comparing the parameter to its default value.

For example, in the example above, the selection list query was:

```
SELECT Sales.SalesPersonID.Person.Contact.LastName + ', ' +
  Person.Contact.FirstName + ' ' + Person.Contact.MiddleName AS Name
FROM Sales.SalesPerson
  INNER JOIN HumanResources.Employee
  ON Sales.SalesPerson.SalesPersonID = HumanResources.Employee.EmployeeID
  INNER JOIN Person.Contact
  ON HumanResources.Employee.ContactID = Person.Contact.ContactID
ORDER BY Person.Contact.LastName, Person.Contact.FirstName,
  Person.Contact.MiddleName
```

To define a default value, change the query to:

```
SELECT 0 AS SalesPersonID, 'All' AS Name,
  0 AS SortOrder
UNION
SELECT Sales.SalesPersonID.Person.Contact.LastName + ', ' +
  Person.Contact.FirstName + ' ' + Person.Contact.MiddleName AS Name,
  1 AS SortOrder
FROM Sales.SalesPerson
  INNER JOIN HumanResources.Employee
  ON Sales.SalesPerson.SalesPersonID = HumanResources.Employee.EmployeeID
  INNER JOIN Person.Contact
  ON HumanResources.Employee.ContactID = Person.Contact.ContactID
ORDER BY SortOrder, Name
```

The second query adds a sales person record called 'All' with a value of zero. When you do this, make sure that you select a value that is not in your table, or you will have a duplicate key value. Zero is not in the Employee table in the EmployeeID field, therefore it can be used. Adding the SortOrder field insures that this extra entry will display at the top of the list. Also be sure that the key value for the added entry (zero in this case) is set as the default value for the parameter on the Visual Studio Report Parameter screen.

To change the main query so that it will return all the records if no parameter is chosen, change the WHERE clause of the query from **'WHERE SalesPersonID=@SalesPersonID'** to **'WHERE (SalesPersonID=@SalesPersonID OR @SalesPersonID=0)'** (remember, zero was our default value).

Samples

Download an .rdl file created with Microsoft Query and OfficeWriter.

Download an .rdl file created with Visual Studio and OfficeWriter.

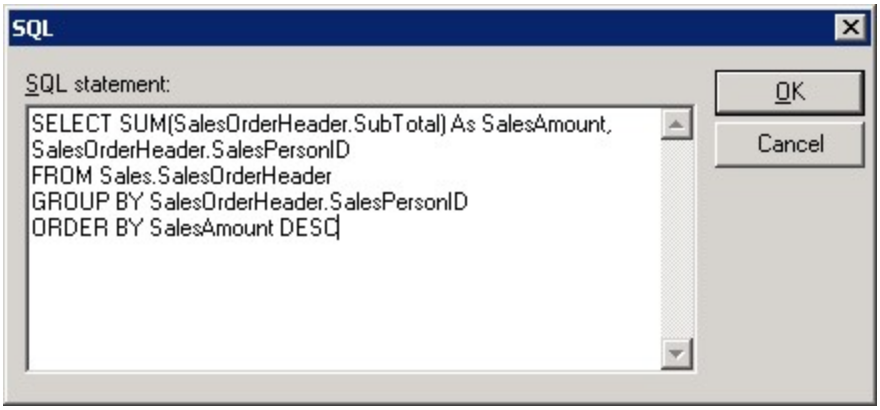
Download an .rdl file with selective filtering.

Adding Formulas to an Excel Report

OfficeWriter Enterprise Edition allows you to create custom formulas. The formulas can be based on query results, report parameters, or they may access a set of global variables that Reporting Services contains. We will explore formulas by building a simple report and then adding formulas. Please read the Quick Start how to add queries and fields to reports if you do not already know how to do this.

This sample is based on the AdventureWorks sample database that is shipped with SQL Server Reporting Services 2005.

1. Open Microsoft Excel.
2. Click OfficeWriter Designer's **Add Query** button.
3. Follow steps 2-11 of Create a Database Query.
4. In the **Add Tables** dialog box, find the **Sales.SalesOrderHeader** table in the list and select **Add**. Click **Close**.
5. Click the SQL button on the Microsoft Query toolbar, and enter the following query:

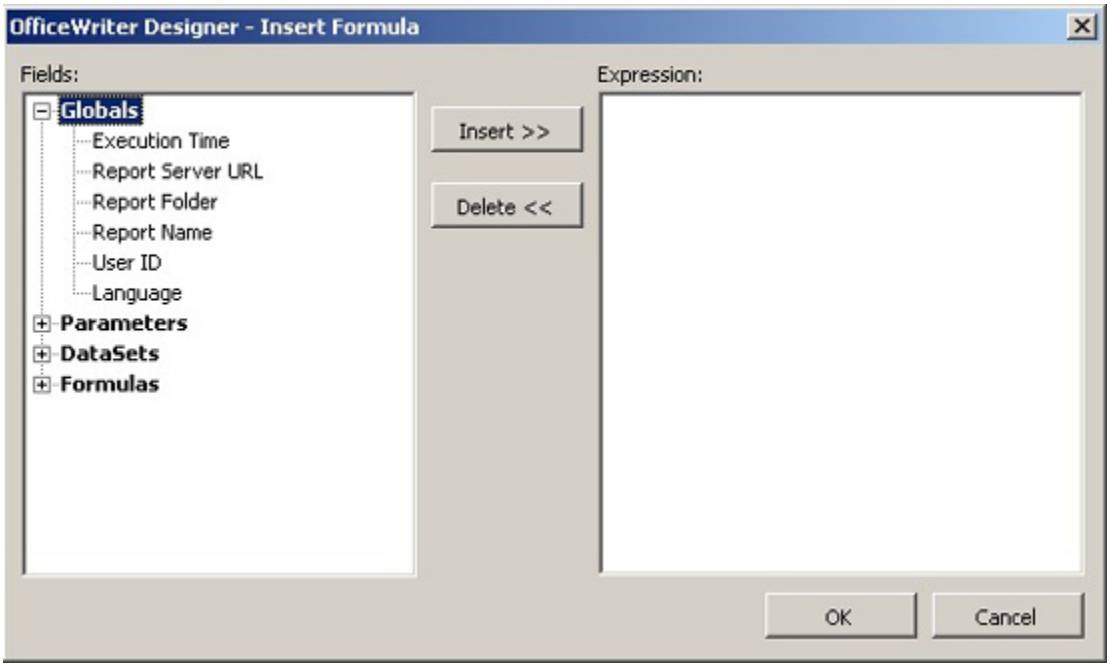


6. Click **Ok**.
7. From the **File** menu, select *Return to OfficeWriter Designer*.

Reporting Services Global Variables

Reporting Services contains global variables that you can access if you have OfficeWriter Enterprise Edition. To access the global variables:

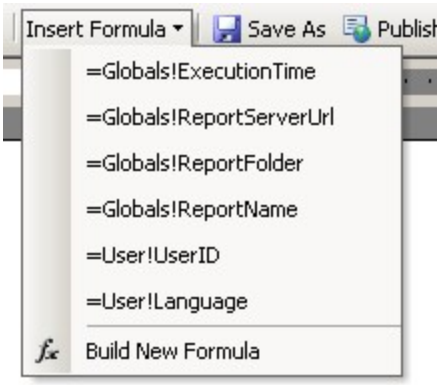
1. On the OfficeWriter toolbar, click **Insert Formula** and select **Build New Formula**.
2. In the **Insert Formula** dialog, click the **+** next to **Globals** to open the list of Reporting Services global variables.



You will see six global variables:

Execution Time	The report's execution time
Report Server URL	The URL of the server running the report
Report Folder	The folder on the Report Server containing the report
Report Name	The Name of the report
User ID	The ID of the user logged on
Language	The report language

3. Select **Execution Time** from the list.
4. Click **Insert** and **Ok**.
5. Click **Insert Formula** and select **Build New Formula**.
6. Expand the **Globals** list.
7. Select **Report Server URL** from the list.
8. Click **Insert** and **Ok**.
9. Repeat the steps above until you have added all six global variables. When you select **Insert Formula**, you should see:



\

10. In cell A1, type **Execution Time**.
11. Place your cursor in cell B1, click **Insert Formula**, and select*=Globals!ExecutionTime*. The formula will be inserted in cell B1.
12. Type labels for each of the other variables (as in step 10) and insert each formula after its label.

	A	B
1	Execution Time	%%=RS_FORMULA.Formula1
2	Report Server URL	%%=RS_FORMULA.Formula2
3	Report Folder	%%=RS_FORMULA.Formula3
4	Report Name	%%=RS_FORMULA.Formula4
5	UserID	%%=RS_FORMULA.Formula5
6	Language	%%=RS_FORMULA.Formula6
7		

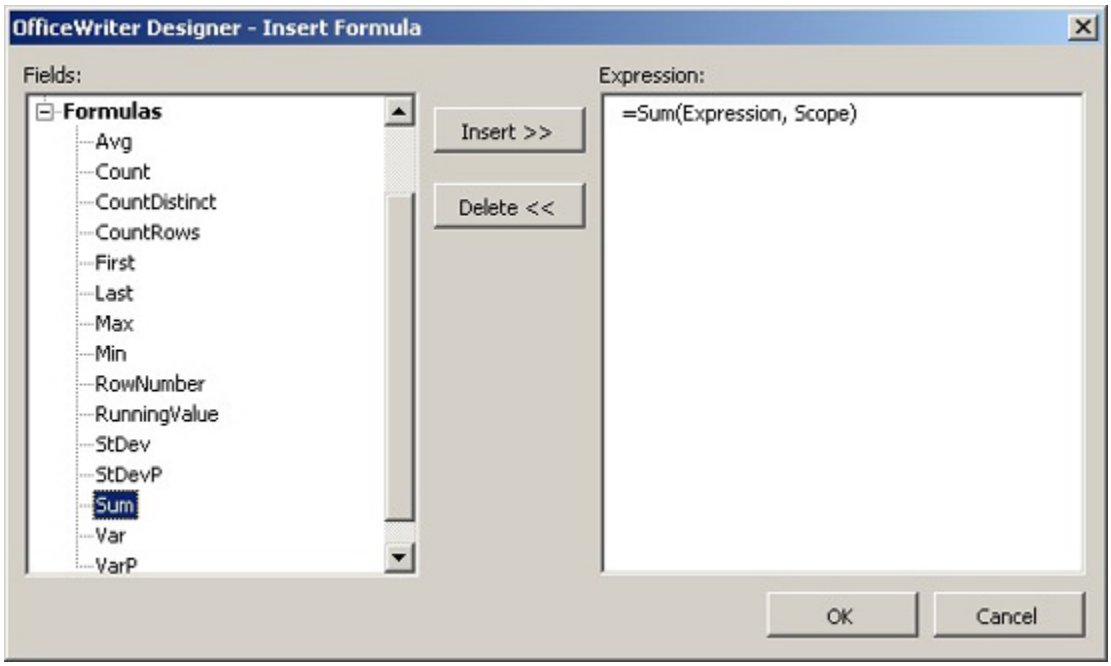
13. Click **Select Query** on the OfficeWriter toolbar and select the query created above.
14. In cell A8, type **Sales Person ID**.
15. In cell B8, type **Sales Amount**.
16. Place your cursor in cell A9, select **Insert Field** from the OfficeWriter toolbar and choose **SalesPersonID**.
17. Place your cursor in cell B9, select **Insert Field** from the OfficeWriter toolbar and choose **SalesAmount**.
18. In cell A10, type **Total**.

	A	B
1	Execution Time	%%=RS_FORMULA.Formula1
2	Report Server URL	%%=RS_FORMULA.Formula2
3	Report Folder	%%=RS_FORMULA.Formula3
4	Report Name	%%=RS_FORMULA.Formula4
5	UserID	%%=RS_FORMULA.Formula5
6	Language	%%=RS_FORMULA.Formula6
7		
8	Sales Person ID	Sales Amount
9	%%=Query1.SalesPersonID	%%=Query1.SalesAmount
10	Total	
11		

19. Click **Insert Formula** on the OfficeWriter toolbar and select **Build New Formula**.

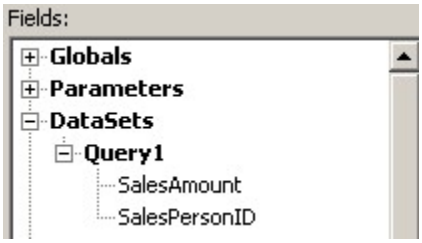
20. Click the **+** to expand the **Formulas** list.

21. Scroll down, select **SUM**, and click insert.

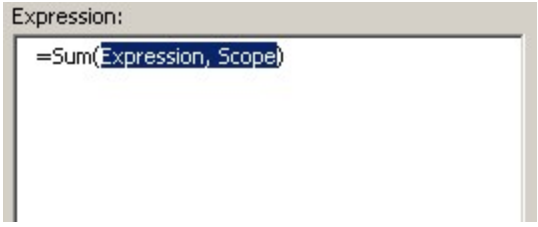


22. Click the **+** to expand the **DataSets** list.

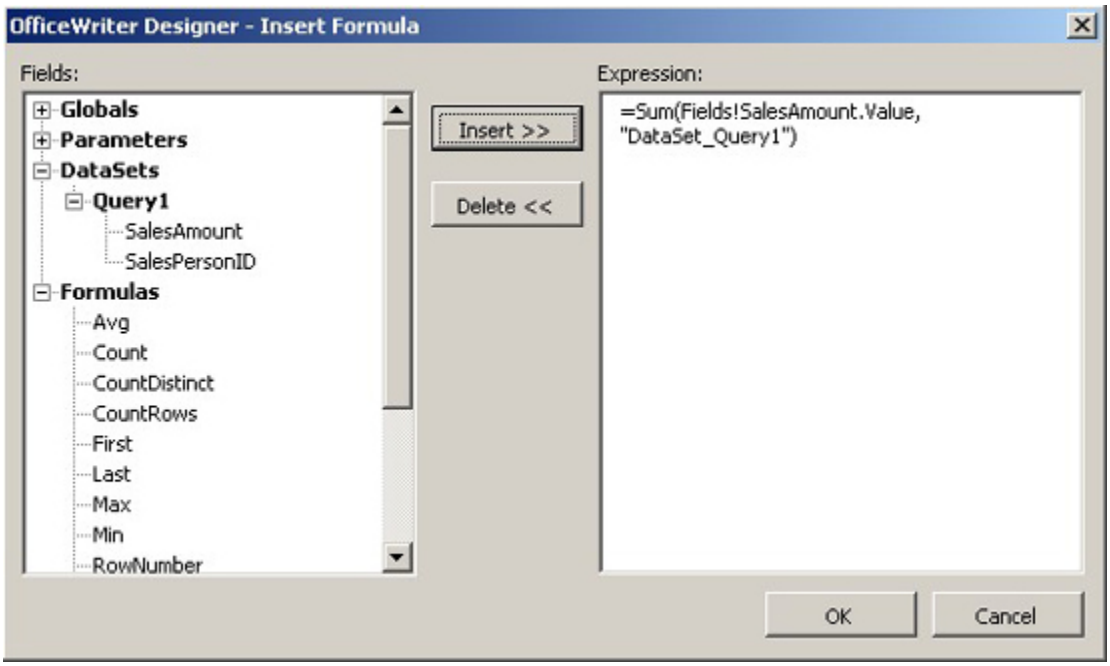
23. Find your query and click its **+** to open it.



24. In the **Expression** list on the right, highlight everything inside the SUM parentheses, as shown.



25. Click **SalesAmount** and **Insert**. Your formula should now look like this:



26. Click **Ok** to return to your worksheet.

27. Place your cursor in cell B10, select **Insert Formula** from the toolbar and choose your new formula.

	A	B
1	Execution Time	%%=RS_FORMULA.Formula1
2	Report Server URL	%%=RS_FORMULA.Formula2
3	Report Folder	%%=RS_FORMULA.Formula3
4	Report Name	%%=RS_FORMULA.Formula4
5	UserID	%%=RS_FORMULA.Formula5
6	Language	%%=RS_FORMULA.Formula6
7		
8	Sales Person ID	Sales Amount
9	%%=Query1.SalesPersonID	%%=Query1.SalesAmount
10	Total	%%=RS_FORMULA.Formula7
11		

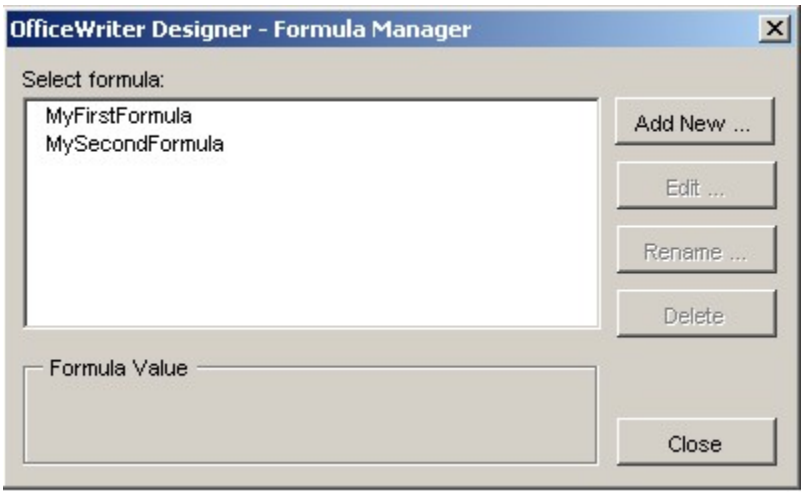
28. Publish the report.

29. Click **View** on the OfficeWriter toolbar. Your report should look like this:

	A	B
1	Execution Time	3/18/2005 2:47:30 PM
2	Report Server URL	http://charon/ReportServer
3	Report Folder	/SoftArtisans/ExcelReports
4	Report Name	FormulaSample
5	UserID	martinr
6	Language	en-US
7		
8	Sales Person ID	Sales Amount
9		29485963.76
10	27	12647729.83
11	24	12157927.19
12	38	11252038.77
13	37	10302726.69
14	29	8714865.97
15	26	7929164.967
16	31	7210650.498
17	23	6742465.108
18	34	5505602.675
19	33	4380714.255
20	302	2814958.894
21	35	2241204.042
22	22	1839370.909
23	36	1758385.926
24	14	1369624.649
25	21	891983.6435
26	20	219088.8836
27	Total	127464466.7
28		
29		
30		

Managing Formulas

Officewriter Designer gives you the ability to manage and maintain formulas you've built. The Formula Manager allows you to change, delete, and build new formulas. To start the Formula Manager, click the **Insert Formula** button on the OfficeWriter toolbar and select **Manage Formulas**.



To build a new formula from the Formula Manager screen:

1. Click the **Add New...** button. This will bring you to the Formula Builder screen described in the previous section.
2. Follow the directions above to create and use a new formula.

To change an existing formula:

1. Highlight the formula you want to change.
2. Click the **Edit** button. This brings you to the Formulas Builder screen described above.
3. Make the changes to the formula.
4. Click **Ok** to save the updated formula.

To delete a formula:

1. Highlight the formula you want to delete.
2. Click the **Delete** button.
3. Click **Yes** to confirm deletion.
4. Click **Close** to return to the report document.
5. ***Important:*** _You must manually review your report document and remove any reference to the deleted formula._

To rename a formula:

1. Highlight the formula you want to rename.
2. Click **Rename**.
3. On the Formula Name screen, type in a new name and click **Ok**.

> The formula name is only used to help you maintain formulas. It is not used anywhere in your report document.

Working With Charts

Excel charts can play an important part in data presentation. The ability to visually present data is one of Excel's strong points. This section shows you how to include Excel charts in the reports you create with OfficeWriter Designer. Each time you execute your report, the chart will be populated with the most recent data.

> The example in this section uses the AdventureWorks sample database for SQL Server 2005, an optional component in the Reporting Services installation. This section assumes you have knowledge of creating reports with OfficeWriter Designer. If you are not familiar with creating reports with OfficeWriter, please refer to the Quick Start.

