# Crystal Reports 2016 Designer 1 Workshop Student Guide

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This course covers Crystal Reports® 2016



Vision Harvest

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# Table of Contents

# Introduction

## Introduction Objectives

This manual is written to give you a step-by-step guide for your classroom training and a handy reference for your daily work. In this Introduction, you will learn how to use this training guide effectively. This section covers the following topics:

- ❖ An introduction to the Crystal Reports application
- ❖ Class objectives
- ❖ Help with using this training guide
- ❖ Information on how to start the program

## About Crystal Reports

In today's information intensive environment, every business has a database of some sort. After all, business today is all about information and databases give you a handle on the massive amounts of information you must deal with. Therefore, your business has a database and from that database, you need reports. The problem is, most reporting capabilities that come with database programs are limited. They only report on data from that program. Many users need to report on data from multiple sources, even SQL (Structured Query Language) databases such as Oracle, Microsoft SQL Server, Informix or Sybase.

Crystal Reports is one of the most powerful reporting programs available with the ability to pull data from all types of data sources. You can use Crystal Reports to generate reports from any of the standard PC database programs, Access, Paradox, or FoxPro, as well as from a mainframe or server database. Crystal also has a powerful web-reporting server that allows you to distribute your reports over the web.

Crystal Reports is bundled with more than 160 other programs including Visual Basic, some medical applications, many accounting packages and several ERP solutions. It makes report generation easy without requiring you to be a programmer or a database expert. If you know how to work in a Windows environment and are familiar with the data you want to use, you can create a Crystal Report that looks professional and makes sense.

## Training Philosophy

Studies show that people retain 10% of information they see, 20% of information they hear, 50% of what they see and hear, and 80% of what they see, hear and do. In line with this concept, the class utilizes a hands-on method of training. You will see the effects of new procedures on the screen, hear the instructor explain how and why to use features, and perform the actions yourself as you learn.

In addition, this class focuses on your ability to perform tasks using the most productive techniques. The manual may contain several methods of accomplishing a certain task. However, class time does not allow for practice of all methods for each task. Your instructor will guide you in the most effective method of performing a task, but inform you of other methods that are available.

Questions are encouraged. While we give our best effort to explain new concepts in understandable terms, you may need to hear the concept again or have it explained more thoroughly. Please let the instructor know when you need more information!

## Class Objectives

This class is a performance based instructional system. It is geared to provide you with the tools you need to build and distribute reports the quickest, most efficient way. After completing this course, you will be able to perform the following tasks:

- ❖ Plan and organize a report
- ❖ Create a new report
- ❖ Save and preview a report
- ❖ Navigate through the report
- ❖ Format and edit report objects
- ❖ Use a report style for formatting
- ❖ Add text objects to reports
- ❖ Add lines, boxes, and graphics images to reports
- ❖ Select specific data from a database
- ❖ Group, sort and summarize reports
- ❖ Create reports that pull data from multiple tables
- ❖ Use the Formula Editor to perform number calculations
- ❖ Create formulas that manipulate dates
- ❖ Modify string fields using powerful text functions.
- ❖ Conditionally format numbers with the Highlighting Expert
- ❖ Format sections on the report
- ❖ Use formulas to conditionally format any type of field
- ❖ Create summary reports for efficient analysis of data
- ❖ Add charts and customize how they look
- ❖ Distribute reports throughout your organization with Crystal's export feature
- ❖ Create geographical maps for charting
- ❖ Set up an ODBC connection to your database

## About This Manual

Each section of this manual contains objectives to provide you with the overall goals for the lesson. Lessons have descriptions of features and concepts followed by systematic directions for completing a specific task. Each section ends with a challenge exercise to help you practice the skills you learned in the lesson. Challenge exercises provide you with tasks to accomplish. Try to complete these exercises on your own.

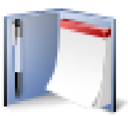
As you work in this Training Guide, certain conventions are used to identify specific procedures. Use the following table as a guide:

| **Training Guide Conventions** | |
|---|---|
| **Item** | **Illustrated As** |
| Menu Commands | Underlined letters for accessing menu commands are shown:<br><br>Example: File/Open |
| Command Buttons | Command Buttons in dialog boxes are shown as buttons:<br><br>Example: Finish |
| Categories, Radio Buttons, Text Boxes, Check Boxes | All options within dialog boxes are listed in italicized text:<br><br>Example: the *Keep Group Together* check box<br>The *Other* radio button |
| Keystrokes | Keyboard keys are indicated by uppercase text:<br><br>Example: press ENTER<br><br>Keyboard combinations are shown in uppercase text with a plus sign (+) between the keys that need to be pressed simultaneously.<br><br>Example: press CTRL + S to save |
| Toolbar Buttons | Toolbar buttons are indicated by the button name and a graphic image of the button:<br><br>Example: click the Print Preview button |
| Typing or File Selections | Text to be typed or file names to be selected are printed in bold letters:<br><br>Example: type **Henry**<br>Select **grouping.rpt** |
| Exercises | Step-by-Step exercises in the text are indicated by bold text and the ❖ symbol.<br><br>For example:<br>❖ **Exercise - Format Objects** |

## Tips, Notes, and Warnings

Tips, notes and warnings display with the following icons. Text for these additional comments display in bold and italics as shown below:

**This icon indicates a tip or shortcut.**



**This icon points out a note of additional information.**

**This icon calls attention to a warning or very important note**

# NOTES

# Lesson 1
# Creating a Simple Report

## Lesson Objectives

After completing this lesson, you will be able to:

❖ **Use the Design and Preview windows to build reports**
*The Design window is the main window for building a report. Become productive in putting together the basic items on the report, and then use the Preview window to see the results of your work*

❖ **Place data fields on your report**
*Learn how to insert fields on the report*

❖ **Size and move objects**
*Learning how to manipulate the objects on the report gives you control over the look and feel of the report*

❖ **Use guidelines to align objects**
*Guidelines provide an easy method for moving and aligning objects. Become proficient at manipulating the guides and snapping objects to them*

❖ **Create text objects**
*Add titles and other text to reports by creating a text object*

❖ **Save and Preview the report**
*Learn about the Preview view and how to navigate through the report. Set up the report to save automatically. Understand what happens when you refresh the data in the report*

## Starting the Crystal Reports Program

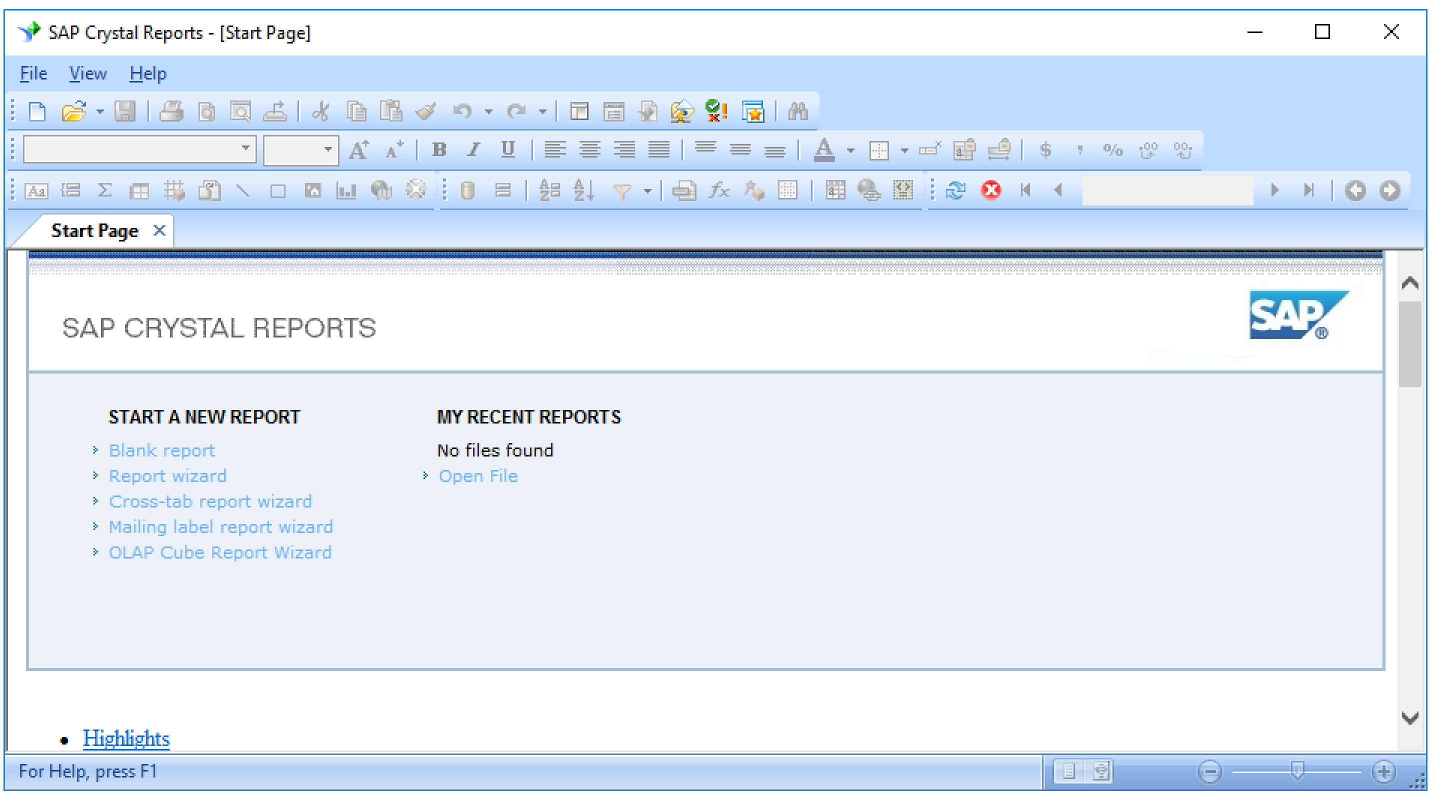
You can start Crystal Reports in one of three ways:

- ❖ Click the Start button | Programs | SAP Business Intelligence | SAP Crystal Reports 2016 menu. Click on SAP Crystal Reports 2016
- ❖ Use either My Computer icon or Windows Explorer. Use the following location: **C:\Program Files (x86)\SAP BusinessObjects\ SAP BusinessObjects Enterprise XI 4.0\win32_x86\crw32**
- ❖ If you have a desktop icon for Crystal Reports 2016, you can double click the desktop icon to open the Crystal Reports program

## Starting a New Report

When you first open Crystal Reports, the program helps you to begin creating a report by presenting the Start Page.