Creating a Chart

The source data for an Excel chart is a range of cell values. But, OfficeWriter Designer places data markers in your worksheet which are later populated with a set of values from a database. How do you specify that the database values should be used as the source data for a chart series? In Excel's **Chart Wizard**, set the source data to be the cell that contains the data marker, but specify the cell as a range, not as an individual cell address. For example, use **=Sheet1!$B$2:$B$2** instead of **=Sheet1!$B$2**

1. Open Microsoft Excel, click **Add Query** on the OfficeWriter toolbar, and create the following query.

```
SELECT ProductCategory.ProductCategoryID,
   Max(ProductCategory.Name) AS 'Category',
   Sum(SalesOrderDetail.LineTotal) AS 'Total'
FROM Production.Product Product,
   Production.ProductCategory ProductCategory,
   Production.ProductSubCategory ProductSubCategory,
   Sales.SalesOrderDetail SalesOrderDetail
WHERE Product.ProductID = SalesOrderDetail.ProductID
   AND ProductSubCategory.ProductSubCategoryID = Product.ProductSubCategoryID
   AND ProductSubCategory.ProductCategoryID = ProductCategory.ProductCategoryID
GROUP BY ProductCategory.ProductCategoryID
ORDER BY Category
```

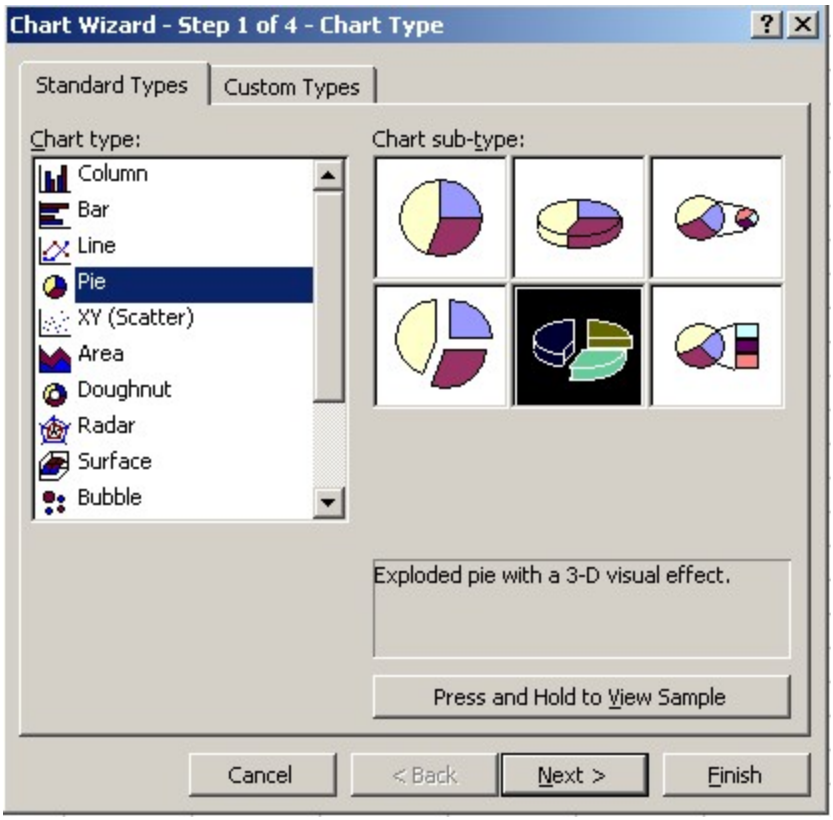
This query returns the sales from the AdventureWorks database broken down by Product Category.

2. Using OfficeWriter's **Insert Field** button, insert the fields in the worksheet, as shown:

	A	B
1	Category	Total
2	%%=MyQuery.Category	%%=MyQuery.Total
3		

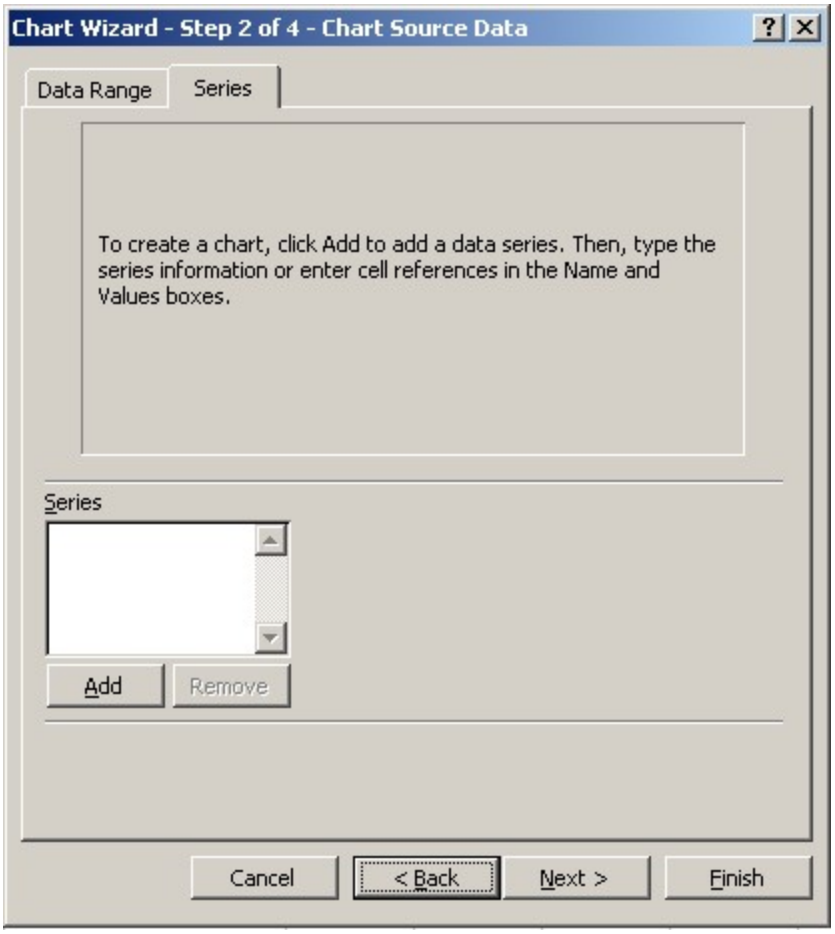
3. From the Excel's **Insert** menu, select **Chart**. The **Chart Wizard** will open.

4. Select the chart type **Exploded pie with a 3-D visual effect**.



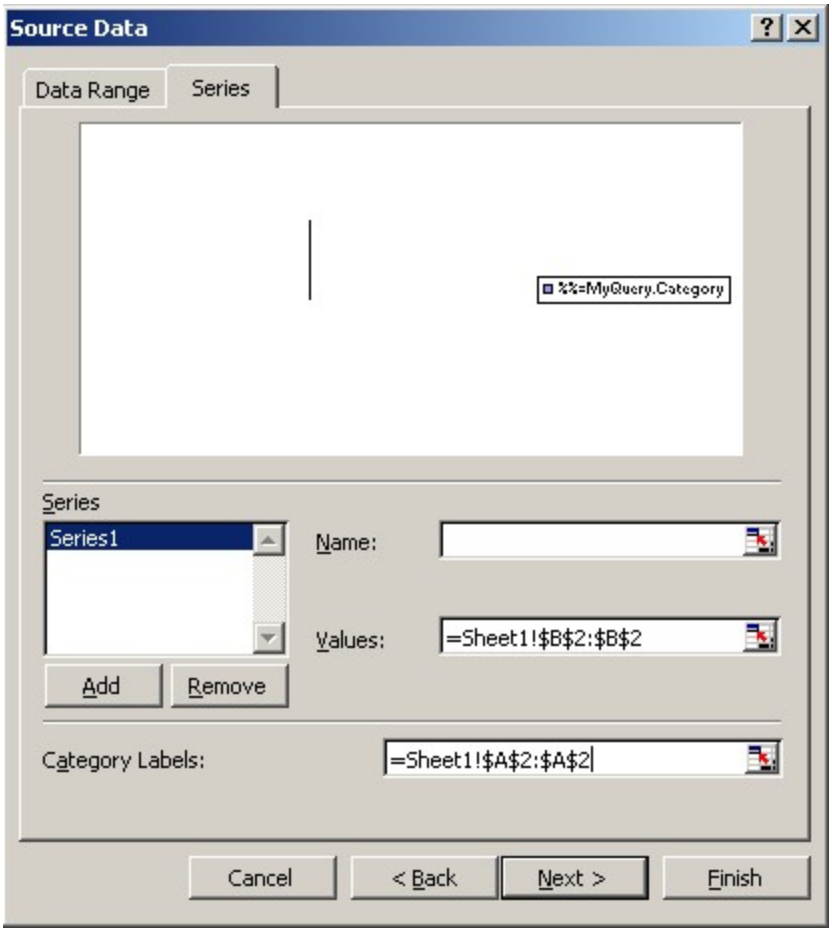
5. Click **Next**.

6. Select the **Series** tab.

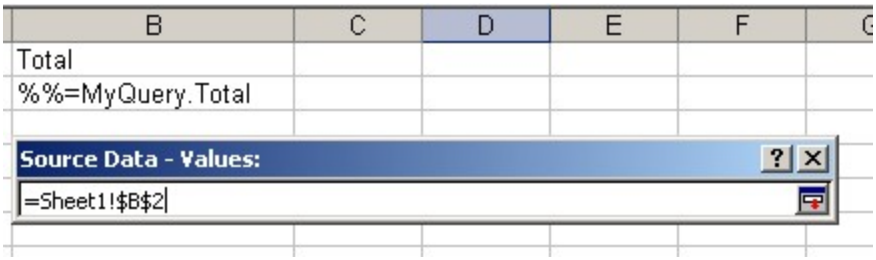


7. Click **Add** add a series.

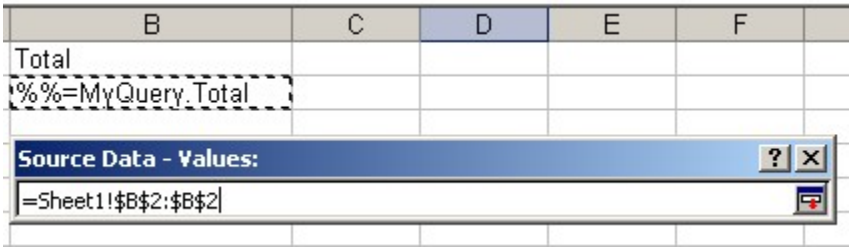
8. In the **Values** text box, enter the address of the cell containing the query's **Total** field, but enter it as a range, not as an individual cell address:
   =Sheet1!$B$2:$B$2



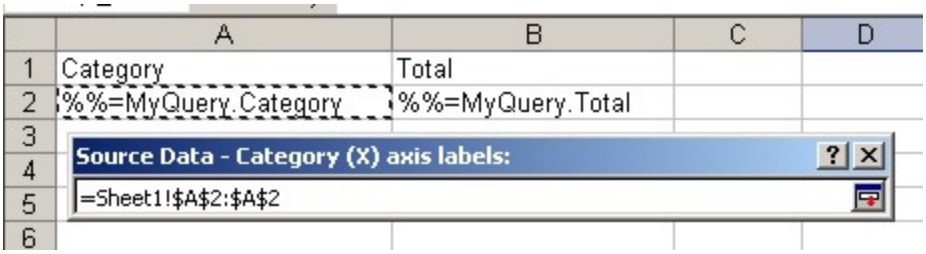
OfficeWriter will take this range and populate it with the query's data. If you click the icon to the right of the **Values** box and select the cell with your mouse, your cell will be selected, but not as a range.



Add **:$B$2** to make sure the cell is selected as a range.

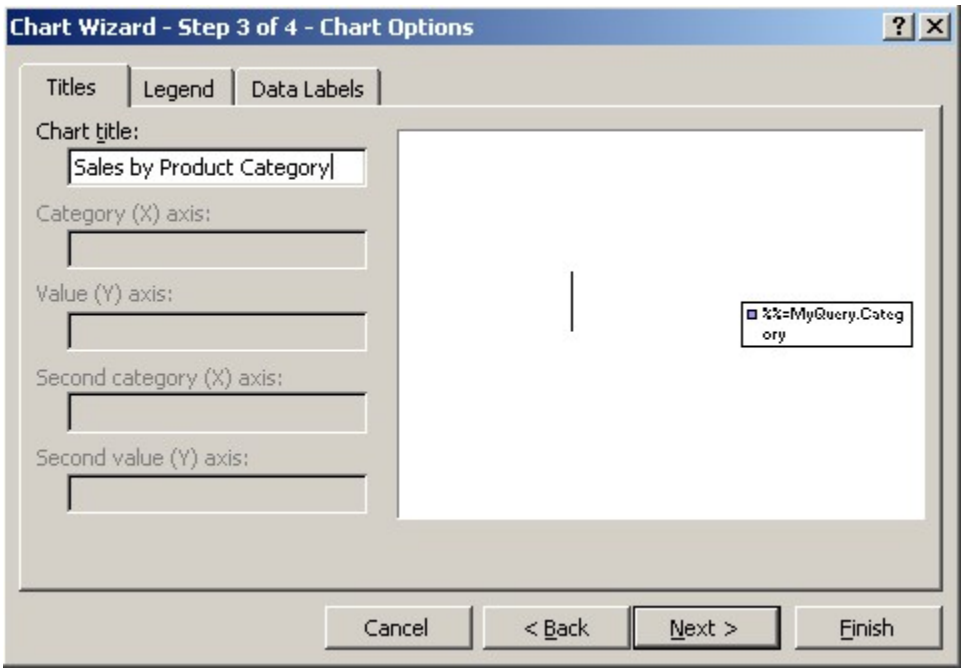


9. Do the same for the cell containing the query's **Category** field.



10. Click **Next**.

11. In the **Chart Title** textbox, enter **Sales by Product Category**, and click **Next**.



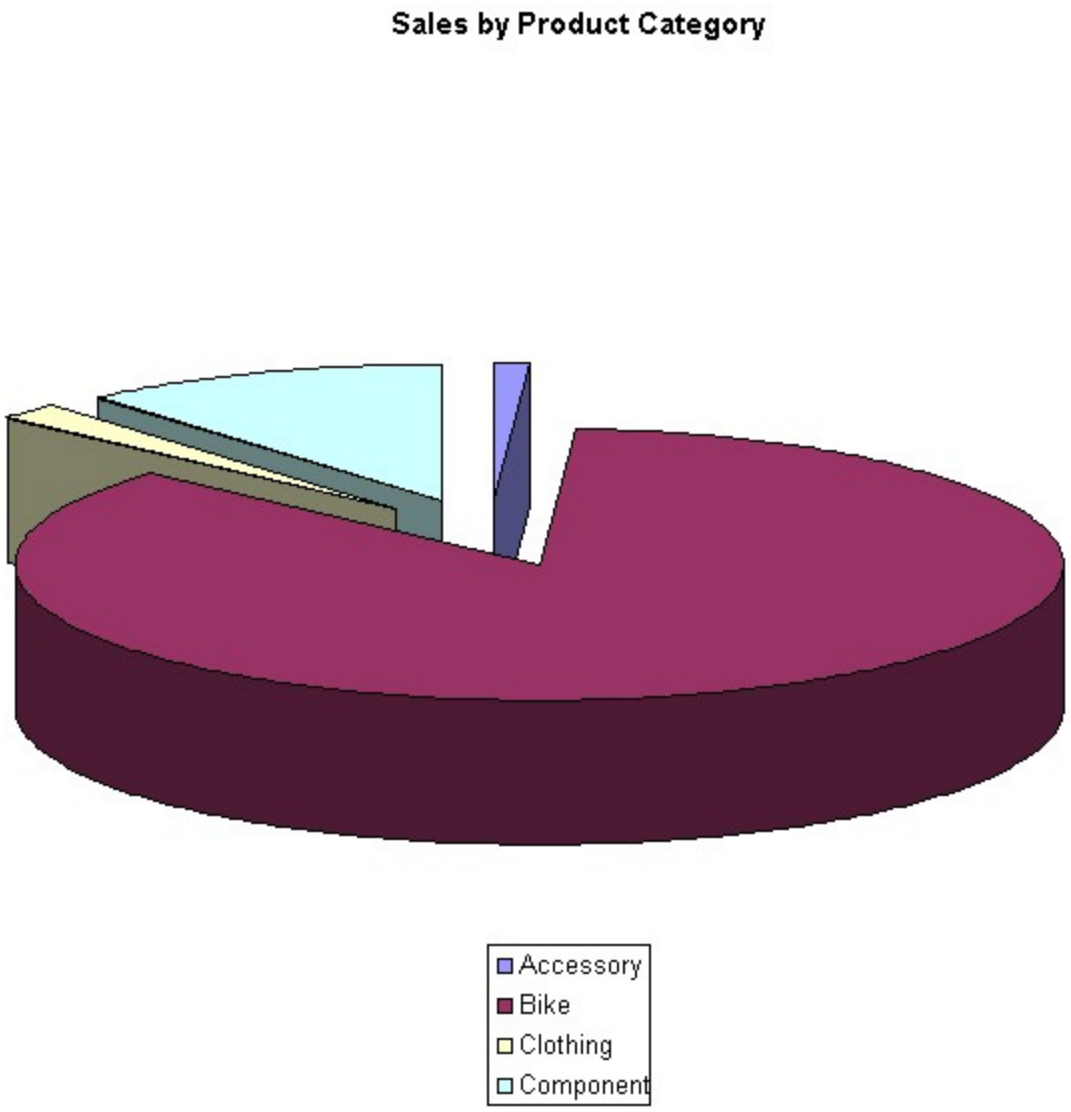
12. In the **Chart Location** dialog, select either **As new sheet** or **As object in**, and click **Finish**.

Viewing the Chart

Publish and View your report and chart. The data from the query will look like this:

	A	B
1	Category	Total
2	Accessory	$1,286,145.15
3	Bike	$109,287,189.26
4	Clothing	$2,326,009.26
5	Component	$14,565,122.97
6		

The chart should look like this:



Working With PivotTables

A PivotTable is an interactive table that summarizes data to present it in a meaningful way. You can rotate a PivotTable's rows and columns to see different summaries of the source data, or drill down to show details. By displaying different views of data, PivotTable reports allow you to easily compare data, see patterns and relationships, and analyze trends.

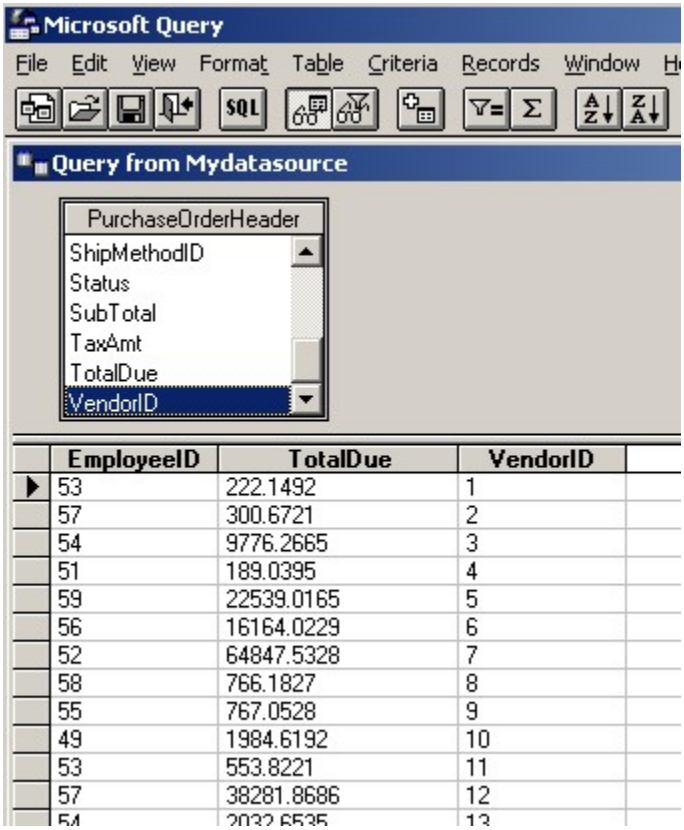
Without OfficeWriter, SQL Server Reporting Services cannot export a report to Excel format while maintaining a PivotTable. Report users have to to manually set up PivotTables every time they they export a PivotTable report from Reporting Services to Excel.

With OfficeWriter, you design your PivotTable only once at report design-time. Each time you run the report, OfficeWriter will export the report to Excel and plug the data into the PivotTable. In this section we will explore using PivotTables in a report created with OfficeWriter Designer.