On this page you have two groups of options – START A NEW REPORT and MY RECENT REPORTS.



## START A NEW REPORT

Under START A NEW REPORT you can use the Wizards to create a standard report; cross tab report; mailing label report or a report against an OLAP cube. The Report Wizards are a series of dialog boxes that assist you in creating a specific type of report by doing some of the work for you. You will learn how to use a Report Expert later in this class.

You can also choose a Blank Report which is what you will do in this lesson.

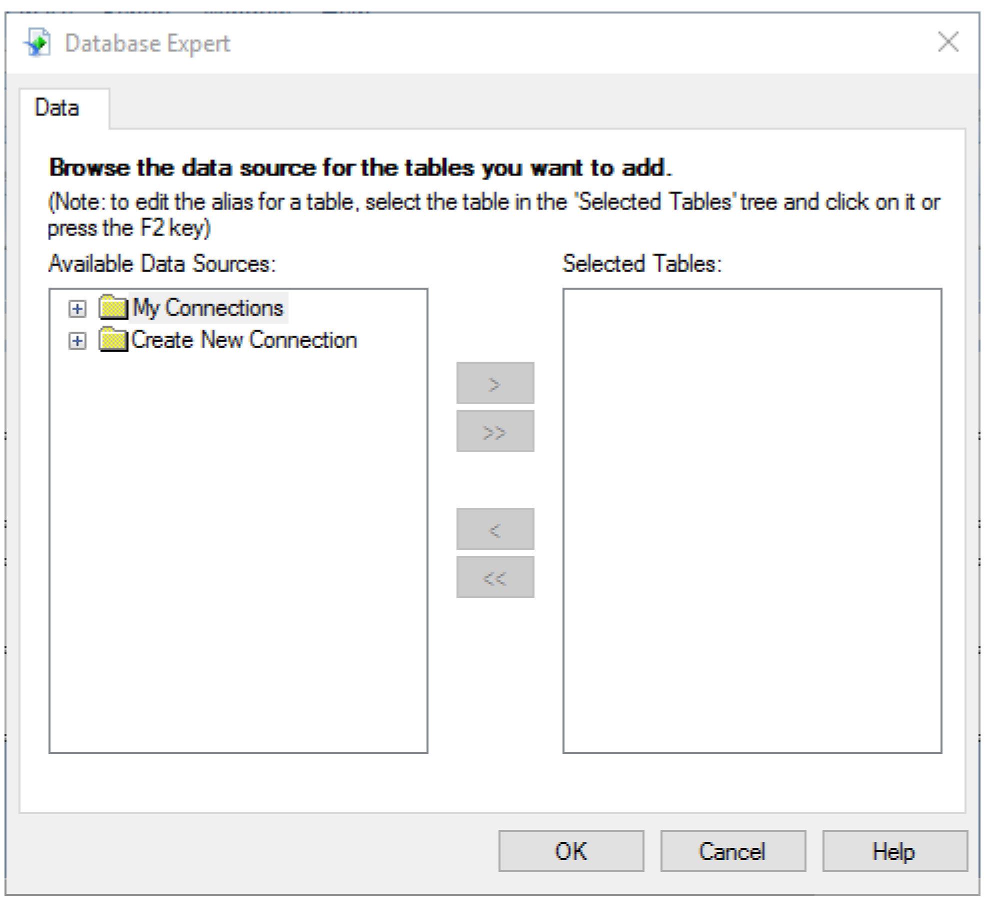
### My Recent Reports

If you have been working with reports you will see them listed here or you can choose to open a report that you have stored on your system. Choosing open report will take you to windows explorer where you can navigate through your folders to find the report.

If you click the ‣ Blank report option, Crystal takes you to the Database Expert screen in order to select the report's data source.

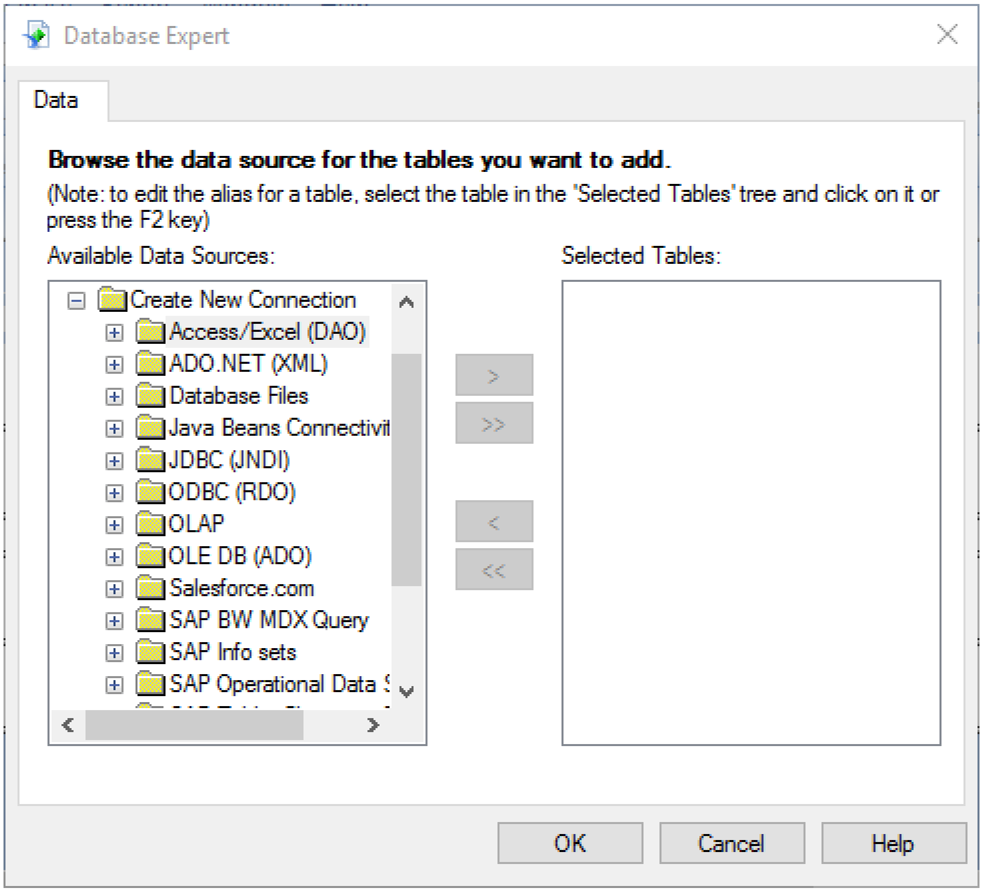
### Choosing a Data Source

Whenever you create a report, the first thing you have to do is select a data source. Crystal uses a dialog box called the Database Expert to present all possible data sources and allow you to choose one or more for a report.



- The **My Connections** option displays the server or data file to which you are currently connected or have connected to previously. If you just opened Crystal Reports for the first time, this option indicates no items found

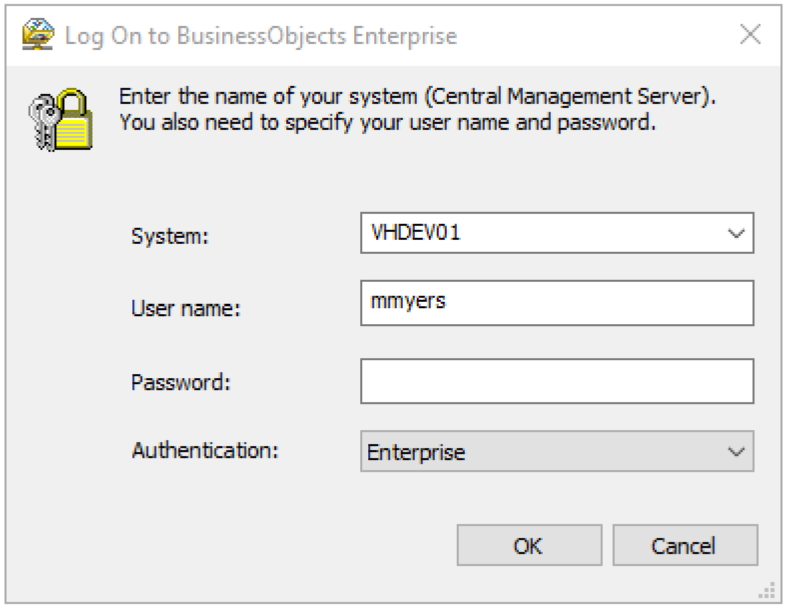
- **Create New Connection** is the folder that contains all possible data connections available for nearly any kind of database including Oracle, SQL Server and Access



- **Access/Excel (DAO)** - Allows a direct connection to MS Access and other files using Microsoft's Data Access Objects and not ODBC
- **ADO.NET (XML)** - Connects to ADO.NET datasets and also support connecting to DLL's that return datasets
- **Database Files** - Use this option to connect directly to PC data files that can be accessed through a physical file location from the C: drive or other mapped network drive. This option connects to Access, Paradox, Btrieve, DBase and Foxpro
- **JDBC (JNDI)** - Java Database Connectivity (JDBC) enables a connection to databases that require Java only connections. In most cases this connection is useful when Crystal Reports is embedded in a Java application.
- **ODBC (RDO)** - The ODBC/RDO (Open Database Connectivity/Remote Data Objects) folder is typically used for server-based databases like Oracle, Sybase, Informix, and MS-SQL Server
- **OLAP** - Use this option when creating reports using On-Line Analytical Processing data sources
- **OLE DB (ADO)** - This is a Microsoft data connection similar to ODBC in its concept and requires the use of an OLE DB provider, which is similar to an ODBC driver
- **Salesforce.com** - Use this connection to create reports for data stored in Salesforce.com accounts. This connection requires an internet connection and proper user credentials for the Salesforce.com account.
- **Universes** - You can create a report from a Business Objects universe. Crystal Reports lets you select a universe and design a query from it using a tool called the Business Objects Query Panel
- **XML and Web Services** – Allows reports to be created from an XML data source file or from an XML Web Service
- **More Data Sources** - This option allows access to other data sources using native drivers and is dependant on the options selected as part of the installation process

***NOTE: You may be asked for the Install CD if the driver was not installed for the database you have selected. In Crystal Reports 2016, not all drivers are installed by default. If you see this message and do not have the CD, contact your system administrator.***

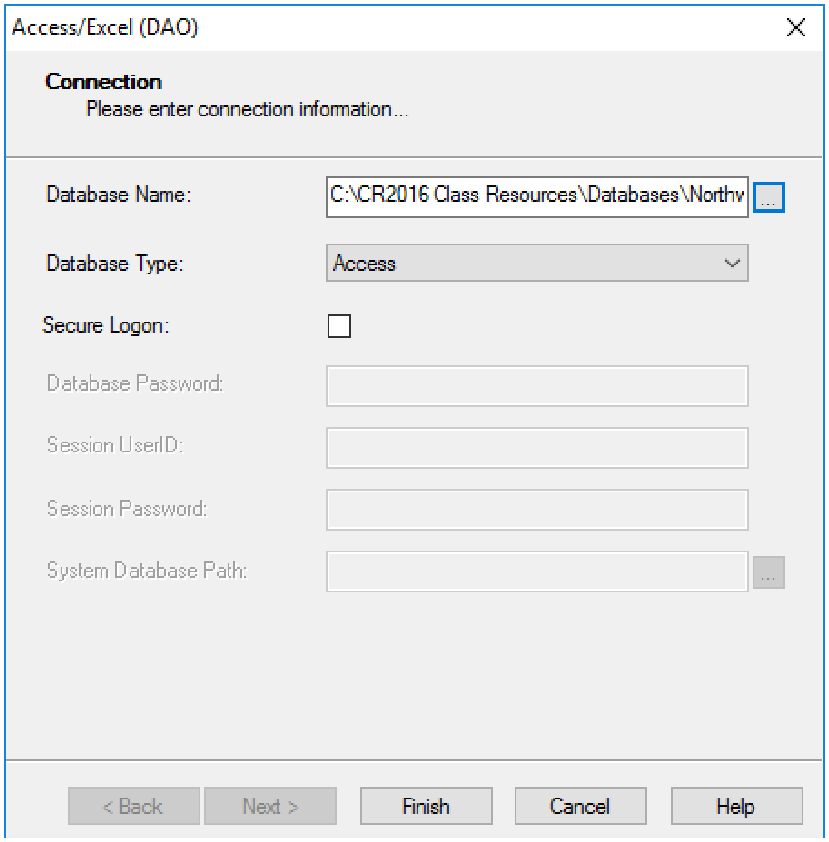
- **Repository** shows a list of data source connections that have been stored in the repository, usually stored SQL queries. Opening the repository folder will first ask you to connect to Business Objects Enterprise. If you have the rights to do this then you will see the repository. You can then select a SQL command or Business View if there are any in the repository




## Choosing a Data Source

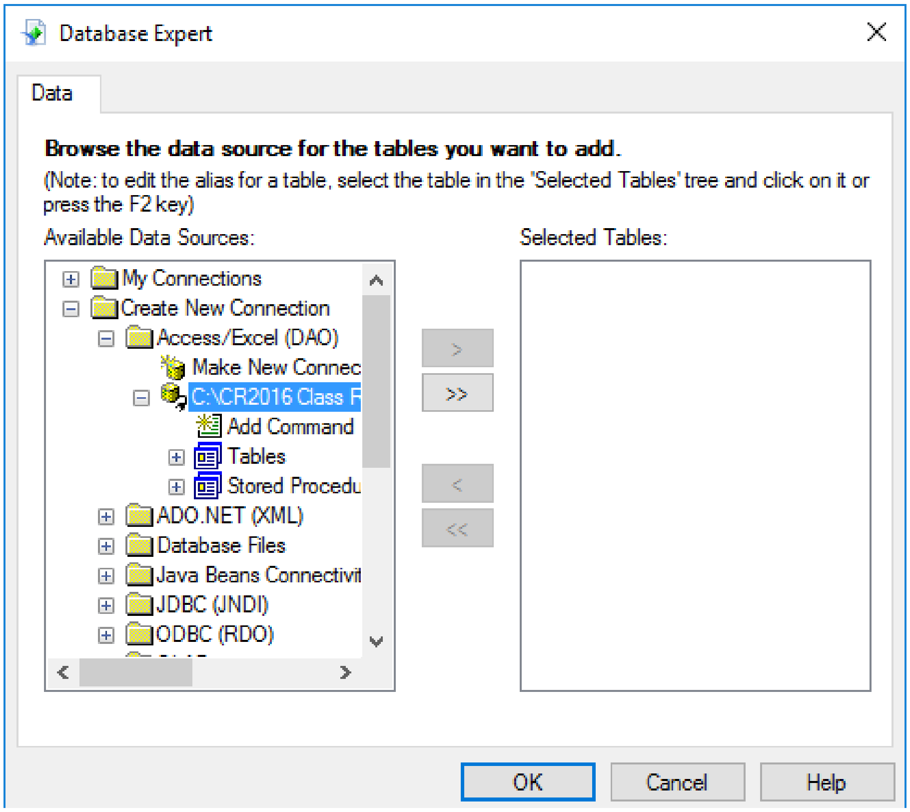
To choose a data source, click the Create a New Connection folder and select the data source you want, for this class select Access/Excel (DAO) and provide all required information the pop-up dialog window requires.

Choosing the Access/Excel (DAO) data connection will activate the Access/Excel (DAO) dialog window which provides the ability to select important database information such as the file name and location, type and login credentials. For this class set the *Database Type* to **Access** and the *Database Name* to point to the **Northwind 2008.mdb** file provided with the course class files. No login information is required.




After finding the Northwind 2008.mdb file and selecting it, click the Finish button. The next screen will prompt for a user name/password if applicable. Respond to this screen and click Finish. Now the database connection is established and the Database Expert reappears.

The Database Expert now shows the new connection along with available items that can be selected for inclusion into the report. Some databases are able to determine which tables are available based on user login ID and therefore not all data tables may be shown.




Depending on the database being accessed Commands, Tables, Views and Stored Procedures will be shown and available for use in the report. It is important to understand the differences between each of these items.

- Commands allow for custom Structured Query Language (SQL) to be used as a data source. This means developers can now build complex queries using an advanced SQL building tool like Toad or SQL Navigator and port the completed code into Crystal Reports for use in the report
- Tables are physical containers of data and are the only items that contain data and are sometimes referred to as "physical tables"
- Views do not contain data and are sometimes referred to as "logical tables". These tables are just queries which pull data from the physical tables. Views are usually created by the Database Administrator to make database reporting easier for the end-user to write reports
- Stored Procedures are very similar to views in that they do not contain data. They are sometimes referred to as "procs". The differences between Views and Procs are in the complexity of the query code used and the programming language used

To add a table to the report, expand the Tables folder and then click the move right button to add the table into the right column labeled Selected Tables. Once all the tables are selected click the OK button.

For this class, we are going to use an Microsoft Access database file named Northwind 2008 . This sample database is included with the course class files.