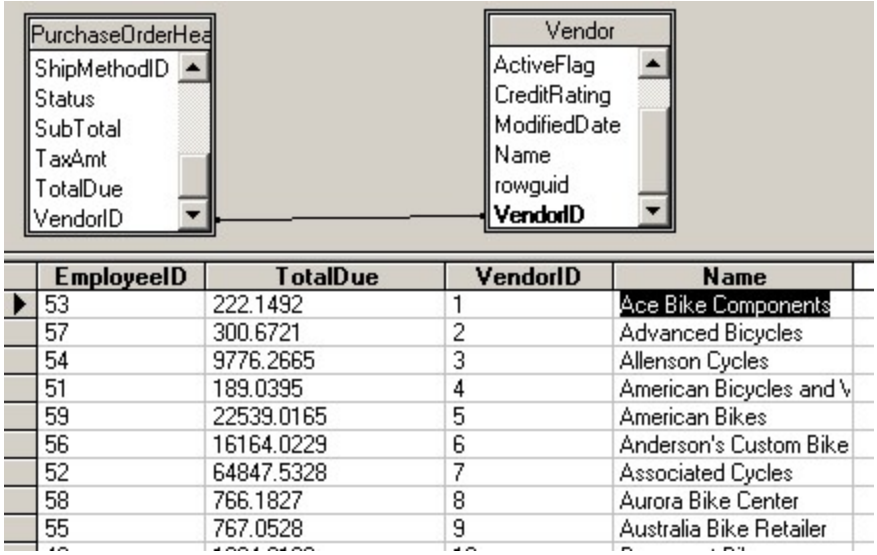
The following example uses the AdventureWorks sample database that ships with SQL Server Reporting Services 2005. It is assumed that you already know how to set up a report in Excel using OfficeWriter Designer. If you do not know how to do this, see Create Your First Excel Report.

Step 1. Add Data Markers to Your Workbook

1. Open Microsoft Excel and create a new workbook.
2. Click **Add Query** on the OfficeWriter toolbar.
3. Follow steps 2-11 of Create a Database Query.
4. In the **Add Tables** dialog box, find the **Purchasing.PurchaseOrderHeader** table in the list and select **Add**. Click **Close**.
5. In Microsoft Query, drag the following fields to the query:**EmployeeID**, **TotalDue**, and **VendorID**.



6. Add the **Purchasing.Vendor** table and its **Name** field to the query. You should see that the two tables are related by the VendorID field.



7. From the **File** menu, select **Return to OfficeWriter Designer**.

8. Add the fields - as data markers - and a header row to your report, as shown.

	A	B	C	D
1	Employee ID	Vendor ID	Vendor Name	Total
2	%%=Query1.EmployeeID	%%=Query1.VendorID	%%=Query1.Name	%%=Query1.TotalDue
3				

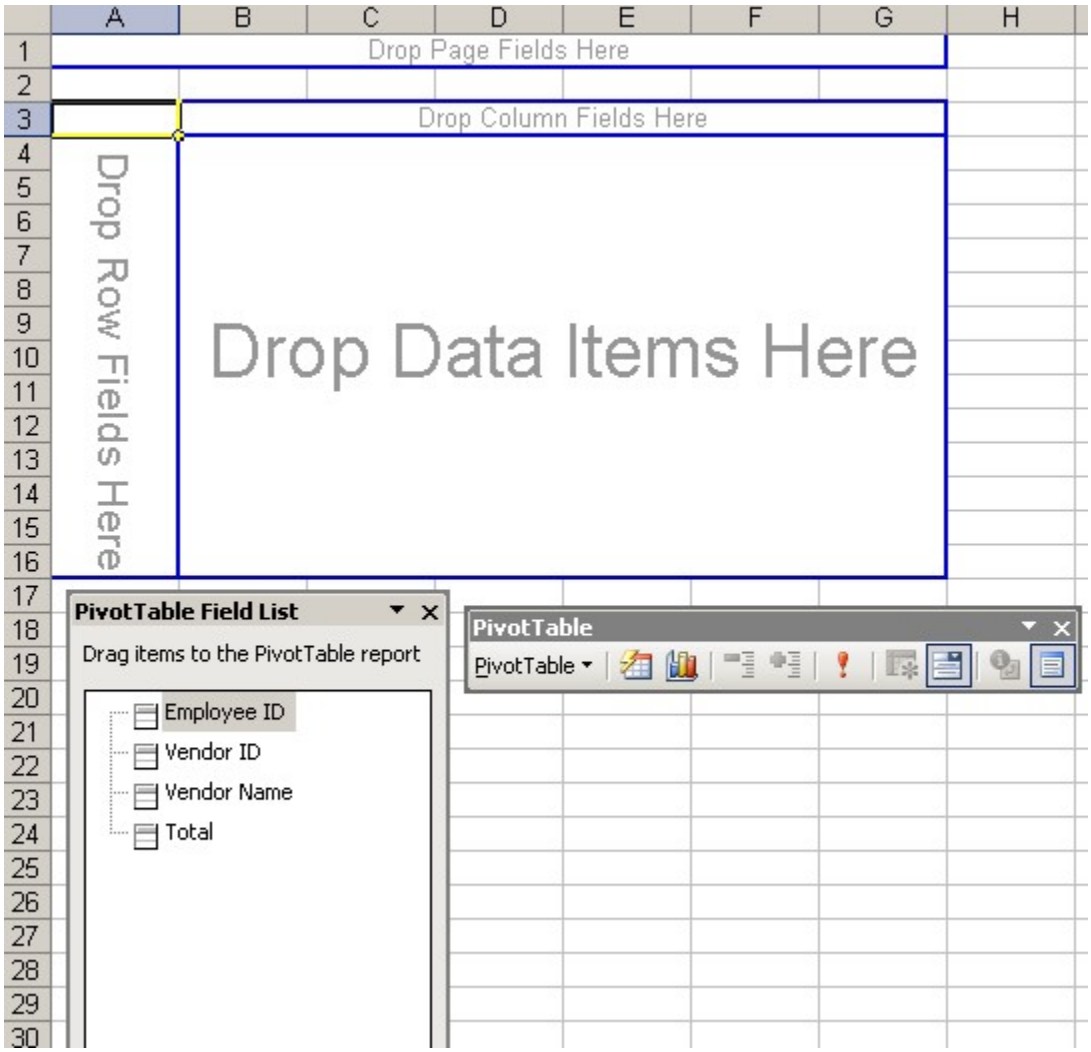
9. Publish the report.

10. Click **View** on the OfficeWriter toolbar to see the populated report.

11. Click **Close Report View** to return to the report template.

Step 2. Create a PivotTable

1. With your mouse, highlight both the header row and the row containing your fields.
2. Open Excel's **Data** menu and select **PivotTable and Pivot Chart Report** to open the PivotTable Wizard.
3. Select **Microsoft Office Excel list or database** from the top section and **PivotTable** from the bottom section and click **Next**.
4. Since you highlighted the header and field rows of your report, the **Step 2** screen should already contain the cell range to use. Click **Next**.
5. Select **New Worksheet** and click **Finish**. You should now have an empty PivotTable in your worksheet, as shown.



6. Click the **Vendor Name** field from the field list box and drag it to where it says **Drop Row Fields Here**.
7. Click and drag the **Employee ID** field to where it says **Drop Column Fields Here**.
8. Click and drag **Total** to where it says **Drop Data Items Here**. Your PivotTable should look like this:

	A	B	C
1	Drop Page Fields Here		
2			
3	Count of Total	Employee ID	
4	Vendor Name	%%=Query1.EmployeeID	Grand Total
5	%%=Query1.Name	1	1
6	Grand Total	1	1
7			

9. By default, this will give us a count of rows for each vendor/employee combination. However, for our example, we want a sum of the totals for each vendor/employee. So, on the PivotTable where it says **Count of Total**, right-click and select **Field Settings**. Under **Summarize by**, change Count to **Sum** and click **Ok**. Your PivotTable should now look like this:

	A	B	C
1	Drop Page Fields Here		
2			
3	Sum of Total	Employee ID	
4	Vendor Name	%%=Query1.EmployeeID	Grand Total
5	%%=Query1.Name	0	0
6	Grand Total	0	0
7			

Data Placeholders

When the report is executed, the data markers that you created in Step 1 will be replaced with values from the database. To ensure that the PivotTable is constructed properly, you must replace the data markers with placeholder data - any data that will be of the same format as the real output data. For example, if the field is numeric, such as our EmployeeID field, we may use a zero or any other number. If the field is a character field, such as the Name field, we need to use a character placeholder. For our example, we will use the word 'none' for Name and a zero for EmployeeID.

1. Under the **Vendor Name** label, replace **=%%Query1.Name** with **none**.

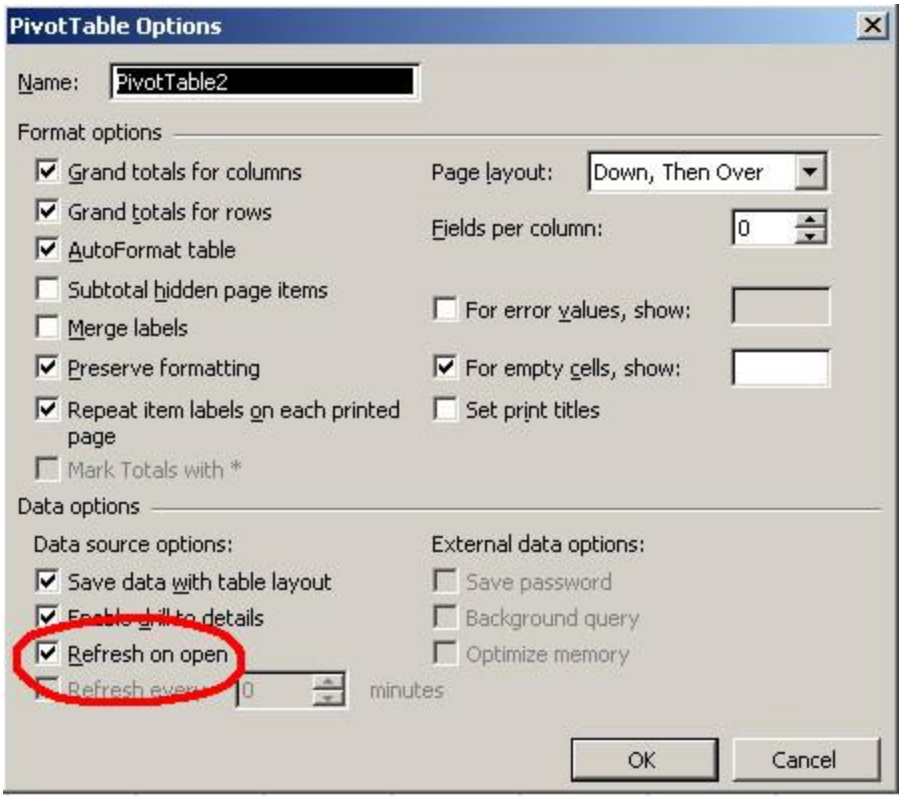
2. Under the **Employee ID** label, replace **=%%Query1.EmployeeID** with **0**.

	A	B	C
1			
2			
3	Sum of Total	Employee ID	
4	Vendor Name	0	Grand Total
5	none	0	0
6	Grand Total	0	0
7			
8			

When you insert placeholder data, never use a real value. For example, if you are displaying a city name, don't use 'Boston' for the placeholder data. The results returned for 'Boston', in that case, may not behave as expected. The same holds true for numeric data. Try to find a value that will never actually be in the query's result set.

Refreshing the Data

There is one more thing to do before trying our PivotTable. Right-click on the PivotTable and select **Table Options**. Near the bottom of the left column, make sure **Refresh on Open** is checked. If you do not check this, when the report is viewed, your PivotTable will be empty.

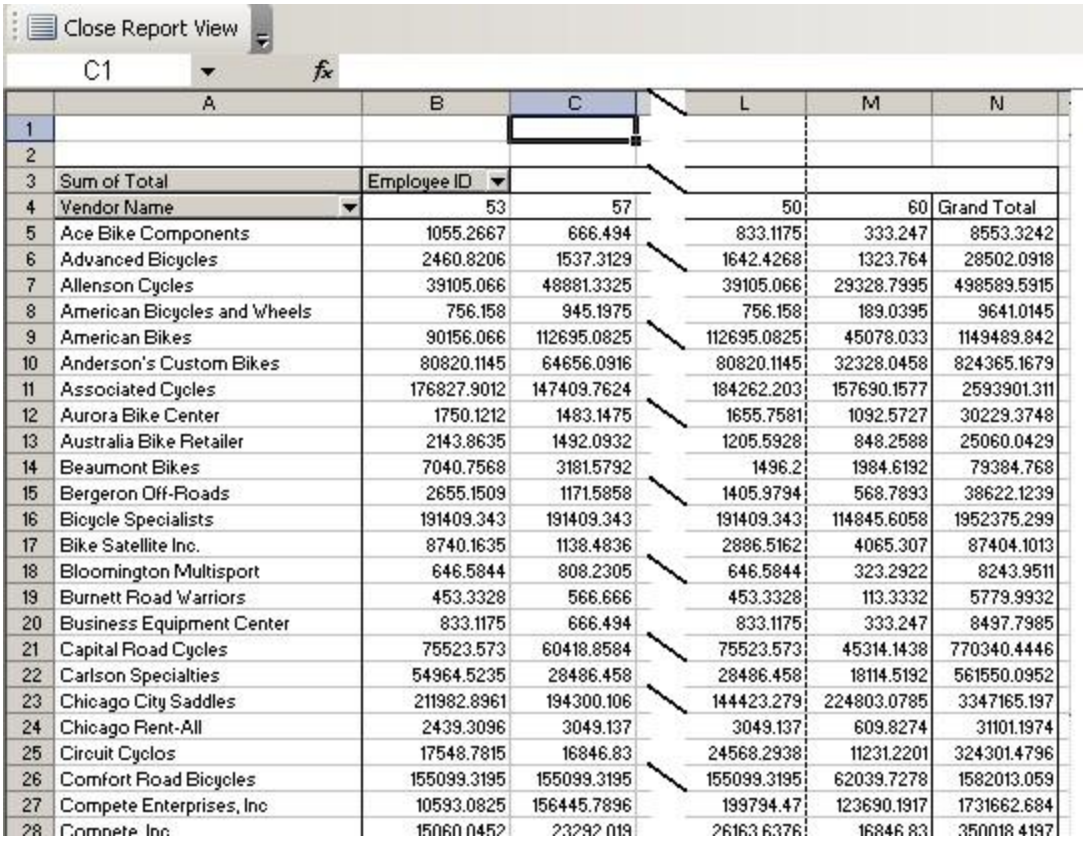


Viewing the PivotTable

Publish, and View your report. Notice that on the first sheet, your data columns display the correct data.

	A	B	C	D
1	Employee ID	Vendor ID	Vendor Name	Total
2	53	1	Ace Bike Components	222.1492
3	57	2	Advanced Bicycles	300.6721
4	54	3	Allenson Cycles	9776.2665
5	51	4	American Bicycles and Wheels	189.0395
6	59	5	American Bikes	22539.0165
7	56	6	Anderson's Custom Bikes	16164.0229
8	52	7	Associated Cycles	64847.5328
9	58	8	Aurora Bike Center	766.1827
10	55	9	Australia Bike Retailer	767.0528
11	49	10	Beaumont Bikes	1984.6192
12	53	11	Bergeron Off-Roads	553.8221
13	57	12	Bicycle Specialists	38281.8686
14	54	13	Bike Satellite Inc.	2032.6535
15	51	14	Bloomington Multisport	161.6461
16	59	15	Burnett Road Warriors	113.3332
17	56	16	Business Equipment Center	166.6235
18	52	17	Capital Road Cycles	15104.7146
19	58	18	Carlson Specialties	18114.5192
20	55	20	Chicago City Saddles	87520.5581
21	50	21	Chicago Rent-All	609.8274
22	49	22	Circuit Cyclos	7721.4638
23	57	23	Comfort Road Bicycles	31019.8639
24	54	24	Compete Enterprises, Inc	41230.0639
25	51	25	Compete, Inc.	4658.4038
26	59	26	Competition Bike Training Systems	31268.7375
27	56	27	Consumer Cycles	66.2387
28	52	28	Continental Pro Cycles	798.4841
29	58	29	Crowley Sport	48485.6873
30	55	30	Cruger Bike Company	655.0424

Now look at the sheet containing your PivotTable. You should find the EmployeeID numbers across the top and all the vendor names along the left column. Each cell will contain the sum for each vendor/employee combination.

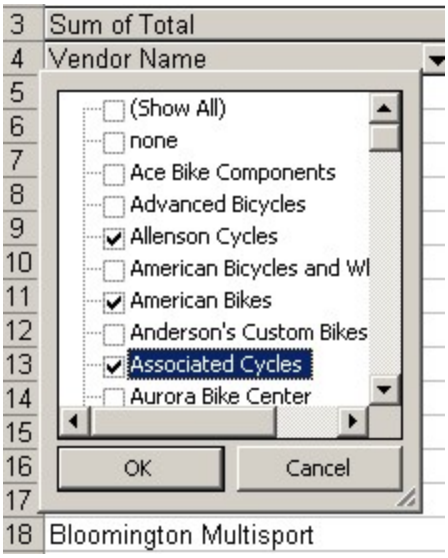


Close Report View

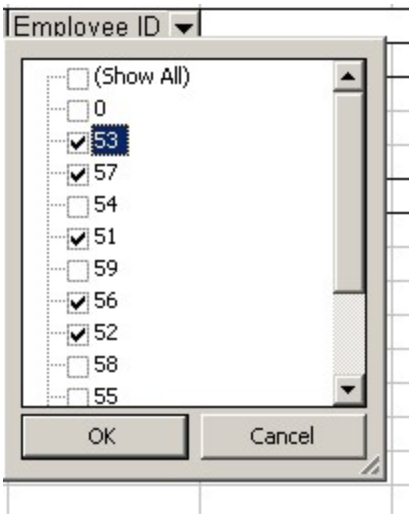
C1

	A	B	C	L	M	N
1						
2						
3	Sum of Total	Employee ID				
4	Vendor Name	53	57	50	60	Grand Total
5	Ace Bike Components	1055.2667	666.494	833.1175	333.247	8553.3242
6	Advanced Bicycles	2460.8206	1537.3129	1642.4268	1323.764	28502.0918
7	Allenson Cycles	39105.066	48881.3325	39105.066	29328.7995	498589.5915
8	American Bicycles and Wheels	756.158	945.1975	756.158	189.0395	9641.0145
9	American Bikes	90156.066	112695.0825	112695.0825	45078.033	1149489.842
10	Anderson's Custom Bikes	80820.1145	64656.0916	80820.1145	32328.0458	824365.1679
11	Associated Cycles	176827.9012	147409.7624	184262.203	157690.1577	2593901.311
12	Aurora Bike Center	1750.1212	1483.1475	1655.7581	1092.5727	30229.3748
13	Australia Bike Retailer	2143.8635	1492.0932	1205.5928	848.2588	25060.0429
14	Beaumont Bikes	7040.7568	3181.5792	1496.2	1984.6192	79384.768
15	Bergeron Off-Roads	2655.1509	1171.5858	1405.9794	568.7893	38622.1239
16	Bicycle Specialists	191409.343	191409.343	191409.343	114845.6058	1952375.299
17	Bike Satellite Inc.	8740.1635	1138.4836	2886.5162	4065.307	87404.1013
18	Bloomington Multisport	646.5844	808.2305	646.5844	323.2922	8243.9511
19	Burnett Road Warriors	453.3328	566.666	453.3328	113.3332	5779.9932
20	Business Equipment Center	833.1175	666.494	833.1175	333.247	8497.7985
21	Capital Road Cycles	75523.573	60418.8584	75523.573	45314.1438	770340.4446
22	Carlson Specialties	54964.5235	28486.458	28486.458	18114.5192	561550.0952
23	Chicago City Saddles	211982.8961	194300.106	144423.279	224803.0785	3347165.197
24	Chicago Rent-All	2439.3096	3049.137	3049.137	609.8274	31101.1974
25	Circuit Cyclos	17548.7815	16846.83	24568.2938	11231.2201	324301.4796
26	Comfort Road Bicycles	155099.3195	155099.3195	155099.3195	62039.7278	1582013.059
27	Compete Enterprises, Inc	10593.0825	156445.7896	199794.47	123690.1917	1731662.684
28	Compete, Inc	15060.0452	23292.019	26163.6376	16846.83	350018.4197

Click on the down arrow next to the **Vendor Name** label. Clear**Show All** and just select a few vendors.



Do the same for the **EmployeeID** field.



Now look at your results.

	A	B	C	D	E	F	G
1							
2							
3	Sum of Total	Employee ID					
4	Vendor Name	53	57	51	56	52	Grand Total
5	Allenson Cycles	39105.066	48881.3325	48881.3325	48881.3325	39105.066	224854.1295
6	American Bikes	90156.066	112695.0825	112695.0825	112695.0825	112695.0825	540936.396
7	Associated Cycles	176827.9012	147409.7624	259390.1311	324237.664	324237.664	1232103.123
8	Grand Total	306089.0332	308986.1774	420966.5461	485814.079	476037.8125	1997893.648
9							

Viewing the Report in Reporting Services Report Manager

In your browser, type the path to the Report Manager (Usually http://<YourReportServer>/Reports). Navigate to the report and view it.

To see the report as you designed it with OfficeWriter:

1. From the **Select a format** drop-down list, choose **Excel (.xls) designed by Officewriter**.
2. Click **Export**.
3. You will be prompted to save or open. If your report contains a chart or a PivotTable, you **MUST** select **Save**. After it saves to disk, then you may select **Open** to view it.

Working With PivotCharts

PivotCharts and PivotTables are similar in that they both allow you to manipulate how your data is presented and analyzed. PivotTables can be the foundation of PivotCharts. If you are not familiar with PivotTables, see Working With PivotTables first.

Without SoftArtisans OfficeWriter, Microsoft SQL Server Reporting Services does not support embedding a PivotChart in a report that can be exported from its Report Manager. Therefore, everytime you export your report from Reporting Services to an Excel format, you need to recreate the PivotChart. If you have many reports, keeping track of how you originally set up the PivotChart can be an intimidating task.

Using OfficeWriter Reporting Services Integration, you can put a PivotChart in your report definition once, and the PivotChart will be refreshed with new data each time the report is executed.

Let's take a look at how you can integrate PivotCharts into your OfficeWriter Designer reports. This example will use the AdventureWorks sample database shipped with SQL Server Reporting Services 2005. We assume you already know how to create a basic report in Excel using Officewriter Designer. If you don't know how to do this, first read Create Your First Excel Report.

Our sample will use a simple query to compare average salary among job titles, gender, and departments, using a chart.

Step 1. Add Data Markers to Your Workbook

1. Open Microsoft Excel and create a new blank workbook.
2. Click **Add Query** on the OfficeWriter toolbar.

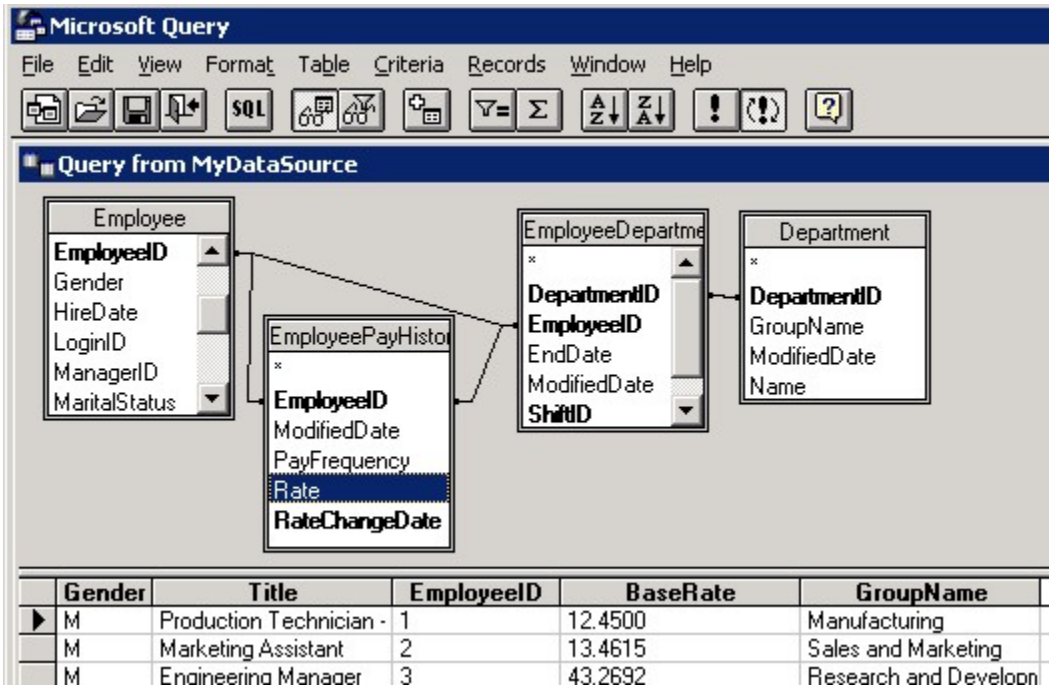
3. Follow steps 2-11 of Create a Database Query.

4. In the **Add Tables** dialog box, find the **Employee** table in the list and select **Add**. Click **Close**.

5. In Microsoft Query, add the following AdventureWorks tables to the query. All of these tables are part of the **HumanResources** schema: **Employee**, **EmployeePayHistory**, **EmployeeDepartmentHistory**, and **Department**.

6. Add the following columns to the query: **Employee.Gender**, **Employee.Title**, **Employee.EmployeeID**, **EmployeePayHistory.Rate**, and **Department.GroupName**

7. In the grid displaying the data, double-click on the **Rate** column header. In the **Column Heading** textbox, enter **BaseRate**, and then click OK. Your query should look like this:



8. From the **File** menu, select *Return to OfficeWriter Designer*.

9. Using the **Insert Field** button located on the OfficeWriter toolbar, place all the fields in the worksheet along with a header for each.

	A	B	C	D	E
1	Base Rate	Employee ID	Gender	Department	Title
2	%%=Query1.BaseRate	%%=Query1.EmployeeID	%%=Query1.Gender	%%=Query1.GroupName	%%=Query1.Title

10. Publish the report.

11. Click **View** on the OfficeWriter toolbar to see the populated report.

12. Click **Close Report View** to return to the report template.

Step 2. Create a PivotChart

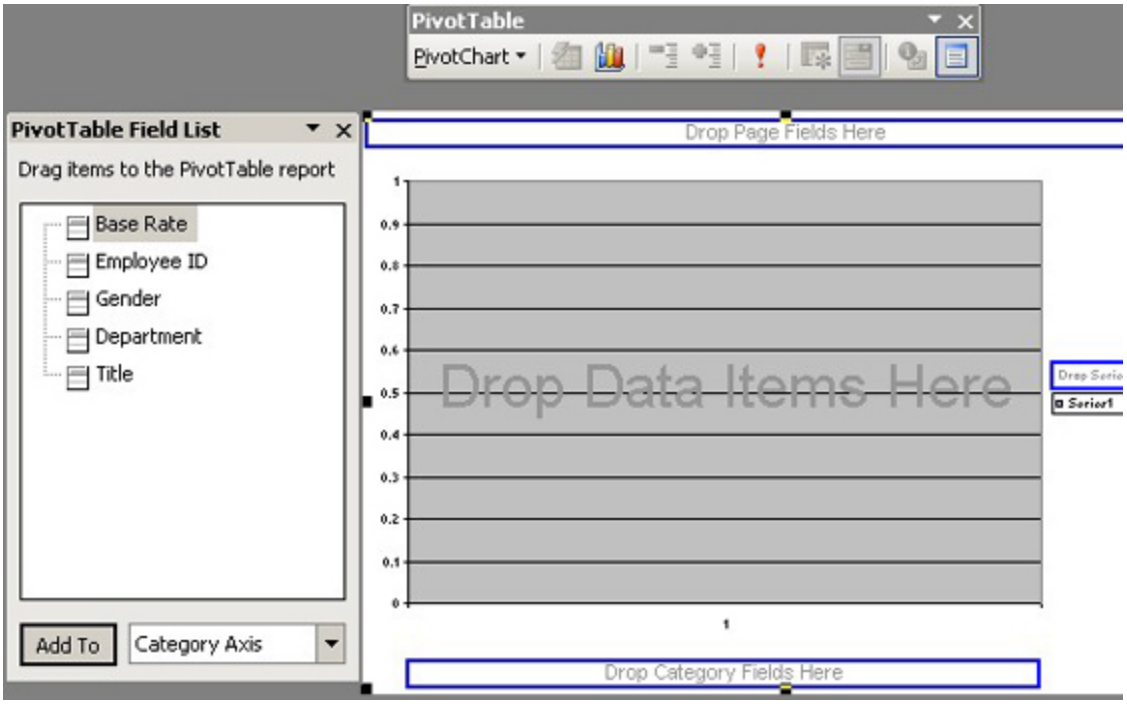
1. With your mouse, highlight all the data markers and headers that you inserted in the worksheet.

2. From Excel's **Data** menu, select **PivotTable and PivotChart Report** to open the PivotTable and PivotChart Wizard.

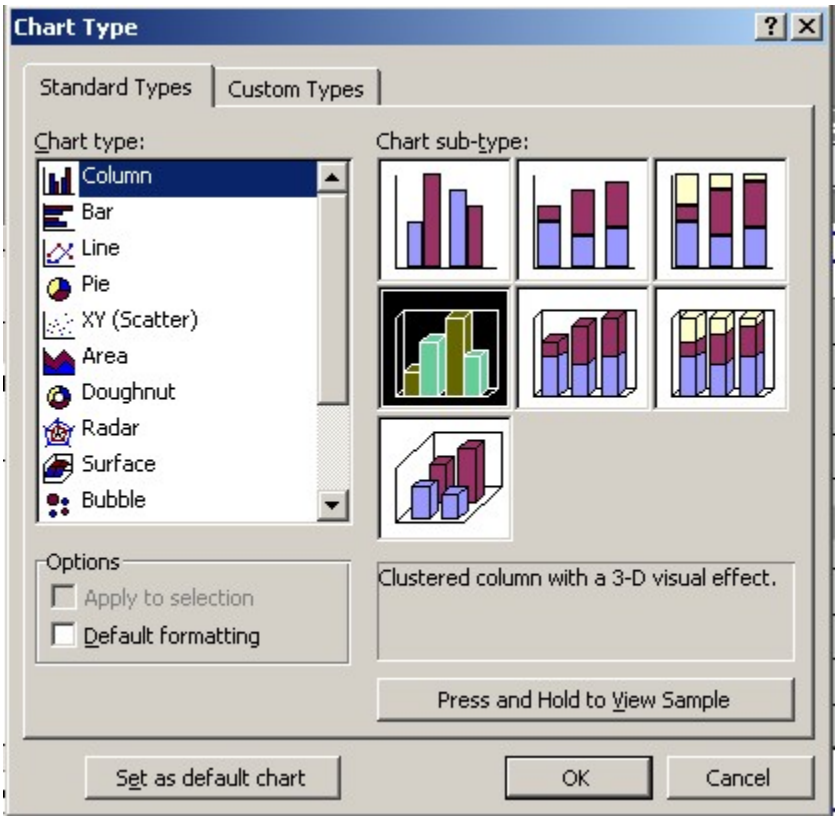
3. Select **Microsoft Office Excel list or database** from the top section, **PivotChart** from the bottom section, and click **Next**.

4. Since you already highlighted the header and field rows of your report, the Step 2 screen should already contain the cell range to use. Click **Next**.

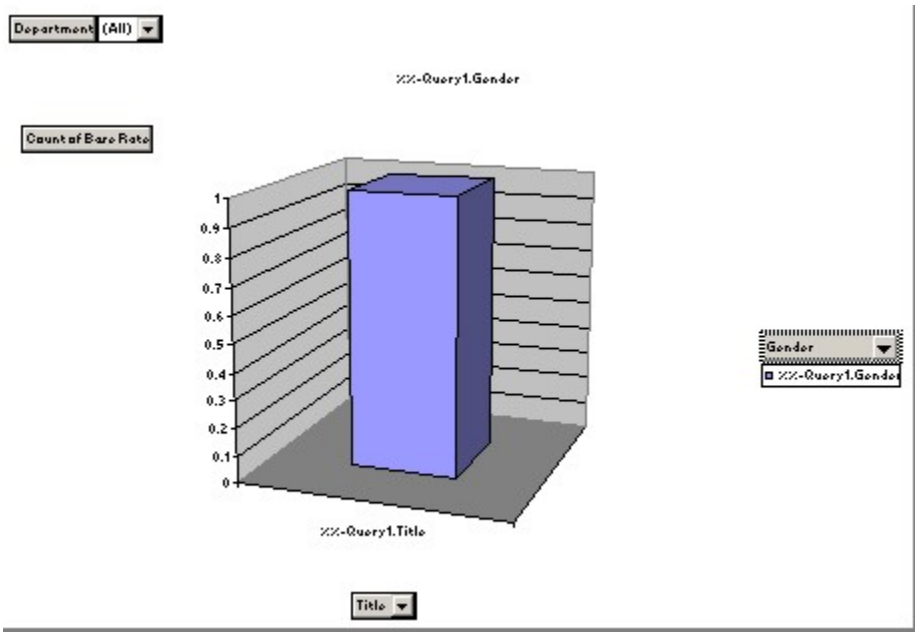
5. Select **New Worksheet** and click **Finish**. You should now have an empty PivotChart in your report as shown.



6. Right-click in the upper left part of the gray area where it says *Drop Data Items Here*, and select **Chart Type**.
7. Select the chart type **Clustered column with a 3-D visual effect**.



8. From the **PivotTable** Field List, drag the **Title** field to the area labeled **Drop Category Fields Here**.
9. Drag the **Gender** field to the **Drop Series Fields Here** area.
10. Drag the **Department** field to **Drop Page Fields Here**.
11. Drag the **BaseRate** field to **Drop Data Items Here**. Your PivotChart should look like this:



For our example, we want to see the average salary, or base rate. However, the default for the PivotChart made the base rate a count, so we must change that.

1. Right-click the label **Count of BaseRate** and select **Format PivotChart Field**.
2. Change Count to **Average** in the list box and click Ok. It should now say Average of BaseRate.

Step 3. Create Data Placeholders

When the report is executed, the data markers that you created in Step 1 will be replaced with values from the database. To ensure that the PivotChart is constructed properly, you must replace the data markers with placeholder data - any data that will be of the same format as the real output data. For example, if the field is numeric, such as the EmployeeID field, we may use a zero or any other number. If the field is a character field, such as the Title field, we need to use a character placeholder. For our example, we will use the word 'none' for the Title and Gender fields.

1. When Excel created your PivotChart, it also created a PivotTable corresponding to the PivotChart. Find the worksheet containing the PivotTable. It should look like this:

	A	B	C
1	Department	(All)	
2			
3	Average of Base Rate	Gender	
4	Title	%%=Query1.Gender	Grand Total
5	%%=Query1.Title	#DIV/0!	#DIV/0!
6	Grand Total	#DIV/0!	#DIV/0!
7			

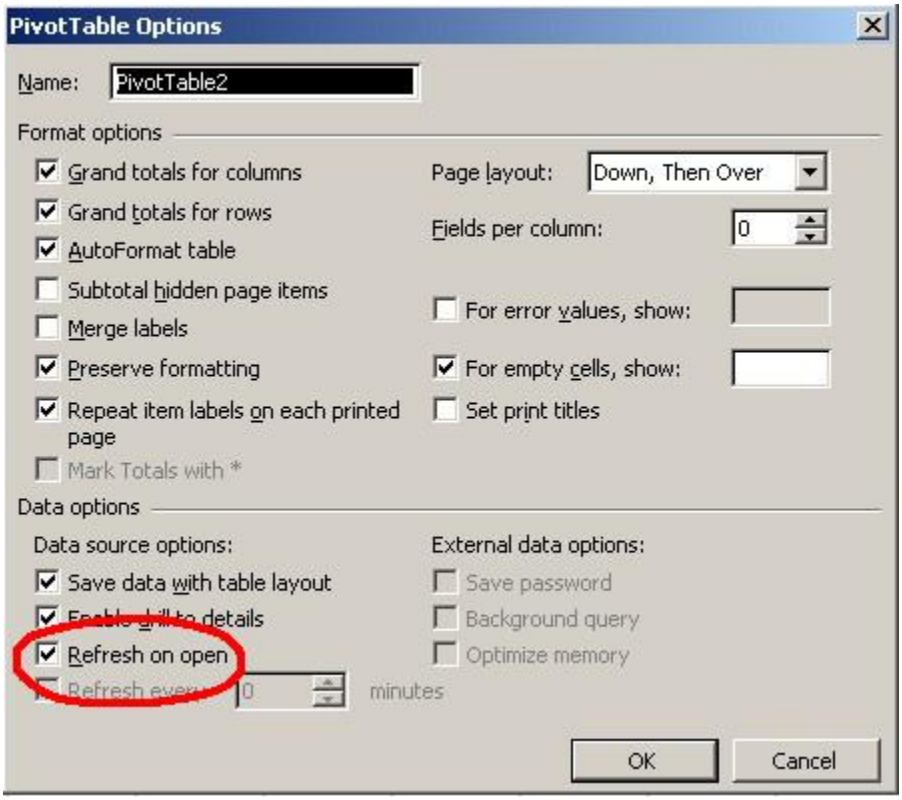
2. Under the **Title** label, replace **=%%Query1.Title** with **none**.
3. Under the **Gender** label, replace **=%%Query1.Gender** with **0**.

	A	B	C
1	Department	(All)	
2			
3	Average of Base Rate	Gender	
4	Title	none	Grand Total
5	none	#DIV/0!	#DIV/0!
6	Grand Total	#DIV/0!	#DIV/0!
7			

When you insert placeholder data, never use a real value. E.g. if you are displaying a city name, don't use 'Boston' for the placeholder data. The results returned for 'Boston', in that case, may not behave as expected. The same holds true for numeric data. Try to find a value that will never actually be in the query's result set.

Refreshing the Data

There is one more thing to do before trying our PivotChart. Right-click on the pivot table and select **Table Options** from the list. Near the bottom of the left column, make sure **Refresh on Open** is checked. If you do not check this, when the report is viewed, your PivotChart and PivotTable will be empty.

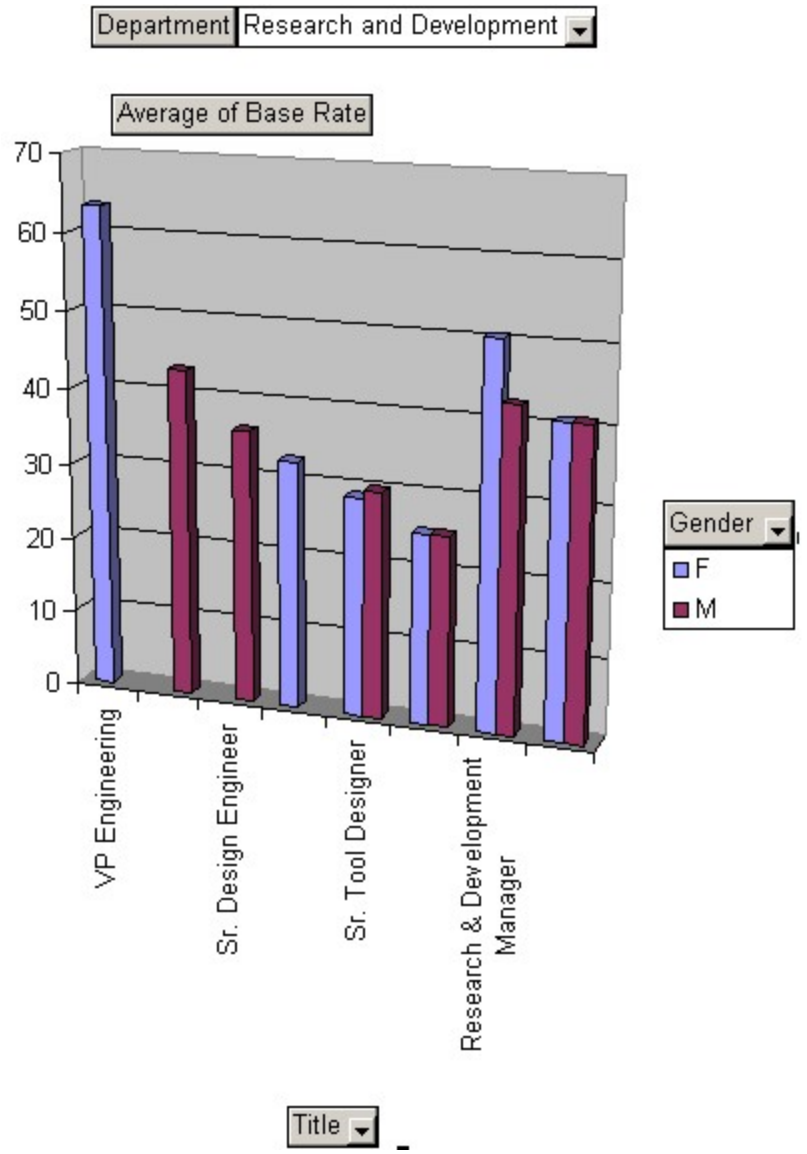


Viewing the PivotChart

Publish, and View your report. Notice that on the first sheet, your data columns display the correct data.