### ❖ Exercise 1.0 - Start a New Report

1. Click the button, choose All Apps | SAP Business Intelligence | SAP Crystal Reports 2016
*The application opens and displays the start page.*

2. Click the Blank report option from the **START A NEW REPORT** column
*The Database Expert dialog box appears*

3. Click the ⊞ to the left of **Create New Connection**
*The list of available data sources displays.*

4. Find the **Access/Excel (DAO)** folder and double-click it
*This activates the Access/Excel (DAO) dialog window. Please note double-clicking only works on the first database connection created. Afterwards you must double-click the Make New Connection item.*

5. With the Access/Excel (DAO) dialog window open, make sure the *Database Type:* is set to **Access** and the *Database Name:* is pointed the **Northwind 2008.mdb** data file included with the course class files. Click Finish

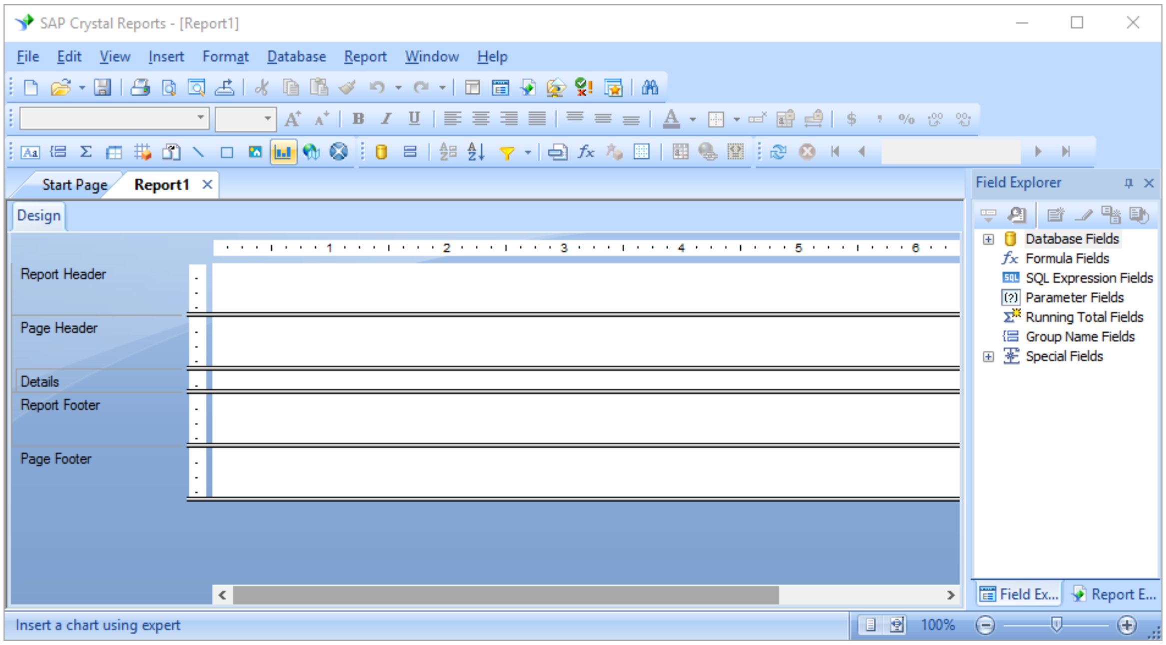
6. The connection is established, verify the connection is now listed in the **My Connections** folder. Do this by collapsing and expanding the folder or RIGHT click the folder and choose **Refresh**
*From the My Connections folder you will now see the new connection just created.*

7. Expand the **Tables** folder and select the **Customers** table. Click on >

8. The **Customers** table will now appear on the right list labeled **Selected Tables:**. Click OK
*The Crystal Reports Design window displays on the screen.*

## The Main Components of the Design Window

The Design view in Crystal Reports contains all the report creation features needed to build a report. Take a moment to look at the screen and identify the features of the Design window.

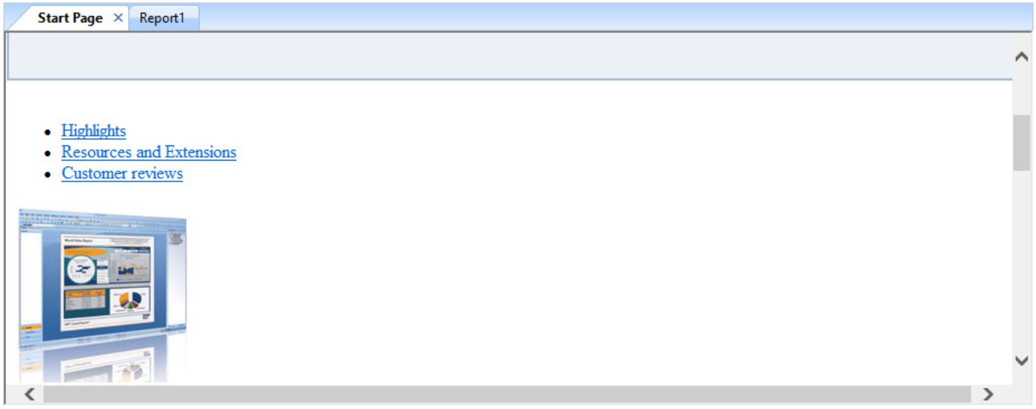



The window has the standard features of a typical Windows-based program. The following allow you to execute commands and perform tasks in Crystal Reports:

- The **Menu Bar** contains all the commands available in Crystal Reports. As with all Windows programs you can open the menus by clicking with the mouse or by pressing ALT + the underlined letter for the menu you want
- The **Toolbars** contain buttons that are shortcuts to menu commands. You can view the function of a button by moving the mouse pointer over the button. When you do this, a Tool Tip displays the button name and the Status Bar at the bottom of the screen displays the function of the button

***TIP: You can open and close the toolbars by RIGHT clicking in the toolbar area. To hide a toolbar, click the check mark to the left of the toolbar name. To show a toolbar, click the toolbar name.***

- Below the tool bars are **Report tabs** for each report you have open plus the **Start Page** tab. Clicking on the start page tab will take you to the following dialog:

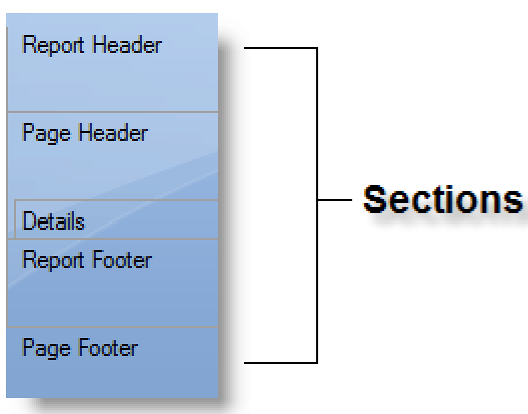



- In addition to the **START A NEW REPORT** and **MY RECENT REPORTS** resources the **Start Page** includes a live web page including numerous links to information, news and resources available on the SAP web site.

- There is a **Design** tab for each report you have open. The Design tab indicates you are in Design view. Once you have previewed the report, there is a **Preview** tab as well. You can easily switch between Design view and Preview view by clicking the appropriate tab

- The **Status Bar** displays at the bottom of the Design and Preview screens and shows information about selected objects. If no object is selected, the Status Bar shows information about the toolbar button to which the mouse is pointing, information about the report itself, or help information

The default Design window is divided into five sections. Each section corresponds to a specific part of the final, printed report. Section names display at the left of the Design window.




Each section has a bar at the bottom of the section that defines the height of the section. When you place the mouse pointer over a section bar, the pointer changes to this image. Using this pointer, you can drag the bar to make the section taller or shorter.

## Exploring the Toolbars

Crystal Reports has six toolbars.

- ❖ **Standard** - Contains buttons for basic editing commands such as Save, Open, Preview, Cut, Copy, Paste, Undo, and Help
- ❖ **Formatting** - Has buttons for formatting commands such as Bold, Italic, Underline, Alignment, and Number formats. Most of these buttons are not active unless you have an object selected
- ❖ **Insert Tools** - Includes buttons for adding various report objects into the report, such as Text Objects, Grouping, Summaries, Cross-Tabs Lines and Boxes. These buttons are generally active and available for all reports
- ❖ **Expert Tools** - Provides buttons for modifying and formatting such items as Charts and Maps using an Expert wizard. These buttons may or may not be active depending on the button and the object it represents
- ❖ **Navigation Controls** - Offers buttons for refreshing the report data and for moving around your report. These buttons will not be active unless in Preview mode
- ❖ **External Command** - Displays icons to access available, registered third-party applications designed to work within Crystal Reports. Add-in applications are registered within Crystal Reports simply by adding the application's DLLs in the Addins directory of the Business Objects install folder. Additional information can be found in the Crystal Reports .Net Developers Guide

### ❖ Exercise 1.1 - Explore the Design Window

1. To begin, open the **Field Explorer** by clicking the  icon
2. When you have the **Design** window in front of you, take a few moments and practice these steps before adding data fields:

   a) Move the mouse pointer across the **Toolbars**, reading the tool tips that appear when you touch the pointer on the buttons

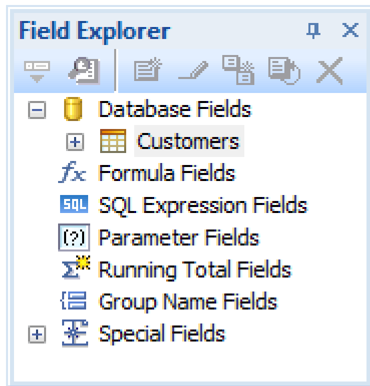
   b) Run your mouse across the options on the **Menu Bar**, just above the Toolbar, click once to read the menu choices to familiarize yourself with the terms used by Crystal Reports

   c) Place the mouse pointer over the **Section** boundaries and stretch them up and down

## Managing Resources with Explorers

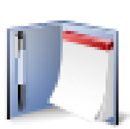
Managing resources are done through three Explorer components.

❖ **Field Explorer** - Use the Field Explorer to insert all types of fields into the report. The Field Explorer lists the seven types of fields you can insert into a report: Database, Formula, SQL Expression, Parameter, Running Total, Group Name, and Special fields. With the icons at the top of the Field Explorer, you can manipulate the fields in the list



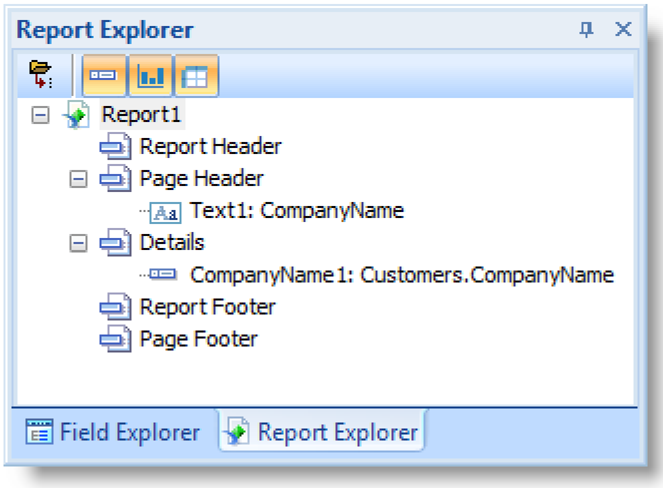

❖ **Repository Explorer** - This powerful feature offers the report developer the chance to save several kinds of objects for re-use in subsequent reports. Although formulas may not be stored in the repository, many other useful items can be. Items which can be saved are:

* Formatted Text Objects
* Graphic Images
* Custom Functions
* Commands (Queries)



***NOTE: The Repository Explorer can only be accessed via the Repository, which is now incorporated into Enterprise. If a user tries to access this feature, a login prompting window will display.***

- **Report Explorer** - Another very useful feature is the Report Explorer. This tool represents all the sections and objects in the report in a tree-node fashion. In addition to making it easier to find a particular object or section, this explorer allows a user to select an item or items within the group tree for editing purposes. Simply right click on the item to view the editing options available




The explorers can easily be turned on or off for viewing, but are normally docked to the right of the report design area. To "un-dock" an explorer, simply drag it by the title bar to the left of the report or RIGHT click and choose "Undock". To view an explorer, pull down the View menu to see a list of the three available explorers.

## Placing Fields on the Report

As you look at the Field Explorer, you will notice there are several categories of object types with each category being represented by an icon to the left of the name. Expand the Database Fields folder to see available tables and fields. Expand a table to see available fields contained in that table.

The Field Explorer is automatically docked to the right of the design area. If you prefer to have it floating (un-docked) or in another location, just drag it by its title bar. If you change your mind, just reposition it back to the docking area. The Field Explorer can also be docked to the left of the design area. And finally, the Field Explorer can also be closed any time and re-opened by clicking the icon.

There are several ways to place fields onto the report. The Field Explorer dialog box provides access to all the fields in the table(s) you selected when beginning the report. Using the Field Explorer dialog box, you can place a field in the report in one of three ways:

- Select the field in the list, then click the Insert Fields button, and then click in the report where you want the field to appear
- Drag the field to the report. Release the mouse button when the pointer is pointing where you want the field to appear
- Right Click on the field and chose Insert to Report from the **Short Cut Menu**, then click in the report where you want the field to appear

Typically, you would place fields in the Detail section of a report. When you place a field in the Detail section, Crystal Reports adds a Field Header directly above the data field in the Page Header section. The field defaults to the actual size of the field in the database or to the size of the field name, whichever is longer. This is very helpful for identifying the field at a glance.

***WARNING: If you place a field in any section other than the Detail section, Crystal Reports does NOT create a Field Header in the page header section of the report. Even if you later move the field to the Detail section, the Field Header is not created automatically.***

***NOTE: If you delete the field object from the report, Crystal Reports will normally remove the Field Header from the report as well.***

### ❖ Exercise 1.2 - Place Fields in the Detail Section of the Report

1. Make sure the **Field Explorer** is open. If it is not click the icon in the **Standard Toolbar**

2. Expand the **Database Fields** node, find the **Customers** table and expand it to see a list of available fields

3. Select the **CustomerID** field in the list of fields

4. Click the button on the **Field Explorer** toolbar
*The mouse pointer appears as a ⃠ symbol when it is pointing to a location where you cannot place a field.*

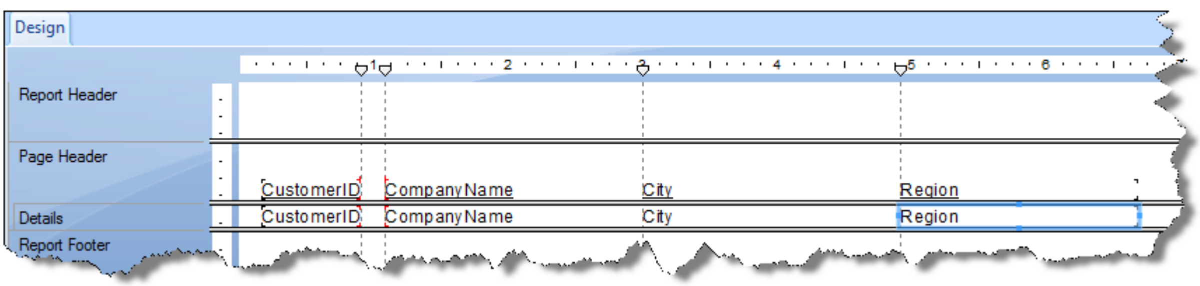
5. Move your mouse into the **Details** section at the left side of the report and LEFT click again
*Crystal Reports places the field in the details section and the field name in the Page Header section.*

6. Using the same method, add the **CompanyName** field to the right of **CustomerID**

7. Use the Drag and Drop method to add the **City** field

8. LEFT-mouse drag the **Region** field to the **Details** section after the **City** field

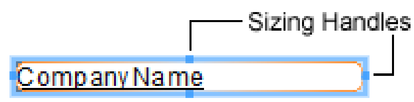
Your design area should look similar to the example below:




***NOTE: In the Field Explorer, you should see a green check mark on the icon to the left of each field you add to the report.***

## Selecting and Sizing Objects

Once a field is placed on a report, it is good practice to re size it to a proper character length. When Crystal inserts the field, it is the same size as the data field in the database, or the size of the field name, whichever is larger. To re size the field to a size you want, you must select it first. When a field is selected, a blue dot appears at the center of each of the four sides surrounding the object. These are called sizing handles. When you place the mouse pointer directly over a handle, the pointer changes to a two-headed arrow. Use this mouse pointer to drag the border of the object to change the size.




Since the data field and the field name appear in the report as the same size, you may often need to select both objects, so you can re size them at the same time. However, if you re size the data field the field header will also re size, whereas if you re size the field header the data field will not re size. To select multiple objects, you can use one of two methods:

❖ Click the first object to select it. Then, while pressing the SHIFT key or the CTRL key, click other objects

❖ Using the LEFT mouse button, drag a marquee around the objects you want to select. Make sure the mouse pointer is NOT pointing to an object when you begin to drag. The marquee you drag selects any object touching the marquee or contained within the marquee. This process is sometimes referred to as "lassoing" objects

### ❖ Exercise 1.3 - Size a Field Using the Re-sizie Handles

1. Select the **CompanyName** field in the detail section

2. Point to the sizing handle on the right side of the selected object
*The mouse pointer changes to a double-headed arrow when you are pointing to the correct location.*

3. Drag to the left to make the data and header fields about 90% of their original size
*Notice that Crystal provides a line and shading on the ruler so you can easily see exactly how wide you are making the objects. Also notice how the field header in the Page Header section re sized itself to match the data field it is associated with. This last feature reduces time spent matching field headers to data fields in terms of size.*

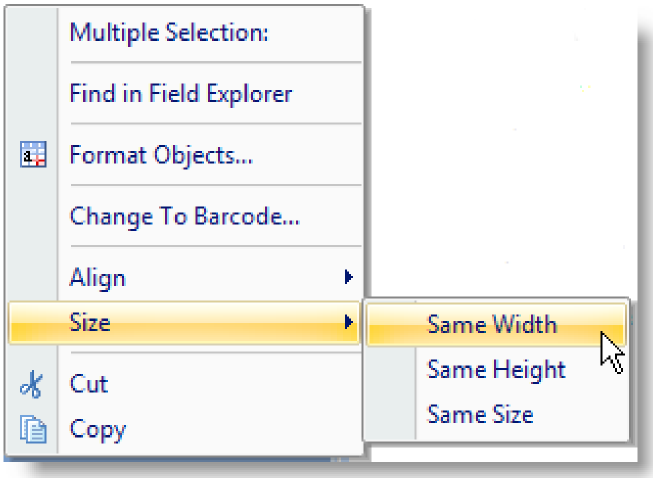
You can also re size fields to be the same size as another field using the Size command. To do this, simply multiple select the fields you want to size plus the field that is the size you want to match. RIGHT click the field that is the size you want, and then choose Size from the Shortcut menu. Crystal can make all selected fields the same width, height, or overall size as the field on which you RIGHT clicked.