	A	B	C	D	E
1	Base Rate	Employee ID	Gender	Department	Title
2	63.4615	1	F	Research and Development	VP Engineering
3	43.2692	2	M	Research and Development	Engineering Manager
4	36.0577	3	M	Research and Development	Sr. Design Engineer
5	32.6923	4	F	Research and Development	Design Engineer
6	32.6923	5	F	Research and Development	Design Engineer
7	32.6923	6	F	Research and Development	Design Engineer
8	28.8462	7	F	Research and Development	Sr. Tool Designer
9	25	8	F	Research and Development	Tool Designer
10	25	9	M	Research and Development	Tool Designer
11	72.1154	10	M	Sales and Marketing	VP Sales

Now look at the sheet containing your PivotChart. You should have the Titles across the bottom of the graph but it is not very pretty. It contains all the data. Open the drop-down list of departments and select one. Now you get a clear graphical picture of the data that visually presents the wage differences between males and females by position across departments.



Now, go to the worksheet containing the chart's PivotTable. What do you see? The selections on the PivotTable match those of the chart. If you selected a department on the PivotChart, that same department was selected on the PivotTable. The PivotChart and the PivotTable work hand-in-hand.

	A	B	C	D
1	Department	Research and Development		
2				
3	Average of Base Rate	Gender		
4	Title	F	M	Grand Total
5	VP Engineering	63.4615		63.4615
6	Engineering Manager		43.2692	43.2692
7	Sr. Design Engineer		36.0577	36.0577
8	Design Engineer	32.6923		32.6923
9	Sr. Tool Designer	28.8462	29.8462	29.3462
10	Tool Designer	25	25	25
11	Research & Development Manager	50.4808	42.4808	46.4808
12	Research & Development Engineer	40.8654	40.8654	40.8654
13	Grand Total	38.34135	36.25321667	37.44643571
14				

Viewing the Report in Reporting Services Report Manager

In your browser, type the path to the Report Manager (Usually http://<YourReportServer>/Reports). Navigate to the report and view it.

To see the report as you designed it with OfficeWriter:

1. From the **Select a format** drop-down list, choose **Excel (.xls) designed by Officewriter**.
2. Click **Export**.
3. You will be prompted to save or open. If your report contains a chart or a PivotTable, you **MUST** select **Save**. After it saves to disk, then you may select **Open** to view it.

Reference

OfficeWriter Word Dialogs

- OfficeWriter Designer for Word - Open Report
- OfficeWriter Designer for Word - Step 1 of 3
- OfficeWriter Designer for Word - Step 2 of 3
- OfficeWriter Designer for Word - Data Source Credentials
- OfficeWriter Designer for Word - Publish Report
- OfficeWriter Designer for Word - Report Parameters
- OfficeWriter Designer for Word - Valid Values
- OfficeWriter Designer for Word - Enterprise Feature
- OfficeWriter Designer for Word - Insert Formula
- OfficeWriter Designer for Word - Formula Manager
- OfficeWriter Designer for Word - Report Browser
- OfficeWriter Designer for Word - Set Query Range
- OfficeWriter Designer for Word - Save Report

OfficeWriter Excel Dialogs

- OfficeWriter Designer for Excel - Open Report
- OfficeWriter Designer for Excel - Step 1 of 3
- OfficeWriter Designer for Excel - Step 2 of 3
- OfficeWriter Designer for Excel - Data Source Credentials
- OfficeWriter Designer for Excel - Publish Report
- OfficeWriter Designer for Excel - Report Parameters
- OfficeWriter Designer for Excel - Valid Values
- OfficeWriter Designer for Excel - Enterprise Feature
- OfficeWriter Designer for Excel - Insert Formula
- OfficeWriter Designer for Excel - Formula Manager
- OfficeWriter Designer for Excel - Report Browser
- OfficeWriter Designer for Excel - Save Report

Microsoft RDL Files

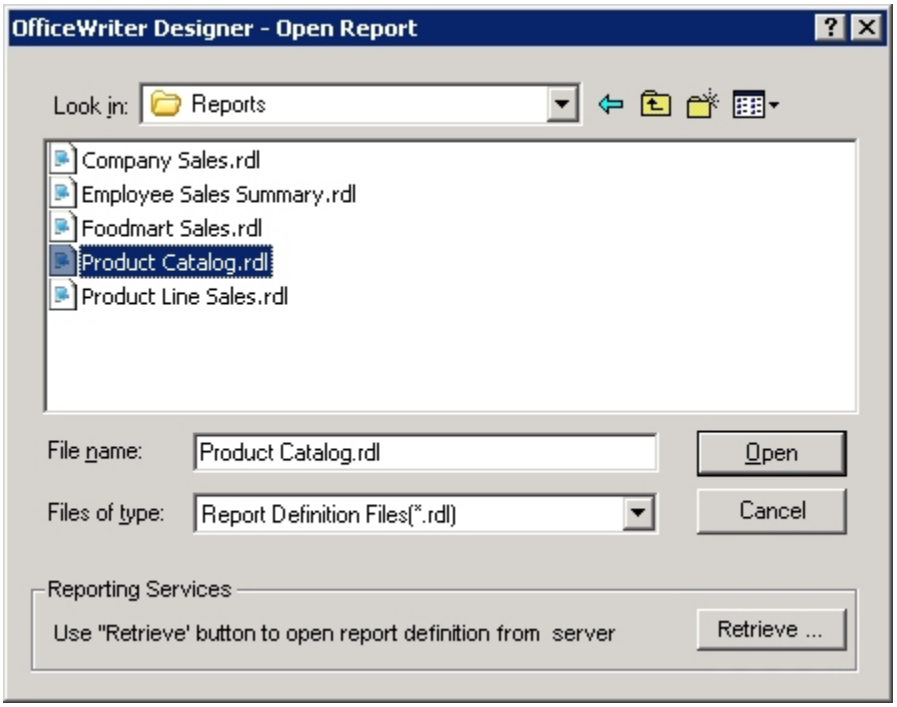
OfficeWriter Word Dialogs

Dialog Title	Description
OfficeWriter Designer for Word - Open Report	The Open Report dialog opens when you click the Open Report button. It allows you to open saved .rdl files.
OfficeWriter Designer for Word - Step 1 of 3	Step 1 of 3 opens when you click the Add Query button. It is the first step in the process of building a query to add to your report.
OfficeWriter Designer for Word - Step 2 of 3	In Step 2 of 3, you will select a saved database connection or create a new connection.
OfficeWriter Designer for Word - Data Source Credentials	Use this dialog to provide data source credentials that specify how the report will link to the Reporting Services data.
OfficeWriter Designer for Word - Publish Report	Use the Publish Report dialog to publish your report to the Reporting Services server.
OfficeWriter Designer for Word - Report Parameters	When you view a report with parameters, the Report Parameters dialog will prompt you to enter parameter values.
OfficeWriter Designer for Word - Valid Values	If the report with parameters contains an available parameter values list, the Valid Values dialog will display a list of valid values.
OfficeWriter Designer for Word - Enterprise Feature	When you select a feature that is available only in OfficeWriter Enterprise Edition, the Enterprise Feature dialog will open.

OfficeWriter Designer for Word - Insert Formula	The Insert Formula dialog allows you to add aggregate functions, report parameters and global variables to your report. This feature is available only in OfficeWriter Enterprise Edition.
OfficeWriter Designer for Word - Formula Manager	The Formula Manager allows you to change, delete, and build new formulas. This feature is available only in OfficeWriter Enterprise Edition.
OfficeWriter Designer for Word - Report Browser	The Report Browser dialog allows you to browse and view reports designed with OfficeWriter.
OfficeWriter Designer for Word - Set Query Range	Use the Set Query Range dialog to set a query's range to Document or Selection.
OfficeWriter Designer for Word - Save Report	Use the Save Report dialog to save your report locally before publishing it to the Reporting Services server.

OfficeWriter Designer for Word - Open Report

The **Open Report** dialog opens when you click the OfficeWriter Designer for Word's **Open Report** button. It allows you to open report definition files (.rdl files) that have already been created and saved. These can be reports created with OfficeWriter Designer or with other .rdl tools, such as Visual Studio. A report file contains reporting information like queries and fields along with any Word functionality you added.



To open a report definition file saved locally:

1. Click **Open Report** on the OfficeWriter toolbar.
2. Make sure that **Report Definition Files (*.rdl)** appears in the file type box.
3. Browse to the folder that contains the .rdl file.
4. Select the .rdl file and click **Open** .

> You will not be able to open reports built in the Office Open XML file format (.docx) from Word 2003

To open a report definition file saved on the report server:

1. Click **Open Report** on the OfficeWriter toolbar.
2. Click **Retrieve** to open OfficeWriter's Report Browser.
3. In the **Domain or Server URL** field, enter the path to your Reporting Services server (for example http://MyReports/ReportServer).

4. Click **Refresh**. OfficeWriter will display the folders available on the server.
5. Navigate to the folder that contains the .rdl file.
6. Click Ok.

See Also

Create a Word Report From an Existing RDL

Adding a Template to an Existing Report Definition

OfficeWriter Designer for Word - Step 1 of 3

The **Step 1 of 3** dialog opens when you click the OfficeWriter Designer for Word's **Add Query** button. This dialog is the first step in the process of building a query to add to your report.

> If you originally created your report using OfficeWriter Designer, you can add or change queries at any time. However, if your report was created using another tool such as Microsoft Visual Studio, the **Add Query** button will not be active.

To begin building a query:

1. Optional: If you are creating a query for a selection, create a text fragment, a list, or a table row in the Word document. Select the fragment, list, or row that you created. This will allow you to define the query as a selection query in the **Step 1 of 3** dialog. However, it is not required. You will be able to set the query's range to selection later.
2. Click OfficeWriter's **Add Query** button.
3. Enter a name for your query, or leave the default name.
4. If you selected a section of the document (step 1), select **Selection**. Otherwise, **Document** will be selected. You will be able to change the query range to selection later.

See Also

Create Your First Word Report

Setting Query Range

OfficeWriter Designer for Word - Step 2 of 3

The **Step 2 of 3** dialog is the second step in the process of building a query to add to your report. In this dialog, you will select a saved database connection or create a new connection.

To select a saved database connection:

1. Select **Add Query** from the toolbar.
2. In the Step 1 of 3 dialog, type in a name for the query (or leave the default name). Click **Next**.
3. In the **Step 2 of 3** dialog, select a connection from the list and click **Next**.

To create a new database connection

1. Select **Add Query** from the toolbar.
2. In the Step 1 of 3 dialog, type in a name for the query (or leave the default name). Click **Next**.
3. In the **Step 2 of 3** dialog, click **Add New**. Microsoft Query will open.
4. Select **New Data Source** and click **Ok**.
5. Enter a name for the data source.
6. Click the down arrow on the right side of the step two box and find the SQL Server driver.
7. At the step 3 line, press the **Connect** button.
8. In the SQL Server Login dialog, pull down the **Server** list with the down arrow and choose the server on which the database resides.
9. Click **Options**.
10. From the database drop-down list, find the database and select it. Click **Ok**.
11. You will now see your data source in the list. Make sure it is selected and click **Next**.

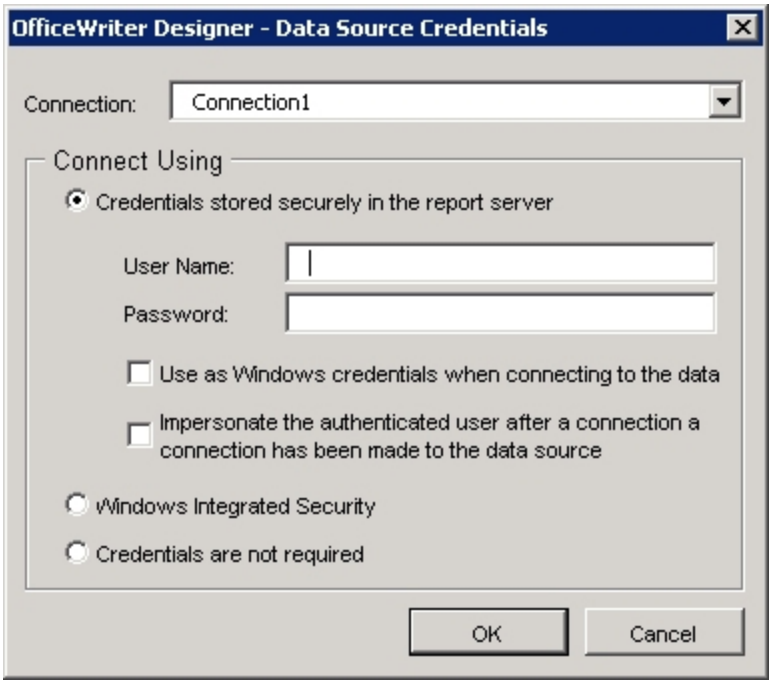
See Also

Create Your First Word Report

Creating a New Template Report

OfficeWriter Designer for Word - Data Source Credentials

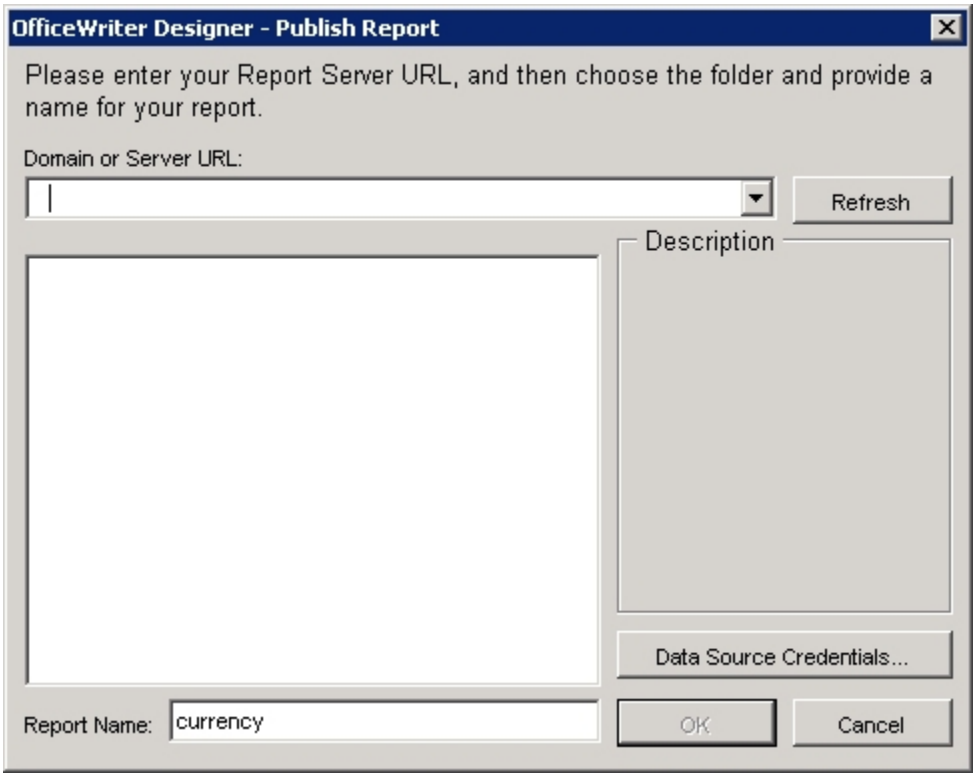
When you publish your report, you can provide data source credentials that specify how the report will link to the Reporting Services data. Open the **Data Source Credentials** dialog from the Publish Report.



Data Source Credentials are not stored in the .rdl files. Therefore, each time you publish your report, you need to re-enter the Data Source Credentials.

OfficeWriter Designer for Word - Publish Report

After saving your report definition locally, you are ready to publish your report to the Reporting Services server. Publishing will submit the report file to the Reporting Services server. On the server, the OfficeWriter renderer will regenerate the template, and - using data supplied by Reporting Services - replace the merge fields in the document with database values.



To publish your report:

1. From the OfficeWriter Designer, select **Publish**. The **Publish Report** dialog will open.

2. In the **Domain or Server URL** field, enter the path to your Reporting Services server (for example http://MyReports/ReportServer).

3. Click **Refresh**. OfficeWriter will display the folders available on the server.

4. Navigate to the destination folder for your report.

5. In the **Report Name** field (at the bottom of the **Publish Report** dialog), enter a name for your report.

6. Optional: Click **Data Source Credentials** to specify how the report will link to the data. You may also do this from the Reporting Services Report Manager after you publish your report. See the Reporting Services documentation for the meaning of the different data source credentials options.
   Click here to see the Data Source Credentials screen.

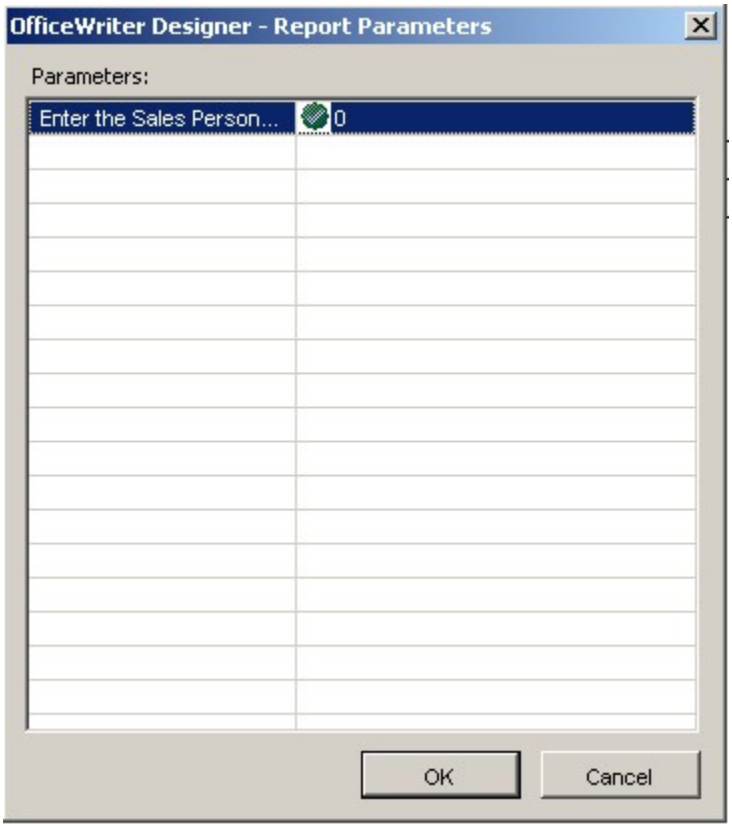
7. Click **Ok**. If your report was already published on the server, you will be asked to overwrite it. When the report is published, you will receive a message box telling you that publishing was successful.

OfficeWriter Designer for Word - Report Parameters

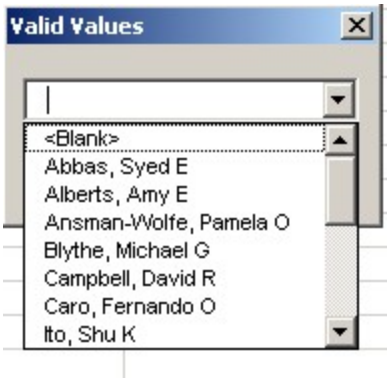
A parameter is a value that filters the data displayed in your report. For example, if you have a sales report that lists each sales group and each sales rep within that group and you want to see one particular sales group at a time, you would use the Sales Group field as the parameter.

When you view a report with parameters, the **Report Parameters** dialog will open. It will prompt you to enter values for the parameters. For example, in the dialog shown, you would enter a sales person ID. Only records for the specified sales person will be displayed in the report.

For more information, see Reports with Parameters



OfficeWriter Designer for Word - Valid Values



A parameter is a value that filters data. For example, you have a sales report that lists each sales group and each sales rep within that group. However, you only want to see one sales group at a time. If you use the sales group field as a parameter, when the report is executed, you will be prompted to select a group. The report will only display data for the group that you selected.

When you view a report with parameters, the Report Parameters dialog will open. If the report contains an available values list, the **Valid Values** dialog will display a list of valid parameter values. Select a name from the drop-down list of valid parameter values.

For more information, see Reports with Parameters.

OfficeWriter Designer for Word - Enterprise Feature

OfficeWriter Reporting Services Integration is available in both OfficeWriter Enterprise Edition and OfficeWriter Standard Edition. When you select a feature that is available in the Enterprise Edition only, the **Enterprise Feature** dialog will open. The dialog allows you to disable the warning and/or hide Enterprise features.