### ❖ Exercise 1.4 – Re-size a Field to Match Another Field

1. Select and re size the field header labeled "**City**" in the **Page Header** section. Re-size the field header to be about 1.5" long, which should make it shorter
*Notice how the data field "City" doesn't re size to match its associated field header. This gives us added flexibility in sizing our field headers to be different sizes than their associated data fields.*

2. Multiple select the **City** data field and its title, then RIGHT click the header field
*Be sure you RIGHT click on the header field and not the data field located in the Details section.*

3. Point to Size in the shortcut menu, and then choose Same Width
*Crystal makes both the data field and the field header the width of the longer object.*



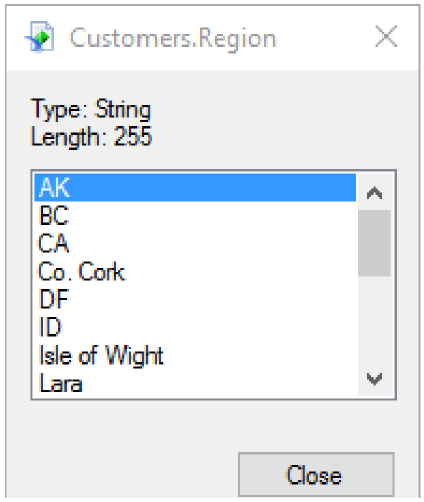

## Browsing Field Data

If you are not familiar with the data contained in a field, you might not know what size the field needs to be on the report. Crystal Reports lets you preview the data contained in a field to help you determine how big a field should be. To view the data in a field, select the field in the Field Explorer dialog box, and then click the Browse button in the Field Explorer toolbar. If the Field Explorer dialog box is not open, you can open it by clicking the Field Explorer button on the Toolbar. You may also right click on a field and select to Browse data.

### ❖ Exercise 1.5 - Browse Field Data

1. Make sure the **Field Explorer** is still open; if it isn't click the **Field Explorer** button in the toolbar to open the **Field Explorer.** Select the **Region** field in the **Data Fields** list

2. Click the Browse Fields button
*The Browse Field Data dialog box opens.*




*When you are finished viewing the field data, click* ***Close*** *to close the* ***Browse*** *dialog box.*

3. Multiple select the **Region** field and its field title. Re size them to make both smaller When you are finished, click away from the objects to deselect them
*However, what if you can't see the right edge of the fields to re size them?*

4. Select **View|Zoom...** and select the *Fit One Dimension* option. Click **OK**

5. Now, drag the re size handle to re size the **Region** field so it fits on the page

6. Reset the **Zoom** dialog box to a *Magnification Factor:* **100%**

***NOTE: The Browse dialog box, by default, displays the first 500 unique values in the database.***

***TIP: You can also open the Browse dialog box by RIGHT clicking the field in the report and choosing Browse Field Data... Be sure you RIGHT click the data field in the Details section, not the field header object.***

## Moving and Aligning Objects

To move a field, you must first select it. Once selected, position the mouse directly over the object until you see a four-headed arrow. With this arrow, you can move the field by dragging it. To drag both a data field and its field name at the same time, just multiple select the fields, and then drag with the four-headed arrow. You can even drag fields from one section of the report to a different section. You can also move a data field and its field name by simply moving the data field.

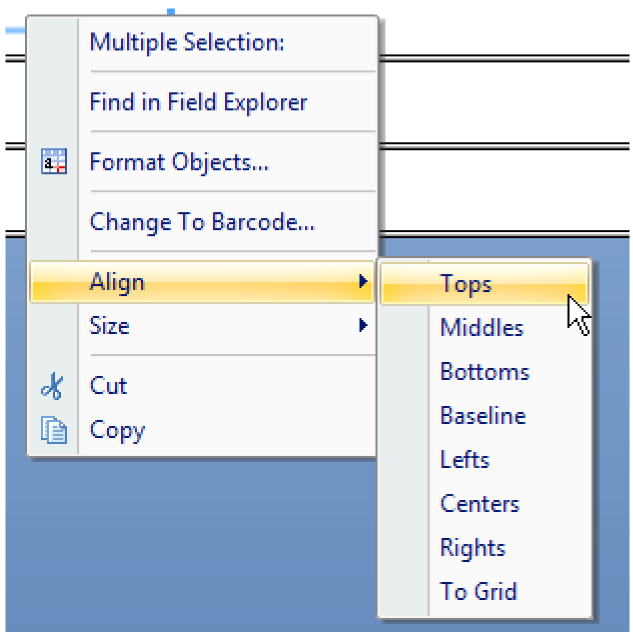
The only problem with moving fields like this is they sometimes get out of alignment with their titles. However, the shortcut menu has an Align command that works similarly to the Size command you have already used. Just multiple select the fields you want to align, then RIGHT click the field you want to align to. Choose Align from the shortcut menu and then choose to align on the left side, the right side, the center, or to the closest grid point.

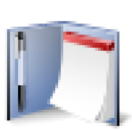
### ❖ Exercise 1.6 - Move and Align an Object

1. Move the **City** field header to the left, closer to the **CompanyName** field
   *Notice only the title moved. Now it is out of alignment with the field itself.*

2. Multiple select the **City** field and its field header. Then RIGHT click on the field header

3. Choose **Align**, then **Lefts** from the shortcut menu
   *Crystal aligns the field and its title on the left edge of the title.*



***TIP: You can also move or size an object with the keyboard. To move an item, select it, and then use the arrow keys on the keyboard to move it. If Snap to Grid is turned on, the arrows move the item one grid point. If it is turned off, the arrow keys move in very small increments. This is referred to as NUDGING an object. To re size using NUDGE, press and hold down the SHIFT key while pressing an arrow key.***

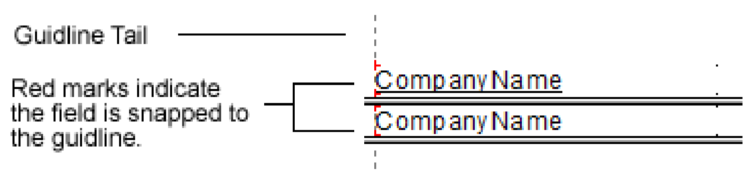
## Using Guides and Guidelines to Move and Align Objects

Although you can simply drag an object to move it, an easier method is to move fields and their field names using the guidelines. Guidelines are triangular buttons with attached dashed lines that appear on the ruler bar at the top of the Design window. You can use these guidelines to easily move and align objects.

Crystal Reports inserts guidelines automatically in these situations:

- ❖ Whenever you insert a field in the Details section of a report, the program automatically creates a guideline at the left edge of the field frame and snaps the field and field title to it. You can move both the field and the field name, keeping them aligned, by dragging the guideline marker in the ruler
- ❖ If you summarize a field, the program snaps the summary to the same guideline as the field you summarized to assure proper alignment
- ❖ When you RIGHT click the shaded areas to the left of a section and choose the Arrange Lines command, the program automatically creates one or more horizontal guidelines in the section and snaps the fields to them

When you move an object by dragging it with the four-headed arrow, you may move it off the guideline. If you do this, the object is no longer snapped to the guide and does not move with the guide. You can re-snap the object, or snap any other object to any guide by moving the left or right edge of the object so it touches the guide. When an object is snapped to a guideline, small red marks appear on the edge of the object where it touches the guideline.




You can also work with guidelines manually. Crystal Reports lets you add guidelines and delete them whenever you need to.

- ❖ To add a guideline to the horizontal ruler in any section, click in the ruler where you want the guideline to appear
- ❖ To add a guideline to the vertical ruler, simply click in the ruler where you want the guideline to appear
- ❖ To delete a guideline, drag its triangular button (Head) off the ruler

***TIP: You can snap a guideline to a field by moving the guideline to the edge of the field or by moving the field's edge to the guide.***

***TIP: Guidelines are much easier to work with if you can see the "tails", that is, the dashed lines that drop down from the ruler. To turn on the tails, choose File/Options… Click the Show Guidelines in Design command, and then click the OK button.***

## ❖ Exercise 1.7 - Work with Guidelines

1. First, turn on the tails for the guidelines. Choose **File/Options…**

2. Check on *Guidelines* in the Design View options of the **Layout** tab. Also check on the Grid option and then click **OK**
*Crystal displays the dashed lines extending down from the guideline markers in the ruler. By making the Grid viewable, it is easier to see field alignment.*

3. Point to the guideline marker for the **Region** field and drag it to the left. Position it right after the **City** field

4. Since you previously moved the **City** field by dragging it with the four-headed arrow, you unsnapped it from its guideline. Using the now unused guideline, move the guide head to line up the guide tail with the left edge of the City fields
*Be sure to look for the red marks to see if the field is snapped to the guideline.*

5. Move the guideline so the **Region** field and its field name are positioned just to the right of the **City** field

6. Now you need to add another field. Make sure the **Field Explorer** is still open

7. Insert the **LastYearsSales** field to the right of the **Region** field
*Notice the guideline is automatically inserted on the right for numeric fields.*

8. For purposes of this exercise, delete the guideline that was originally used to align the field by dragging its marker off the ruler

9. The **Last Year's Sales** field is a number. Numbers usually look better if they line up on the right. Therefore, you need to create a new guideline for this field. Click on the horizontal ruler at the 7" mark
*Crystal creates a new guideline there.*

10. Multiple select the **Last Year's Sales** field and its field name, and then drag the objects so their right edges touch the new guideline

11. Using the **LastYearsSales** guide, reposition the fields to the right of the **Region** fields

### ❖ Exercise 1.8 - Use the Arrange Lines Command to Align Field Titles Horizontally

1. Click in the **Page Header** section at the left of the screen with the RIGHT mouse button
   *A shortcut menu opens.*

2. Choose **Arrange Lines**
   *Guidelines appear wherever a field is located in the section and sometimes even where they don't appear.*

3. Make sure all the field headers are lined up on a single guideline. Move any titles to the guideline if they are not

4. If you see additional guidelines in the vertical ruler, delete them by dragging them off the ruler

5. Move the vertical guideline to position the field titles where you want them

***WARNING: Be careful when you are moving a guideline. If the mouse pointer is not positioned in the ruler when you release the mouse button, you will delete the guideline. If this happens, just create a new guideline by clicking in the ruler where you want it to appear or click the Undo button.***

## Creating Text Objects

In addition to adding fields to a report, you can also add text objects. A text object is an object in which you can type any text you wish. It is not related to the underlying database in any way. Typically, you use text objects as titles or identifiers for summary information. To create a text object, choose Insert/Text Object from the menus or click the Insert Text Object button on the Toolbar. The mouse pointer resembles a "crosshairs" from which you can either LEFT click onto the report to add the default sized text box, or draw a custom sized text box for entering text using the LEFT mouse button.

When you first insert a text object, it is in Edit mode. You see a flashing insertion bar inside the object. You can type text at this point. When you are finished adding text, click away from the object to finish editing. You cannot end the editing by pressing the ENTER key. This only adds another line to the text in the object.

***TIP: You can tell if you are in Edit mode by looking for the flashing insertion bar. Crystal Reports also displays a small ruler above the object when you are in Edit mode. If you need to make corrections to an object after you have exited Edit mode, double click the object to return to Edit mode.***

### ❖ Exercise 1.9 - Insert a Text Object

1. Click the **Insert Text Object** button
*The mouse pointer displays as a + (crosshairs) symbol until you point into the report.*

2. Click in the **Report Header** section to add the object
*The text box appears with a flashing insertion bar.*

3. Type **Customer Sales**

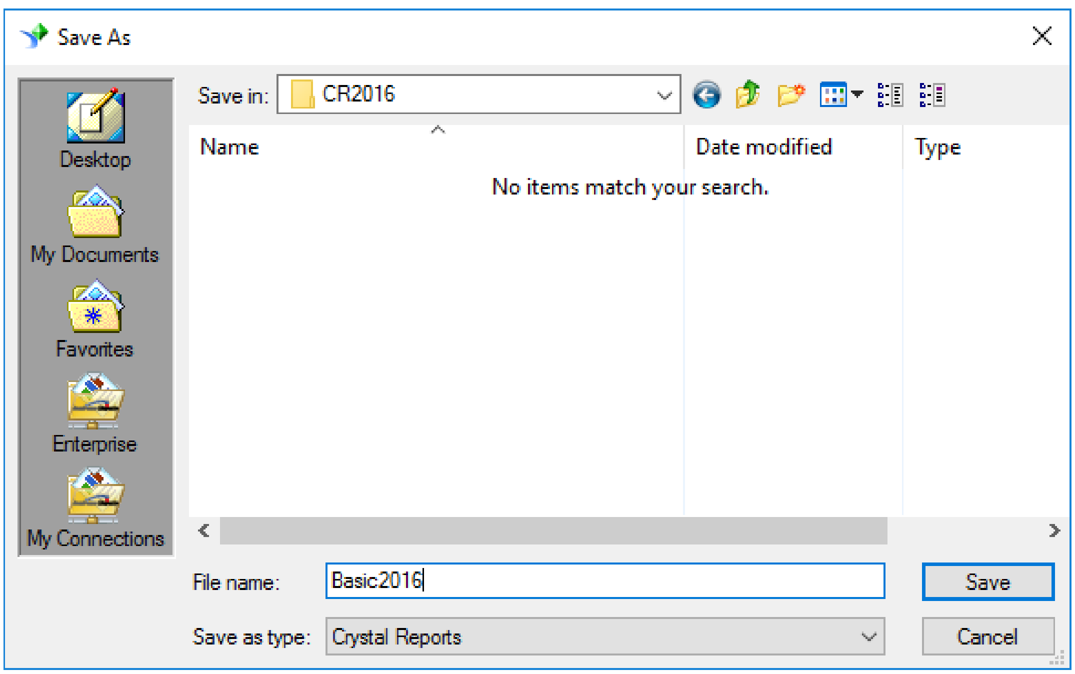
4. Click away from the text object to finish editing

5. Re size the object if necessary to view the entire text on one line

## Saving the Report

As with any software, it is a good idea to save your reports frequently in Crystal Reports so you do not lose work you have done. To save a report, you can choose File/Save from the menu or click the Save button on the Toolbar.

The first time you save a report, Crystal Reports opens the Save As dialog box. In this box, you can specify a folder location for the report and give the report a filename. The six icons on the left give you one click access to common locations.



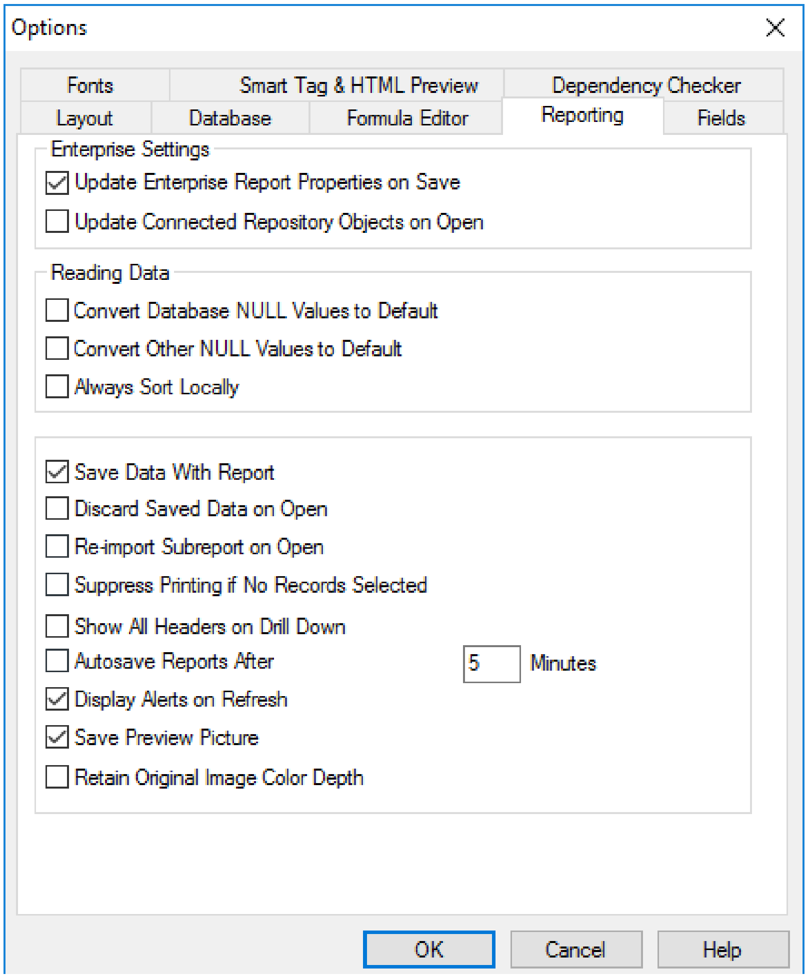
- The **Desktop** icon lets you save this report your Windows Desktop
- **My Documents** opens the Windows My Documents folder on Windows 2000/XP systems or the user Documents directory on Windows Vista
- The **Favorites** folder opens the list of favorite folders you have specified in Internet Explorer. If you have a folder where you want to keep all of your reports, add it to the Favorites folder, then it is easily accessible from here
- **Enterprise** lets you save your report to an Enterprise folder
- **My Connections** offers a list of saved connections to either crystalreports.com or Enterprise. This makes it easier to publish to multiple locations without having to con figure connection settings each time

Once you have saved and named a file, the Save command automatically overwrites the previous version of the file with the revised version. Crystal Reports does not prompt you to overwrite. If you want to preserve the previous version of the report, you must use the Save As command on the File menu to give the revised report a new name.

### Autosaving the Report

Crystal Reports has an Autosave feature that automatically saves the report for you in a time frame you specify. To turn on the Autosave feature, choose File/Options from the menu and then select the Reporting tab.

You can check mark the Autosave Reports After command, then enter the number of minutes between saves.



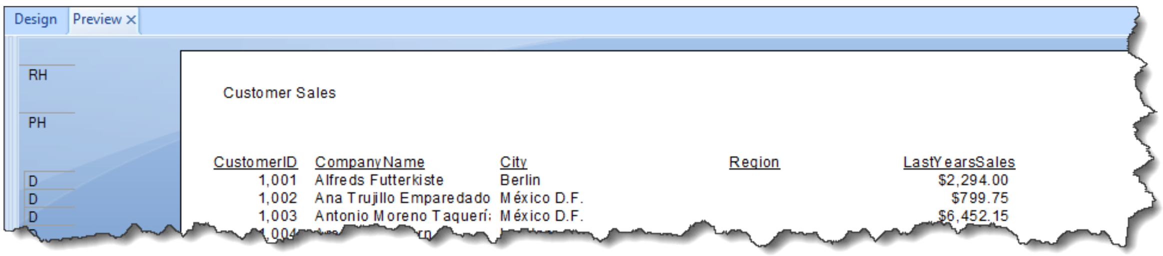

### ❖ Exercise 1.10 - Save the Report

1. Click the Save button on the Toolbar
   *Crystal Reports opens the Save As dialog box.*
2. Select the **My Documents** button
3. Create a new directory and name it **CR2016**
4. Name the report **Basic2016**
5. When finished, click the **Save** button

## Previewing the Report

When you have saved the report, you can see how it looks with collected data by using the Preview command.

To preview the report for the first time, choose File/Print or click the Print Preview button on the toolbar. Crystal Reports creates a Preview tab and displays the report similar to how it will look when printed. Once you have created the Preview tab, you can switch between Design and Preview views by clicking the appropriate tab.




In the toolbars area you should see the Navigation toolbar. Usually it will be located in the bottom row to the very right.