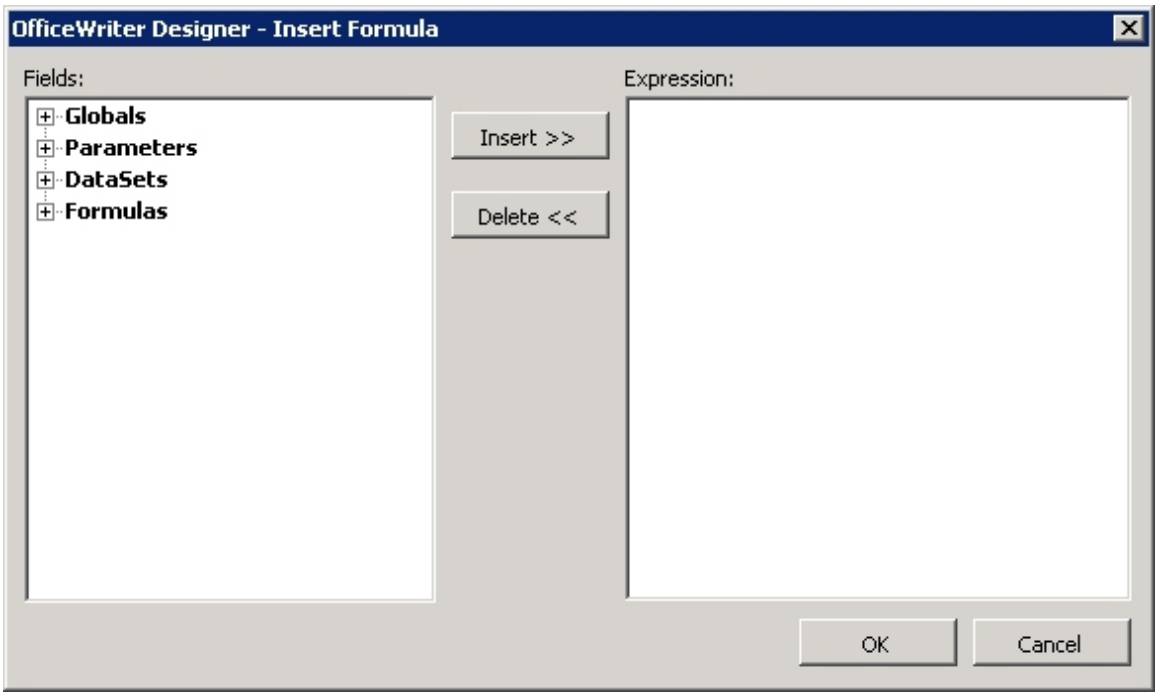
Both the **Enterprise Feature** dialog and Enterprise features can also be disabled through Registry Settings "Hide Enterprise Features" and "No Enterprise Features Warning."

- To prevent the display of the **Enterprise Feature** dialog the next time an Enterprise feature is selected, uncheck **Show this warning when Enterprise Edition feature is used**.
- To hide Enterprise features on the OfficeWriter toolbar, click **Hide EE Features**.

OfficeWriter Designer for Word - Insert Formula

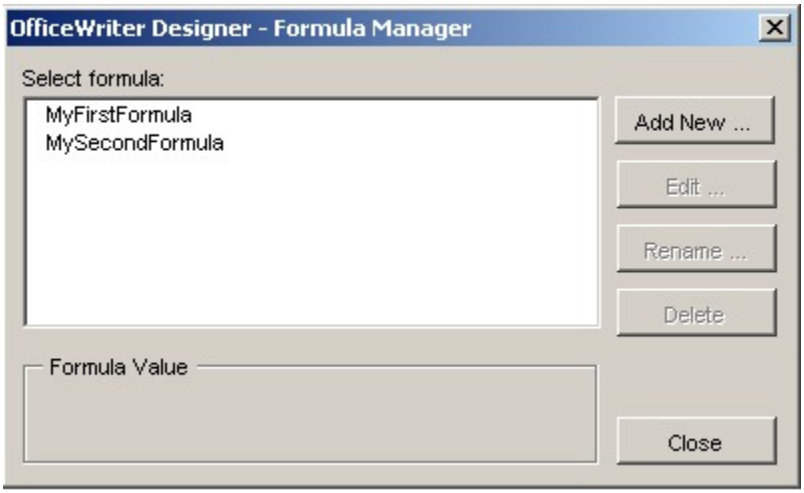
With OfficeWriter Enterprise Edition, you can use Reporting Services formulas in Word reports to add aggregate functions, report parameters or global variables to your report template. Clicking the OfficeWriter Designer's **Insert Formula** button will open the dialog displayed.

For instructions on adding formulas to a report, see Adding Formulas.



OfficeWriter Designer for Word - Formula Manager

Officewriter Designer gives you the ability to manage and maintain formulas you've built. The Formula Manager allows you to change, delete, and build new formulas. To start the Formula Manager, click the **Insert Formula** button on the OfficeWriter toolbar and select **Manage Formulas**.



To build a new formula from the Formula Manager screen:

1. Click the **Add New...** button. This will bring you to the Formula Builder screen described in the previous section.
2. Follow the directions above to create and use a new formula.

To change an existing formula:

1. Highlight the formula you want to change.
2. Click the **Edit** button. This brings you to the Formulas Builder screen described above.
3. Make the changes to the formula.
4. Click **Ok** to save the updated formula.

To delete a formula:

1. Highlight the formula you want to delete.

2. Click the **Delete** button.
3. Click **Yes** to confirm deletion.
4. Click **Close** to return to the report document.
5. ***Important:*** *You must manually review your report document and remove any reference to the deleted formula.*

To rename a formula:

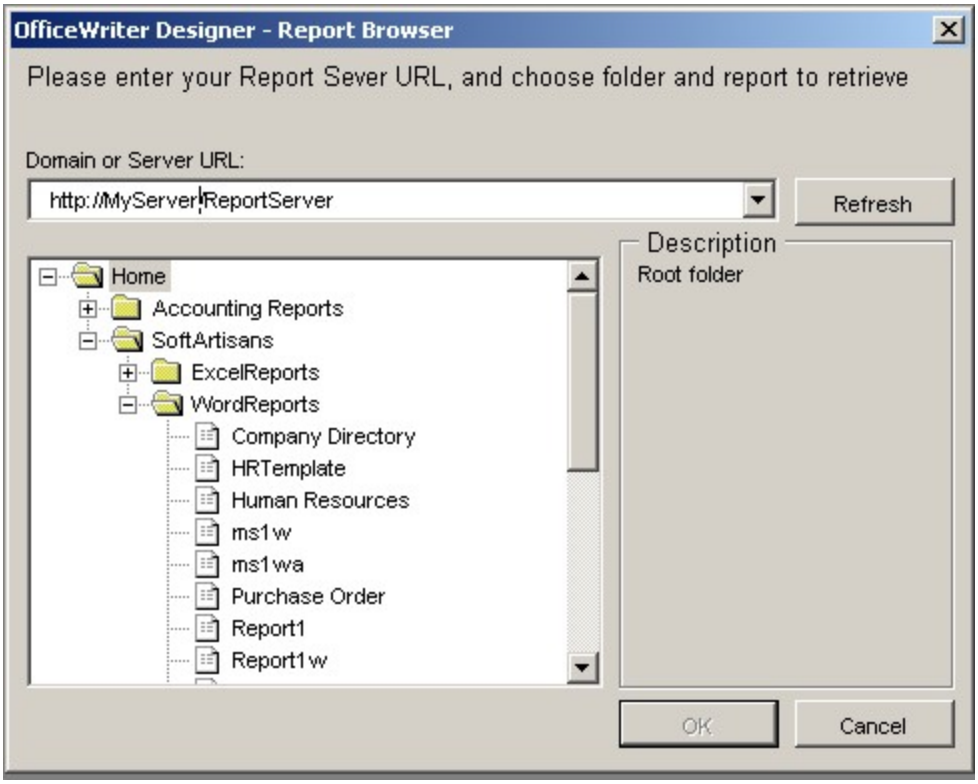
1. Highlight the formula you want to rename.
2. Click **Rename**.
3. On the Formula Name screen, type in a new name and click **Ok**.

> The formula name is only used to help you maintain formulas. It is not used anywhere in your report document.

OfficeWriter Designer for Word - Report Browser

The **Report Browser** dialog allows you to browse and view reports designed with OfficeWriter. To open the dialog:

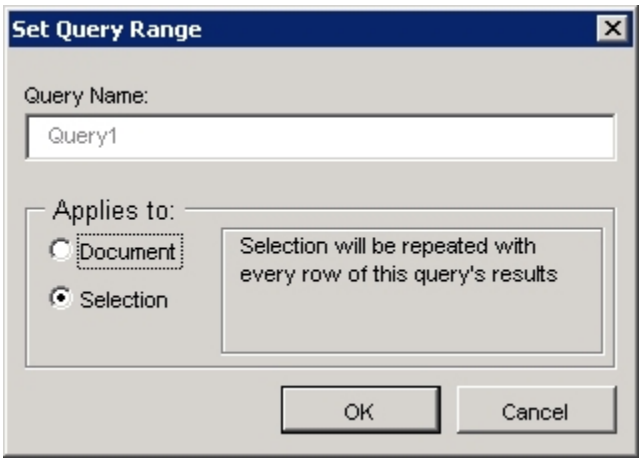
1. Close all active documents.
2. Click the OfficeWriter Designer's **View** button. The dialog will open.
3. In the **Domain or Server URL field**, enter the path to your Reporting Services server (for example http://MyReports/ReportServer).
4. Click **Refresh**. OfficeWriter will display the folders available on the server.
5. Navigate to the folder that contains the report.
6. Click **Ok**.



The **View** button will only work with reports designed with OfficeWriter in Word. If you created your report in Visual Studio and then modified it with OfficeWriter Designer for Word, only the modifications will be displayed.

OfficeWriter Designer for Word - Set Query Range

A query's range may be either **Document** or **Selection**. If a query is set to Document range, only the first row of data is returned from the query. If a query is bound to a Selection within the document - a text fragment, list, or table row - the query will return all the rows to the report and the selected text will be repeated for each row returned from the database.



To set a query's range to Document:

1. From the OfficeWriter Designer's **Select Query** drop-down, select the query.
2. Click the OfficeWriter Designer's **Query Range** button.
3. In the dialog, select **Document**.
4. Click **Ok**.

To set a query's range to Selection:

1. Add merge fields to your report.
2. From the OfficeWriter Designer's **Select Query** drop-down, select the query.
3. Highlight the merge fields that you want to include in the selection.
4. Click the OfficeWriter Designer's **Query Range** button.
5. In the dialog, choose **Selection**.
6. Click **Ok**.

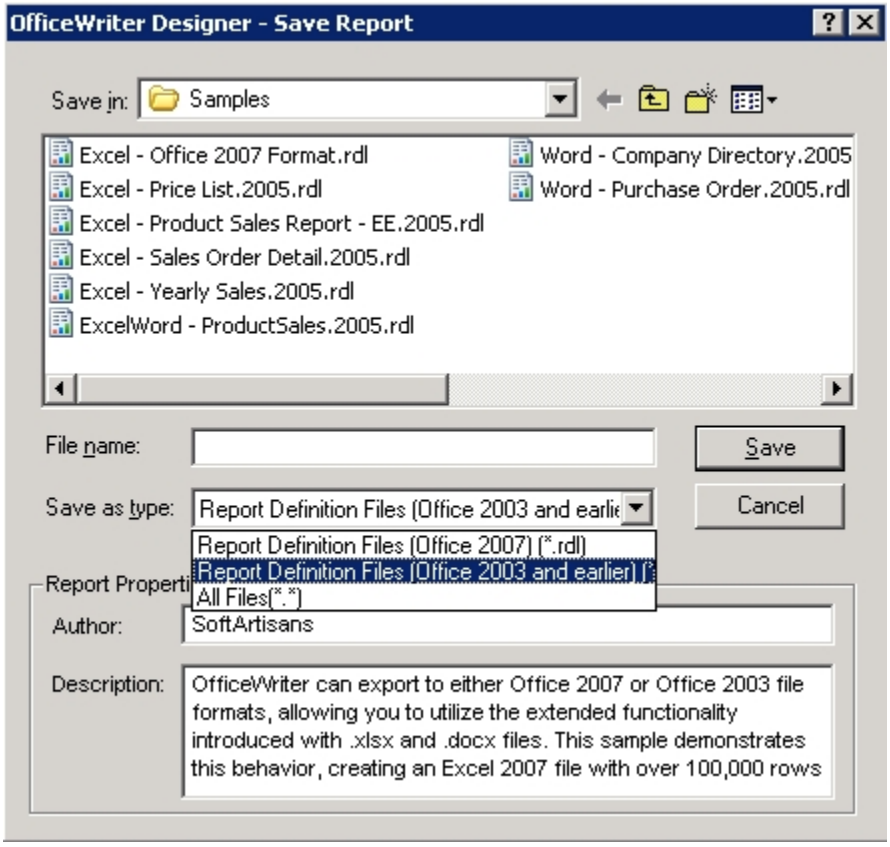
OfficeWriter Designer for Word - Save Report

Before you publish your report, save the report template locally:

1. Click the OfficeWriter Designer's **Save As** button. The dialog shown will open.
2. Browse to the local destination folder for the template.
3. Enter a name in the **File name** field.
4. Make sure that the selected file type is **Report Definition Files (Office 2007) (*.rdl)** or **Report Definition Files (Office 2003 or earlier) (*.rdl)**.

   > You cannot save as **Report Definition Files (Office 2007) (*.rdl)** from Word 2003

5. Optional: Enter your name and a report description in the **Author** and **Description** fields.
6. Click **Save** .



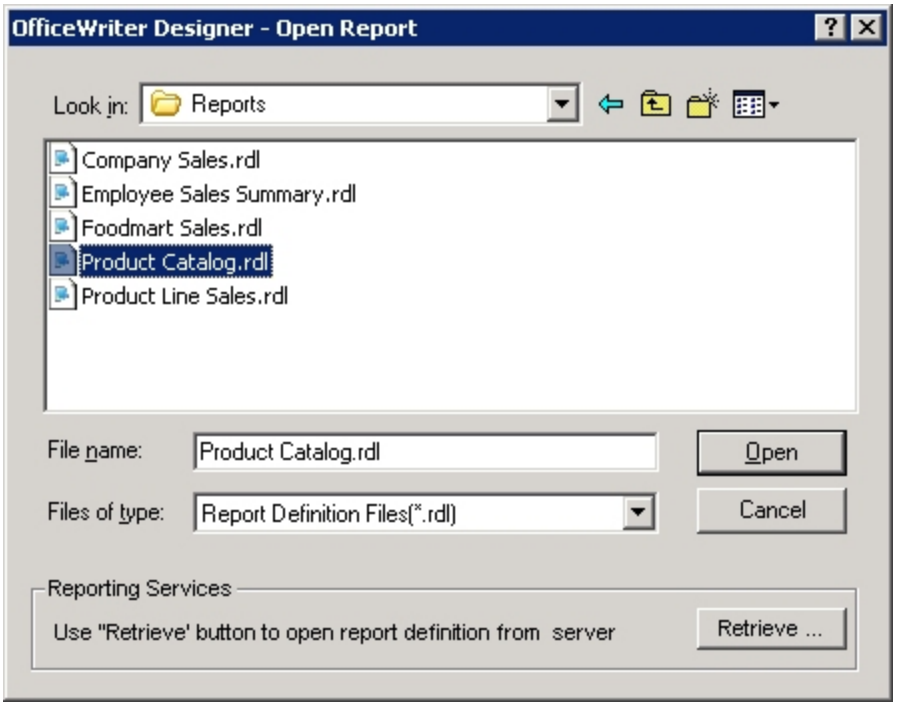
Remember to use the OfficeWriter Toolbar **Save As** button to save your report. If you use File -> Save from the Word Menu bar, you will not save the report information in your template.

OfficeWriter Excel Dialogs

Dialog Title	Description
OfficeWriter Designer for Excel - Open Report	The Open Report dialog opens when you click the Open Report button. It allows you to open saved .rdl files.
OfficeWriter Designer for Excel - Step 1 of 3	Step 1 of 3 opens when you click the Add Query button. It is the first step in the process of building a query to add to your report.
OfficeWriter Designer for Excel - Step 2 of 3	In Step 2 of 3, you will select a saved database connection or create a new connection.
OfficeWriter Designer for Excel - Data Source Credentials	Use this dialog to provide data source credentials that specify how the report will link to the Reporting Services data.
OfficeWriter Designer for Excel - Publish Report	Use the Publish Report dialog to publish your report to the Reporting Services server.
OfficeWriter Designer for Excel - Report Parameters	When you view a report with parameters, the Report Parameters dialog will prompt you to enter parameter values.
OfficeWriter Designer for Excel - Valid Values	If the report with parameters contains an available parameter values list, the Valid Values dialog will display a list of valid values.
OfficeWriter Designer for Excel - Enterprise Feature	When you select a feature that is available only in OfficeWriter Enterprise Edition, the Enterprise Feature dialog will open.
OfficeWriter Designer for Excel - Insert Formula	The Insert Formula dialog allows you to add aggregate functions, report parameters and global variables to your report. This feature is available only in OfficeWriter Enterprise Edition.
OfficeWriter Designer for Excel - Formula Manager	The Formula Manager allows you to change, delete, and build new formulas. This feature is available only in OfficeWriter Enterprise Edition.
OfficeWriter Designer for Excel - Report Browser	The Report Browser dialog allows you to browse and view reports designed with OfficeWriter.
OfficeWriter Designer for Excel - Save Report	Use the Save Report dialog to save your report locally before publishing it to the Reporting Services server.

OfficeWriter Designer for Excel - Open Report

The **Open Report** dialog opens when you click the OfficeWriter Designer's **Open Report** button. It allows you to open reports (.rdl files) that have already been created and saved. These can be reports created with OfficeWriter Designer or with other .rdl tools such as Visual Studio. A report file contains reporting information like queries and fields along with any Excel functionality you added.



To open a report definition file saved locally:

1. Click **Open Report** on the OfficeWriter toolbar.
2. Make sure that **Report Definition Files (*.rdl)** appears in the file type box.
3. Browse to the folder that contains the .rdl file.
4. Select the .rdl file and click **Open** .

> You will not be able to open reports built in the Office Open XML file format (.xlsx) from Excel 2003

To open a report definition file saved on the report server:

1. Click **Open Report** on the OfficeWriter toolbar.
2. Click **Retrieve** to open OfficeWriter's Report Browser.
3. In the **Domain or Server URL** field, enter the path to your Reporting Services server (for example http://MyReports/ReportServer).
4. Click **Refresh**. OfficeWriter will display the folders available on the server.
5. Navigate to the folder that contains the .rdl file.
6. Click Ok.

See Also

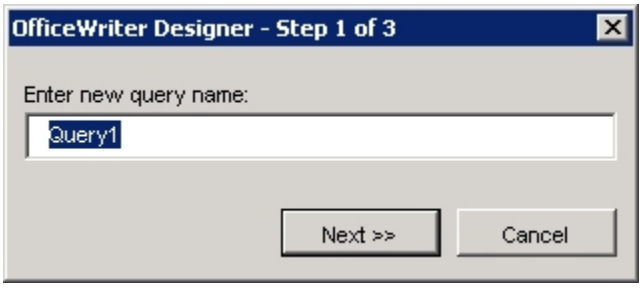
Create an Excel Report from an Existing RDL

Adding a Template to an Existing Report

OfficeWriter Designer for Excel - Step 1 of 3

The **Step 1 of 3** dialog opens when you click the OfficeWriter Designer's **Add Query** button. This dialog is the first step in the process of building a query to add to your report.

> If you originally created your report using OfficeWriter Designer, you can add or change queries at any time. However, if your report was created using another tool such as Microsoft Visual Studio, the **Add Query** button will not be active.



To begin building a query:

1. Click OfficeWriter's **Add Query** button.
2. Enter a name for your query, or leave the default name.
3. Click **Next**.

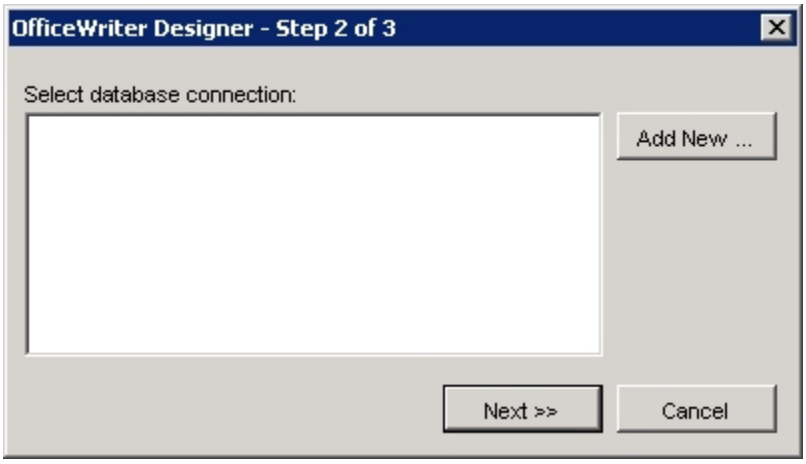
See Also

Create Your First Excel Report

Creating a New Template

OfficeWriter Designer for Excel - Step 2 of 3

The **Step 2 of 3** dialog is the second step in the process of building a query to add to your report. In this dialog, you will select a saved database connection or create a new connection.



To select a saved database connection:

1. Select **Add Query** from the toolbar.
2. In the Step 1 of 3 dialog, type in a name for the query (or leave the default name). Click **Next**.
3. In the **Step 2 of 3** dialog, select a connection from the list and click **Next**.

To create a new database connection

1. Select **Add Query** from the toolbar.
2. In the Step 1 of 3 dialog, type in a name for the query (or leave the default name). Click **Next**.
3. In the **Step 2 of 3** dialog, click **Add New**. Microsoft Query will open.
4. Select **New Data Source** and click **Ok**.
5. Enter a name for the data source.
6. Click the down arrow on the right side of the step two box and find the SQL Server driver.

7. At the step 3 line, press the **Connect** button.
8. In the SQL Server Login dialog, pull down the **Server** list with the down arrow and choose the server on which the database resides.
9. Click **Options**.
10. From the database drop-down list, find the database and select it. Click **Ok**.
11. You will now see your data source in the list. Make sure it is selected and click **Next**.

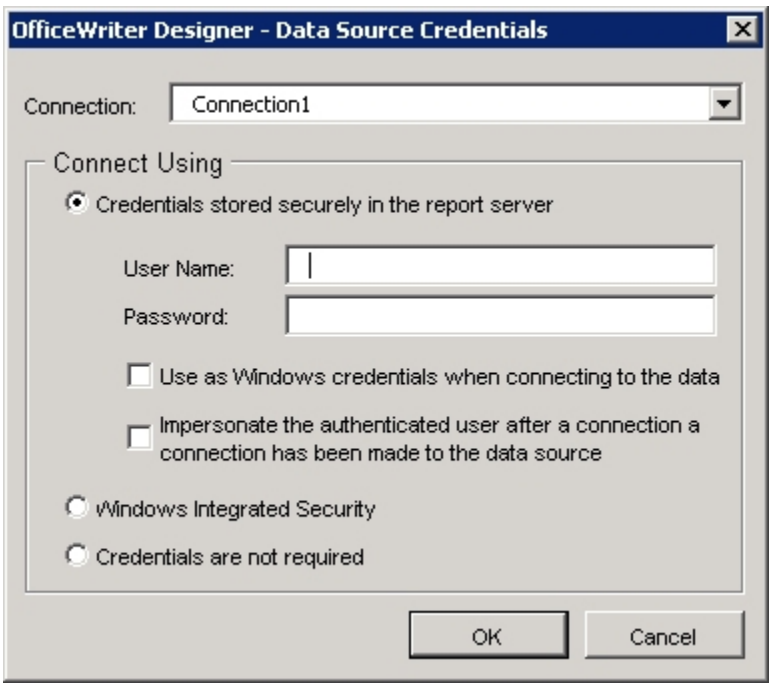
See Also

Create Your First Excel Report

Creating a New Template

OfficeWriter Designer for Excel - Data Source Credentials

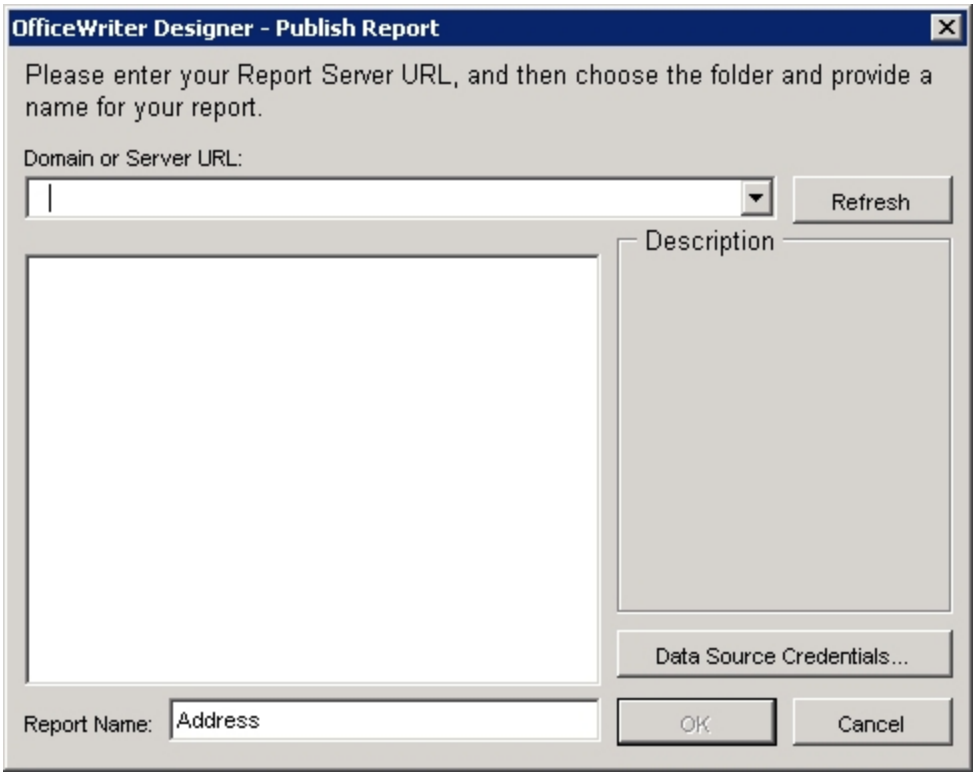
When you publish your report, you can provide data source credentials that specify how the report will link to the Reporting Services data. Open the **Data Source Credentials** dialog from the Publish Report dialog.



Data Source Credentials are not stored in the .rdl files. Therefore, each time you publish your report, you need to re-enter the Data Source Credentials.

OfficeWriter Designer for Excel - Publish Report

After saving your report definition locally, you are ready to publish your report to the Reporting Services server. Publishing will submit the report file to the Reporting Services server. On the server, the OfficeWriter renderer will regenerate the template, and - using data supplied by Reporting Services - replace the data markers in the workbook with database values.



To publish your report:

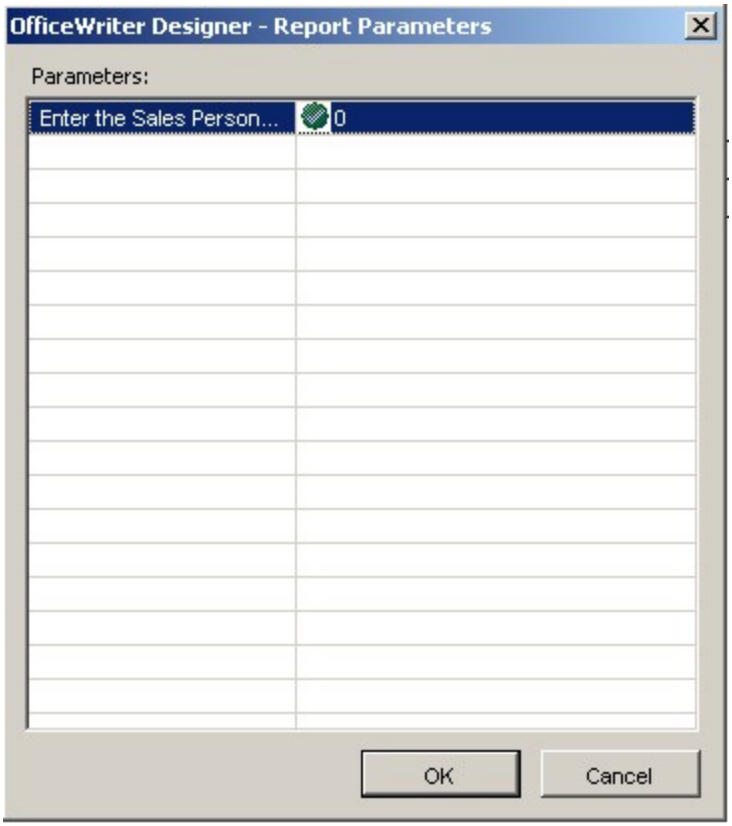
1. From the OfficeWriter Designer, select **Publish**. The **Publish Report** dialog will open.
2. In the **Domain or Server URL** field, enter the path to your Reporting Services server (for example http://MyReports/ReportServer).
3. Click **Refresh**. OfficeWriter will display the folders available on the server.
4. Navigate to the destination folder for your report.
5. In the **Report Name** field (at the bottom of the **Publish Report** dialog), enter a name for your report.
6. Optional: Click **Data Source Credentials** to specify how the report will link to the data. You may also do this from the Reporting Services Report Manager after you publish your report. See the Reporting Services documentation for the meaning of the different data source credentials options.
   Click here to see the Data Source Credentials screen.
7. Click **Ok**. If your report was already published on the server, you will be asked to overwrite it. When the report is published, you will receive a message box telling you that publishing was successful.

OfficeWriter Designer for Excel - Report Parameters

A parameter is a value that filters the data displayed in your report. For example, if you have a sales report that lists each sales group and each sales rep within that group and you want to see one particular sales group at a time, you would use the Sales Group field as the parameter.

When you view a report with parameters, the **Report Parameters** dialog will open. It will prompt you to enter values for the parameters. For example, in the dialog shown, you would enter a sales person ID. Only records for the specified sales person will be displayed in the report.

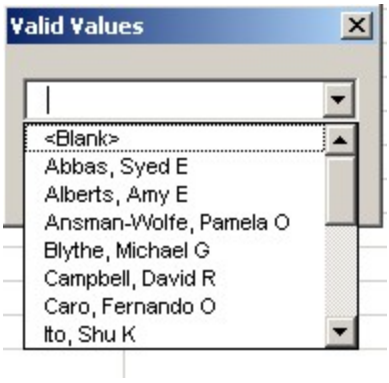
For more information, see Reports with Parameters



OfficeWriter Designer for Excel - Valid Values

When you view the report with parameters, the Report Parameters dialog will open. If the report contains an available values list, the **Valid Values** dialog will display a list of valid parameter values.

For more information, see Reports with Parameters.



OfficeWriter Designer for Excel - Enterprise Feature

OfficeWriter Reporting Services Integration is available in both OfficeWriter Enterprise Edition and OfficeWriter Standard Edition. When you select a feature that is available in the Enterprise Edition only, the **Enterprise Feature** dialog will open. The dialog allows you to disable the warning and/or hide Enterprise features. Both the **Enterprise Feature** dialog and Enterprise features can also be disabled through Registry Settings.

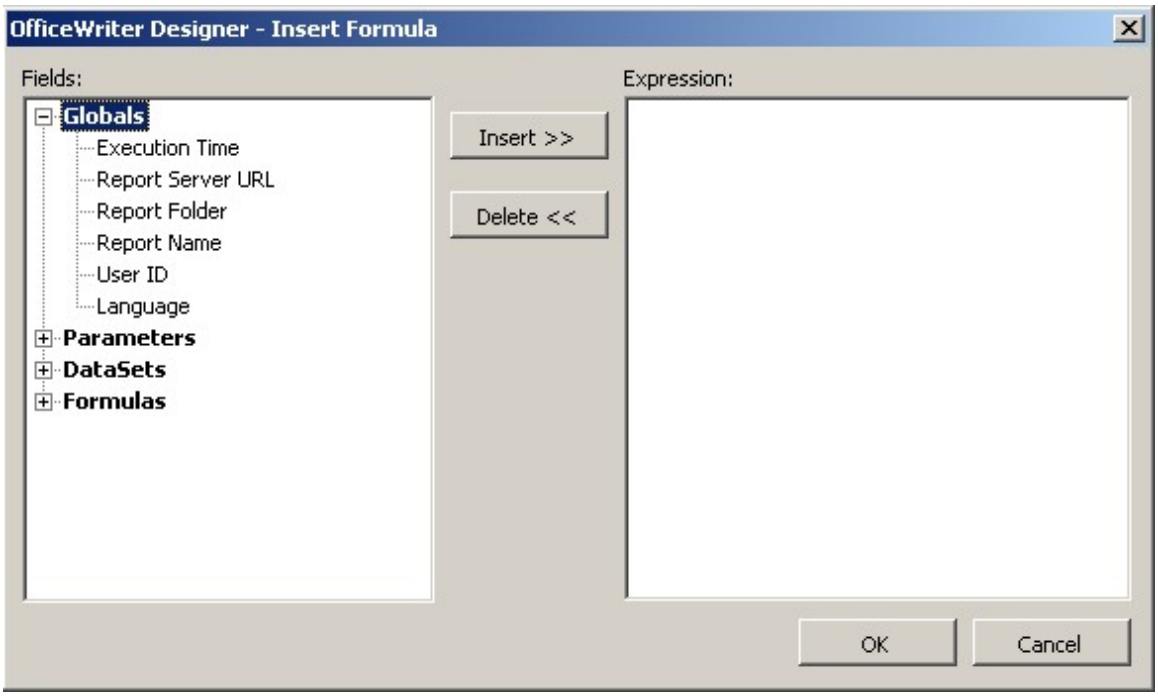
OfficeWriter Editions lists the Reporting Services Integration features available in each edition.

- To prevent the display of the **Enterprise Feature** dialog the next time an Enterprise feature is selected, uncheck **Show this warning when Enterprise Edition feature is used**.
- To hide Enterprise features on the OfficeWriter toolbar, click **Hide EE Features**.

OfficeWriter Designer for Excel - Insert Formula

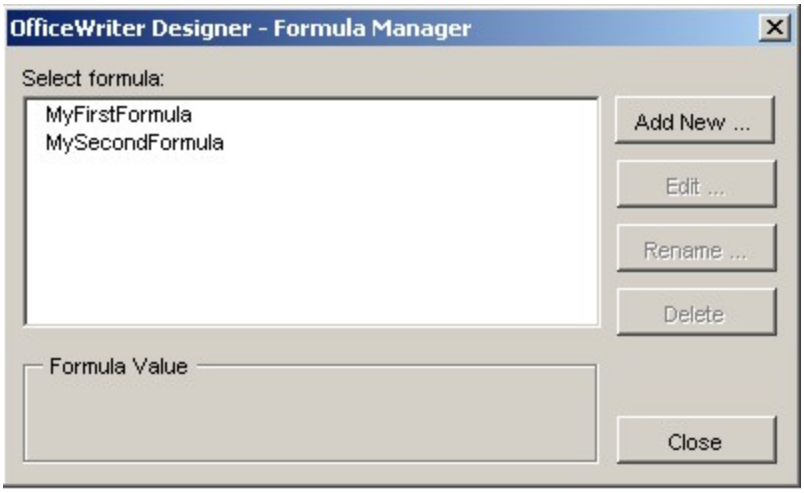
With OfficeWriter Enterprise Edition, you can use Reporting Services formulas in Excel reports to add aggregate functions, report parameters or global variables to your report template. Clicking the OfficeWriter Designer's **Insert Formula** button will open the dialog displayed.

For instructions on adding formulas to a report, see Adding Formulas to an Excel Report.



OfficeWriter Designer for Excel - Formula Manager

Officewriter Designer gives you the ability to manage and maintain formulas you've built. The Formula Manager allows you to change, delete, and build new formulas. To start the Formula Manager, click the **Insert Formula** button on the OfficeWriter toolbar and select **Manage Formulas**.



To build a new formula from the Formula Manager screen:

1. Click the **Add New...** button. This will bring you to the Formula Builder screen described in the previous section.
2. Follow the directions above to create and use a new formula.

To change an existing formula:

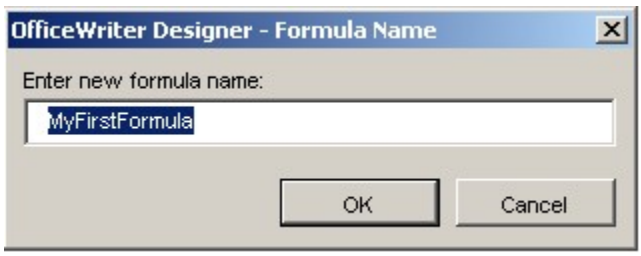
1. Highlight the formula you want to change.
2. Click the **Edit** button. This brings you to the Formulas Builder screen described above.
3. Make the changes to the formula.
4. Click **Ok** to save the updated formula.

To delete a formula:

1. Highlight the formula you want to delete.
2. Click the **Delete** button.
3. Click **Yes** to confirm deletion.
4. Click **Close** to return to the report document.
5. ***Important:*** *You must manually review your report document and remove any reference to the deleted formula.*

To rename a formula:

1. Highlight the formula you want to rename.
2. Click **Rename**.
3. On the Formula Name screen, type in a new name and click **Ok**.

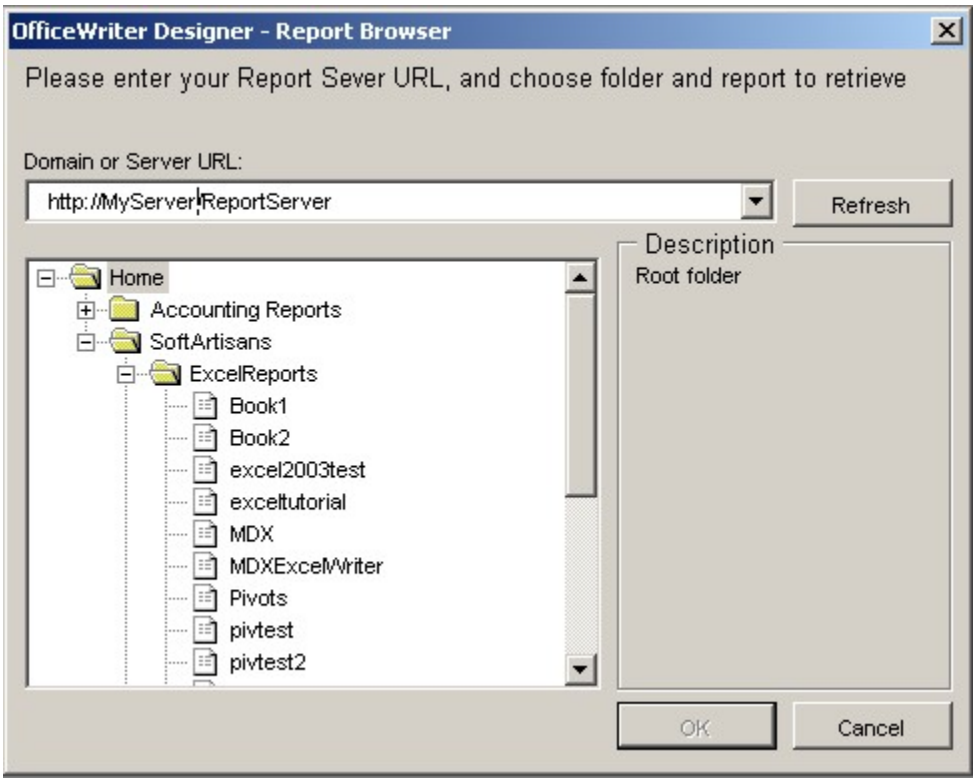


The formula name is only used to help you maintain formulas. It is not used anywhere in your report document.

OfficeWriter Designer for Excel - Report Browser

The **Report Browser** dialog allows you to browse and view reports designed with OfficeWriter. To open the dialog:

1. Close all active documents.
2. Click the OfficeWriter Designer's **View** button. The dialog will open.
3. In the **Domain or Server URL field**, enter the path to your Reporting Services server (for example http://MyReports/ReportServer).
4. Click **Refresh**. OfficeWriter will display the folders available on the server.
5. Navigate to the folder that contains the report.
6. Click **Ok**.



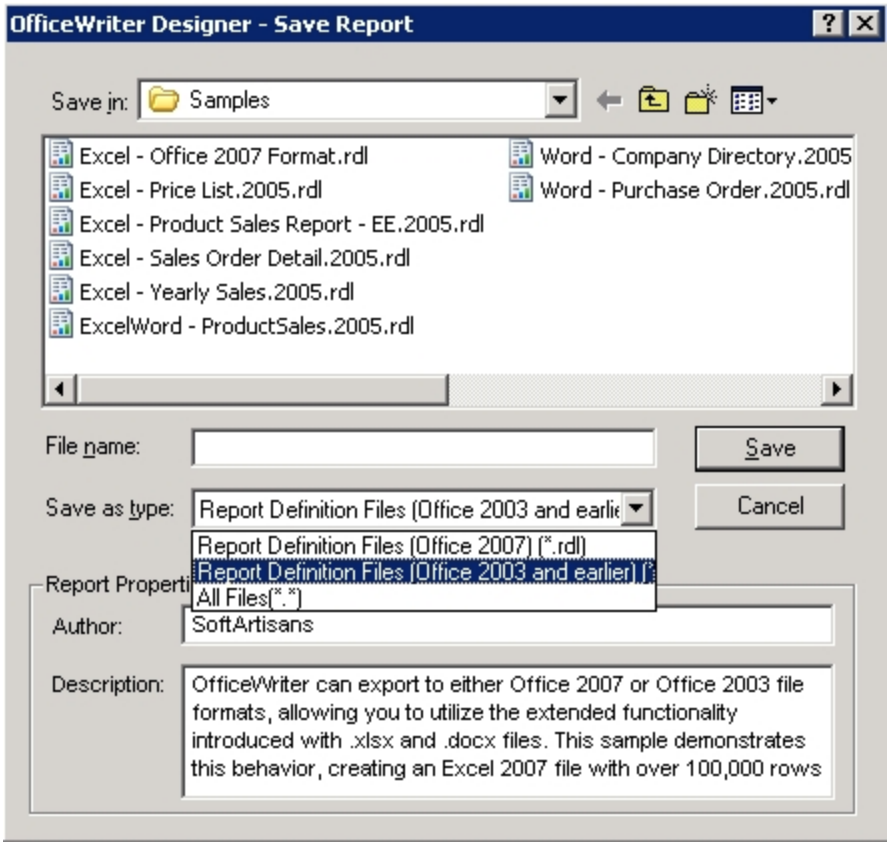
The **View** button will only work with reports designed with OfficeWriter in Excel. If you created your report in Visual Studio and then modified it with OfficeWriter Designer for Excel, only the modifications will be displayed.

OfficeWriter Designer for Excel - Save Report

Before you publish your report, save the report template locally:

1. Click the OfficeWriter Designer's **Save As** button. The dialog shown will open.
2. Browse to the local destination folder for the template.
3. Enter a name in the **File name** field.
4. Make sure that the selected file type is **Report Definition Files (Office 2007) (*.rdl)** or **Report Definition Files (Office 2003 or earlier) (*.rdl)**.

   Note:*You cannot save as *Report Definition Files (Office 2007) (*.rdl) from Excel 2003
5. Optional: Enter your name and a report description in the **Author** and **Description** fields.
6. Click **Save** .



Remember to use the OfficeWriter Toolbar **Save As** button to save your report. If you use File -> Save from the Word Menu bar, you will not save the report information in your template.

Microsoft RDL Files

When you save an OfficeWriter report template, the OfficeWriter Designer encodes it as a custom XML element in a Reporting Services RDL file. The OfficeWriter renderer on the server understands this custom element, decodes it, regenerates the template, and - using data supplied by Reporting Services - replaces the merge fields or data markers in the template with database values.

The RDL files created by the OfficeWriter designer are compliant with the Microsoft RDL schema, and can be edited in Microsoft Visual Studio. You can edit the generated report in Visual Studio, format tables and text boxes, and cut-and-paste report definitions from existing reports. You must, however, preserve tables defined in the generated RDL, all custom tags, data source names (query names), and field names.

A Table ReportItem is added to the RDL file for each query assigned to the template. The structure of an RDL file is:

```
<?XML ...>

<Report>

<Custom>base64-encoded template</Custom>

<DataSources>
 <DataSource>
  ...
 </DataSource>
 ...
</DataSources>

<DataSets>
 <DataSet Name="DataSet_Query1" >
  <Query>
   <CommandText>Select...</CommandText>
  </Query>

  <Fields>
   <Field Name=...>
    ...
   </Field>
  </Fields>
 </DataSet>
 ...
</DataSets>

<Body>

 <ReportItems>
  ...
  <Table Name="Query1">
  ...
  </Table>
 </ReportItems>

</Body>

</Report>
```

Installation

- Installing OfficeWriter on the Client
- Installing OfficeWriter on the Server
- Removing OfficeWriter
- Registry Settings

Installing OfficeWriter on the Client

Automatic Installation

To install the OfficeWriter Designer on the client:

1. Copy the **OfficeWriterDesigner-Installer-4.x.x.exe** from the server to your desktop or any other desired location on the client. If you ran the SoftArtisans OfficeWriter Installer on your server and used the default location, it should be located at **C:\Program Files\SoftArtisans\OfficeWriter\ReportingServices**

2. Close all Microsoft Office applications.

3. Double-click **OfficeWriterDesigner-Installer-4.x.x.exe** and follow the InstallShield instructions.

Manual Installation

#Run the automatic installation on one machine in order to unpack the OfficeWriterRS files. Once InstallShield has unpacked the files that contain the OfficeWriter Designer, you can install it manually on other machines

1. Close all Microsoft Office applications.
2. Open a command prompt window and move to the directory OfficeWriter\Designer. For example, enter **cd C:\Program Files\SoftArtisans\OfficeWriter\Designer**.
3. Enter **regsvr32 SARS4CLT.dll**. A dialog box will inform you that SARS4CLT.dll registered successfully; click **Ok**.
4. Enter **regsvr32 OWAssist.dll**. A dialog box will inform you that OWAssist.dll registered successfully; click **Ok**.
5. Enter **regsvr32 XFClient.dll**. A dialog box will inform you that XFClient.dll registered successfully; click **Ok**.

   The Application Data folder is hidden by default. In order to show hidden folders, open a Windows Explorer window and go to **Tools**. Select **Folder Options**, then select the **View** tab. Under **Hidden files and folders**, check the radio button beside **Show hidden files and folders**.

6. Copy **SAWordTemplateAddIn.dot** from **OfficeWriter\Designer** to **Documents and Settings\<user_name>\Application Data\Microsoft\Word\STARTUP**.
7. Copy **SAExcelTemplateAddIn.xla** from **OfficeWriter\Designer** to **Documents and Settings\<user_name>\Application Data\Microsoft\Excel\XLSTART**.
8. Create the Registry Key settings as described on the Registry Settings page.

Installing OfficeWriter on the Server

Automatic Installation

To run the automatic installation, double-click **OfficeWriter-Installer-4.x.x-WIN32.exe**, and follow the InstallShield instructions.

During the automatic installation process you will be asked to enter the OfficeWriter license key that you received with your order confirmation. To see all OfficeWriter license keys installed in the registry, or to add or remove a key (for example, when upgrading) run LicenseManager.exe (included with OfficeWriter). When you update a license key, IIS must be reset before the new license will take effect.

When you wish to **upgrade** a currently installed version of OfficeWriter that was installed using the automatic installer, you must first uninstall the existing version, then install the new version.

Manual Installation

To install OfficeWriter the first time, run the automatic installation. Once InstallShield has unpacked the dll files that contain OfficeWriter, you can re-install OfficeWriter manually (for example, if you are moving OfficeWriter to a different server):

1. Make sure that the following are installed on the server:
   - Microsoft .NET Framework Redistributable version 2.0
   - MS Reporting Services 2005 or 2008
   - To run the OfficeWriter samples, SQL Server 2005 or 2008 and the AdventureWorks database must be installed.
2. Copy the following files to **<MSSQL Directory>\Reporting Services\ReportServer\bin**
   - **SoftArtisans.OfficeWriter.RS2005.dll** (for Reporting Services 2005) or **SoftArtisans.OfficeWriter.RS2008.dll** (for Reporting Services 2008)
   - **SoftArtisans.OfficeWriter.WordWriter.dll**
   - **SoftArtisans.OfficeWriter.ExcelWriter.dll** .
3. Run **LicenseManager.exe** to install the OfficeWriterEE or OfficeWriterSE key.
4. Modify the **RSReportServer.config** file in **<MSSQL Directory>\Reporting Services\ReportServer**. Copy the following report rendering extension declaration to the file's **<Render>** node:
   For Reporting Services 2005:

```
<Configuration>
  <Extensions>
    <Render>
      <Extension Name="XLTemplate"
Type="SoftArtisans.OfficeWriter.ReportingServices.ExcelTemplateRenderer,
          SoftArtisans.OfficeWriter.RS2005"/>
      <Extension Name="WordTemplate"
Type="SoftArtisans.OfficeWriter.ReportingServices.WordTemplateRenderer,
          SoftArtisans.OfficeWriter.RS2005"/>
    </Render>
  </Extensions>
</Configuration>
```

For Reporting Services 2008:

```
<Configuration>
  <Extensions>
    <Render>
      <Extension Name="XLTemplate"
Type="SoftArtisans.OfficeWriter.ReportingServices.ExcelTemplateRenderer,
          SoftArtisans.OfficeWriter.RS2008"/>
      <Extension Name="WordTemplate"
Type="SoftArtisans.OfficeWriter.ReportingServices.WordTemplateRenderer,
          SoftArtisans.OfficeWriter.RS2008"/>
    </Render>
  </Extensions>
</Configuration>
```

> You will likely already have Extension elements in your Render node. You should only need to copy the Extension element lines below your existing Extension elements in the Render node.

5. Modify the **rssrvpolicy.config** file in **<MSSQL Directory>\Reporting Services\ReportServer**. Add the following security trust codegroup to the file's **<CodeGroup>** node:

```
<configuration>
  <mscorlib>
    <security>
      <policy>
        <PolicyLevel version="1">
          <CodeGroup class="FirstMatchCodeGroup" version="1" PermissionSetName="Nothing">
            <CodeGroup class="UnionCodeGroup"
              version="*"
              PermissionSetName="FullTrust"
              Name="SoftArtisans_OfficeWriter_Strong_Name"
              Description="This code group grants SoftArtisans OfficeWriter code full trust.">
              <IMembershipCondition
                class="StrongNameMembershipCondition"
                version="*"

PublicKeyBlob="0024000004800000940000000602000000240000525341310004000001000100477 9CB207F11

5E86EF9DD3233F9F130F8891911345176650F72330F84CA3F54C96DEB08439680660F02872EEF5DA3955

A14C63F96E57DFB71B1535280C37DA2CB5BA37D78A9882414DB11F67FD66DEBC4AD93DD34F4A587D34D

B4D23D9C6AF83431D88A7EF42BB01082913F3560DCB50129C5BBA7ECA0DE8BC286DA74F58FADE"/>
            </CodeGroup>
          </CodeGroup>
        </PolicyLevel>
      </policy>
    </security>
  </mscorlib>
</configuration>
```

> You will likely already have the "FirstMatchCodeGroup" CodeGroup element in your Render node. You should only need to copy the innermost CodeGroup element (Name="SoftArtisans_OfficeWriter_Strong_Name").

> The PublicKeyBlob value should be in one line. When you copy the lines above to **rssrvpolicy.config**, remove the line breaks within the PublicKeyBlob.

6. To install the samples, upload the RDL files in **OfficeWriter\ReportingServices\Samples** to the Reporting Server using Report Manager.

Removing OfficeWriter

Removing OfficeWriter Designer from the Client Automatically

1. Open the **Control Panel**.
2. Open **Add or Remove Programs**.
3. Select **SoftArtisans OfficeWriter Designer**.
4. Click **Change/Remove**.
5. Select **Remove** and click **Next**.
6. Remove the OfficeWriter toolbar from Microsoft Word and Excel:
   a. Open Word/Excel's **View** menu.
   b. Select **Toolbars -> Customize**.
   c. Select the **Toolbars** tab.
   d. From the list of toolbars, select **OfficeWriter**.
   e. Click **Delete**.
   f. A dialog will ask you to confirm that you want to delete the toolbar. Click **Ok**.
   g. Click **Close**.

> To reinstall OfficeWriter Designer, see Installing OfficeWriter on the Client.

Removing OfficeWriterRS from the Client Manually

1. Open a command prompt window and move to the directory **OfficeWriter\Designer**. For example, enter **cd C:\Program Files\SoftArtisans\OfficeWriter\Designer**.
2. Enter **regsvr32 /u SARS4CLT.dll**. A dialog box will inform you that **SARS4CLT.dll** unregistered successfully; click Ok.
3. Enter **regsvr32 /u OWAssist.dll**. A dialog box will inform you that **OWAssist.dll** unregistered successfully; click Ok.
4. Enter **regsvr32 /u xfclient.dll**. A dialog box will inform you that **xfclient.dll** unregistered successfully; click Ok.
5. Open **Documents and Settings\<user_name>\Application Data\Microsoft\Word\STARTUP** and delete **SAWordTemplateAddIn.dot**.
6. Open **Documents and Settings\<user_name>\Application Data\Microsoft\Excel\XLSTART** and delete **SAExcelTemplateAddIn.xla**.
7. Remove the OfficeWriter toolbar from Microsoft Word and Excel:
   a. Open Word/Excel's **View** menu.
   b. Select **Toolbars -> Customize**.
   c. Select the **Toolbars** tab.

d. From the list of toolbars, select **OfficeWriter**.

e. Click **Delete**.

f. A dialog will ask you to confirm that you want to delete the toolbar. Click **Ok**.

g. Click **Close**.

> To reinstall OfficeWriter Designer, see Installing OfficeWriter on the Client.

Removing OfficeWriter from the Server Automatically

1. Open the **Control Panel**.
2. Open **Add or Remove Programs**.
3. Select **SoftArtisans OfficeWriter 4.0.0**.
4. Click **Change/Remove**.
5. Select **Remove** and click **Next**.

Removing OfficeWriter the Server Manually

1. Open **<MSSQL Directory>\Reporting Services\ReportServer\bin** and delete **SoftArtisans.OfficeWriter.RS2005.dll** or **SoftArtisans.OfficeWriter.RS2008.dll**, **SoftArtisans.OfficeWriter.WordWriter.dll**, and **SoftArtisans.OfficeWriter.ExcelWriter.dll**.
2. Run **LicenseManager.exe** to remove the OfficeWriterEE or OfficeWriterRS key.
3. Open **RSReportServer.config** (in **<MSSQL Directory>\Reporting Services\ReportServer**) and delete the following report rendering extension declaration:

```
<Extension
     Name="XLTemplate"
     Type="SoftArtisans.OfficeWriter.ReportingServices.ExcelTemplateRenderer,
     SoftArtisans.OfficeWriter.RS2005"/>
<Extension Name="WordTemplate"
     Type="SoftArtisans.OfficeWriter.ReportingServices.WordTemplateRenderer,
     SoftArtisans.OfficeWriter.RS2005"/>
```

4. Open **rssrvpolicy.config** (in **<MSSQL Directory>\Reporting Services\ReportServer**) and delete the following security trust codegroup:

```
<CodeGroup
     class="UnionCodeGroup"
     version="*"
     PermissionSetName="FullTrust"
     Name="SoftArtisans_OfficeWriter_Strong_Name"
     Description="This code group grants SoftArtisans OfficeWriter code full trust.">
     <IMembershipCondition
         class="StrongNameMembershipCondition"
         version="*"
         PublicKeyBlob="0024000004800000940000000602000000240000525341310004000001000100 4779CB
         207F115E86EF9DD3233F9F130F8891911345176650F72330F84CA3F54C96DEB08439680660F02872EEF5D
         A3955A14C63F96E57DFB71B1535280C37DA2CB5BA37D78A9882414DB11F67FD66DEBC4AD93DD34F4A587D
         34DB4D23D9C6AF83431D88A7EF42BB01082913F3560DCB50129C5BBA7ECA0DE8BC286DA74F58FADE"/>
</CodeGroup>
```

5. Open **rsmgrpolicy.config** (in **<MSSQL Directory>\Reporting Services\ReportManager**) and delete the following security trust codegroup:

```
<CodeGroup
     class="UnionCodeGroup"
     version="*"
     PermissionSetName="FullTrust"
     Name="SoftArtisans_OfficeWriter_Strong_Name"
     Description="This code group grants SoftArtisans OfficeWriter code full trust.">
     <IMembershipCondition
         class="StrongNameMembershipCondition"
         version="*"
         PublicKeyBlob="0024000004800000940000000602000000240000
         525341310004000001000100477 9CB207F115E86EF9DD3233F9F130F88919113451
         76650F72330F84CA3F54C96DEB08439680660F02872EEF5DA3955A14C63F96E57DF
         B71B1535280C37DA2CB5BA37D78A9882414DB11F67FD66DEBC4AD93DD34F4A587D3
         4DB4D23D9C6AF83431D88A7EF42BB01082913F3560DCB50129C5BBA7ECA0DE8BC28
         6DA74F58FADE"/>
</CodeGroup>
```

Registry Settings

To change an OfficeWriter Designer registry key value:

1. Open the Start menu and select **Run**.
2. Enter regedit and click **Ok**.
3. Open the folder **HKEY_CURRENT_USER\Software\SoftArtisans\OfficeWriter\Designer**.
4. Double-click the key you want to update. A dialog will open.
5. In the **Value Data** field, enter a new value for the key.

Key	Type	Value Description
Toolbar Caption Style	REG_DWORD	**1** - Icon only **2** - Caption only **3** - Icon and caption (default)
Enable MSQuery	REG_DWORD	**0** - Disable 'Add Query', 'Edit Query' and 'Delete Query' buttons. (default) **1** - Enable 'Add Query', 'Edit Query' and 'Delete Query' buttons.
Always Ask Param Values	REG_DWORD	**0** - Don't ask for parameter values in reports with parameters if valid default values are specified in the RDL file. **1** - Always ask for parameter values in reports with parameters, even if valid default values are specified in the RDL file. (default)
Excel AddIn Default Renderer	REG_SZ	Rendering extension used for viewing report without template in Excel Add-In. "EXCEL" is default.
Word AddIn Default Renderer	REG_SZ	Rendering extension used for viewing report without template in Word Add-In. "HTML4.0" is default.
Debug	REG_SZ	**"True"** - Enables SOAP request and response dump to c:\temp\PayloadDump.xml and c:\temp\ResponseDump.xml correspondingly. **"False"** - Disables SOAP request and response dump. (default)
No Overwrite Prompt	REG_DWORD	**1** - Don't prompt to overwrite RDL file in Save As dialog. **0** - Prompt to overwrite RDL file in Save As dialog. (default)
Validate Fields	REG_DWORD	**1** - Validate that each template data field has a field in the data source that binds to it. Generates error on "Save" on the client instead of error on "View" on the server. **0** - Don't validate that each template data field has a field in the data source that binds to it. (default)
Hide Enterprise Features	REG_DWORD	**1** - Hides Insert Formula drop-down. **0** - Shows Insert Formula drop-down (default)
No Enterprise Features Warning	REG_DWORD	**1** - Disables Enterprise Feature warning. **0** - Enables Enterprise Feature warning. (default)

Help File Path	REG_SZ	Path to chm file. Default value is **C:\WINDOWS\Help\OfficeWriterRS.chm**
SamplesDir	REG_SZ	Path to the root or samples (RDL) directory. Default value is **C:\Program Files\SoftArtisans\OfficeWriter\Designer\samples**
InstallDir	REG_SZ	Path to install directory. **C:\Program Files\SoftArtisans\OfficeWriter\Designer**
WordUseOpenFileMRU	REG_DWORD	**0** - Use SampleDir once, then switch to 1 **1** - Use last opened dir (default) **2** - Always use SampleDir
ExcelUseOpenFileMRU	REG_DWORD	**0** - Use SampleDir once, then switch to 1 **1** - Use last opened dir (default) **2** - Always use SampleDir
ServerMRU	Subkey	Keeps a list of most recently used (MRU) servers.

To change an OfficeWriter ServerMRU (most recently used servers) registry key value:

1. Open the Start menu and select **Run**.
2. Enter regedit and click **Ok**.
3. Open the folder **HKEY_CURRENT_USER\Software\SoftArtisans\OfficeWriter\Designer\ServerMRU**.
4. Double click the key you want to update. An dialog will open.
5. In the **Value Data** field, enter a new value for the key.

Key	Type	Value	Value Description
Maximum Entries	REG_DWORD	optional, default - 10	Maximum entries in MRU list. Entries at the bottom of the list are removed to accommodate new server URLs.
MRU#	REG_SZ	Server URL (full)	http://<servername>/ReportServer

OfficeWriter Links

Documentation for other parts of OfficeWriter

OfficeWriter includes the following products:

- **ExcelWriter**
  - **ExcelWriter** allows you to create Excel spreadsheets on the server programmatically or from a template.
- **WordWriter**
  - **WordWriter** allows you to create Word documents on the server programmatically or from a template.
- **ExcelWriter COM**
  - **ExcelWriter COM** allows you to create Excel documents on the server programmatically or from a template using ASP.

Online samples

There are extensive online samples available for OfficeWriter, with the option to run and view code:
http://windemo.softartisans.com/OfficeWriter/latest/aspnet.aspx

External Links

- OfficeWriter Online
- OfficeWriter Forums

- SoftArtisans Technical Services
- SoftArtisans
- General Questions