- ❖ Use the button to refresh the data
- ❖ Use the and buttons to move through the report one page at a time.
- ❖ Use the or to display the first or last page of the report
- ❖ The button stops the processing of the report and displays the report with whatever data it has gathered up to the point you stopped the processing
- ❖ The page indicator in the middle of the arrow buttons indicates the page you are viewing and the total number of pages in the report. Crystal formats the report only to display requested pages to save time when previewing the report. If you see a + sign after the total page count, that means that Crystal has not formatted all the pages of the report, so the total count is not known. To get the actual total page count, go to the last page of the report

### Refreshing the Data

When you preview a report, Crystal Reports queries the underlying database, pulls the records you requested, then saves the retrieved records in a combination of active memory and disk files. Thereafter, Crystal Reports works with the same dataset on the local machine rather than re-querying the database. Once you have pulled the initial set of records, Crystal Reports can work very quickly because it does not have to re-query the database each time you want to preview the results of your work. If you want Crystal Reports to re-query the database, you can choose to refresh the data.

Crystal Reports automatically refreshes the data in certain circumstances:

- When you add additional fields to the report
- When you add criteria that causes Crystal Reports to select additional records from the database
- When you add a formula that uses a field not currently being used in the report
- If you want Crystal Reports to automatically discard the saved data and pull new data from the database whenever you open the report, you can specify for Crystal to do this. Choose File/Options, select the Reporting tab, and then check the Discard Saved Data on Open command. You can refresh the data manually whenever you want by choosing Report/Refresh Report Data, or by clicking the Refresh button on the Toolbar

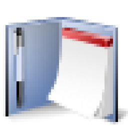
❖ **Exercise 1.11 - Preview the Report**

1. Click the **Print Preview** button
2. Click the page navigation buttons to view different pages of the report
3. Click the navigation buttons to view the first and last pages of the report
   *Notice the change in the total page count after you have navigated to the last page of the report.*
4. Click the **Close** button on the **Preview** tab to close it
5. Click the **Print Preview** button to restore the tab
6. Click the **Design** tab to return to Design view. Click the **Save** button again to save the report

## Using the Status Bar

The Status bar offers additional value beyond providing descriptions of selected objects. When in Preview mode, the Status bar shows:

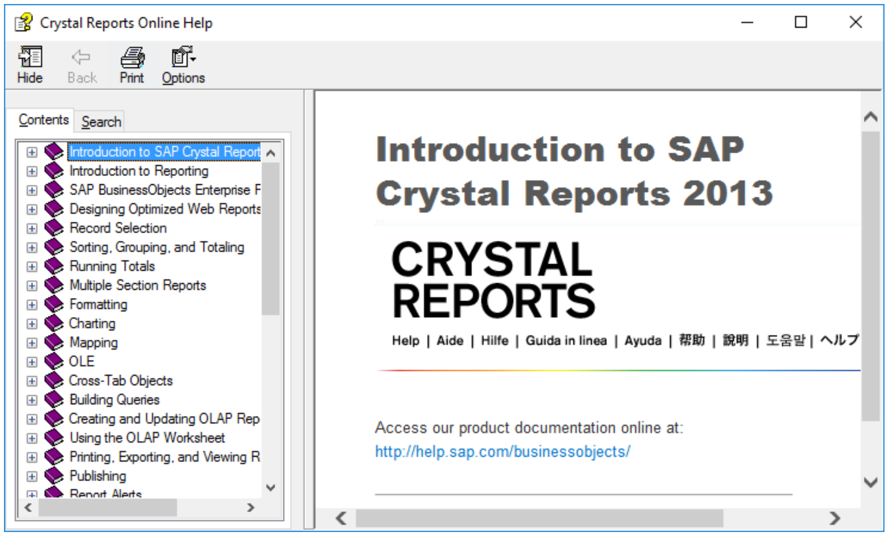
- Data and time of last database refresh
- Number of records retrieved and saved
- Zoom controls - The Zoom control can be used in both Design and Preview mode. Features include the ability to quickly view the whole page, width only or to set the percentage dimension



***NOTE: When you preview the report, you may see a blank white area on the left of the screen along with Groups, Parameters and Find options. This is the Preview Panel area. You will learn more about using this later. For now, you can turn this off by clicking the Toggle Preview Panel button on the Standard toolbar.***

## Getting Help

You can obtain help on Crystal Reports by choosing Help, Crystal Reports Help or by pressing the F1 key.




The left side of the screen provides help in locating the information you want.

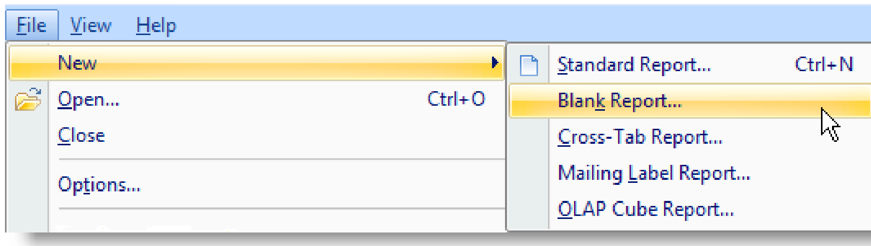
- *Contents* shows a table of expandable subjects through which you can look for information. Think of this as a table of contents
- *Index* provides a search method that looks through screen titles. Just type the keyword you want. Crystal Help interactively displays topics with the keyword in the title
- *Search* is a word search option that searches help screen text. Again, type the keyword or words you want, and then click the List Topics button to see a listing of screens that contain your keyword
- *Favorites* display a list of topics you have added as favorites

***TIP: If you need help on functions in the Formula Editor, look them up by the function name or by the general category to which they belong. For example, search for the function name ReplicateString. If you cannot find the function by searching for the name, then look up the general category to which it belongs. You cannot locate For Loop by searching for the name, but you can find it by searching for its category, Control Structures.***

## Challenge Exercise – Creating a Basic Report

Create a report that lists orders with important date and payment information.

1. Select **File Menu|New|Blank Report** from the **Menu** bar
*Note if you click on the New Report button by default you will be taken into the Standard Report expert.*




2. Create this report as a **Blank Report**

3. In the **Database Expert** window, open the **My Connections** folder, the **Northwind 2008** database connection, **Tables** and then add the **Orders** table. Click **OK**

4. Add the following fields to the Details section: **OrderID**, **OrderDate**, **RequiredDate**, **ShippedDate** and **OrderAmount**
*The **OrderID** and **OrderAmount** fields are number fields. Notice how Crystal Reports provides guidelines on the right edges of these fields. This is because number fields are right-aligned by default.*

5. Browse the **OrderDate** field to see what the date looks like. When you are finished, close the **Browse** box
*Notice the field shows both the date and the time. It needs to be about 1.5" long to display all the data.*

6. Re size the **OrderDate** field to be 1.5" long

7. Using the **Size** command on the shortcut menu, re size the **RequiredDate** and the **ShippedDate** fields to be the same width as **OrderDate**
*Notice how the field headers automatically re size the same as the data fields.*

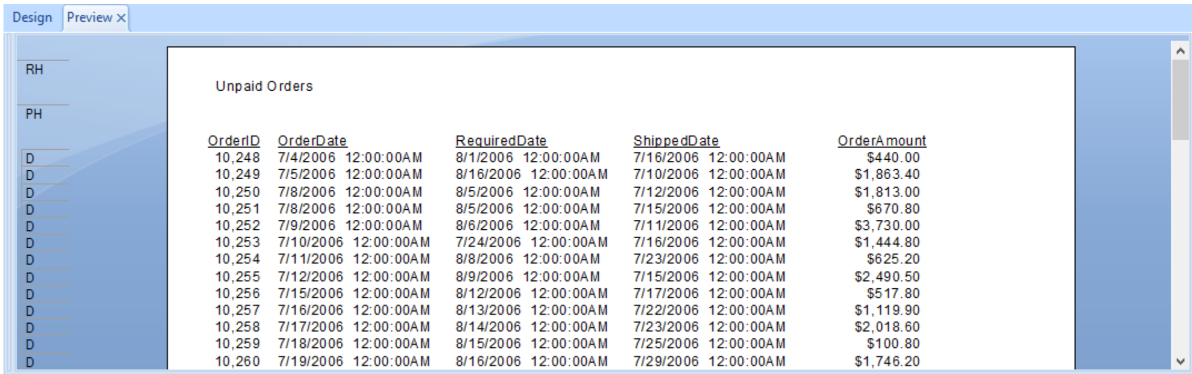
8. Use guidelines to position the fields so they look good to you

9. Add a text box to the Report Header section. Type **Unpaid Orders**

10. Save the report. Name it **Unpaid Orders**. Preview the report then re-save it after you have previewed

11. When finished, close the report

The Preview view of the report should look similar to the following illustration:


Design | Preview

Unpaid Orders

| OrderID | OrderDate | RequiredDate | ShippedDate | OrderAmount |
|---|---|---|---|---|
| 10,248 | 7/4/2006 12:00:00AM | 8/1/2006 12:00:00AM | 7/16/2006 12:00:00AM | $440.00 |
| 10,249 | 7/5/2006 12:00:00AM | 8/16/2006 12:00:00AM | 7/10/2006 12:00:00AM | $1,863.40 |
| 10,250 | 7/8/2006 12:00:00AM | 8/5/2006 12:00:00AM | 7/12/2006 12:00:00AM | $1,813.00 |
| 10,251 | 7/8/2006 12:00:00AM | 8/5/2006 12:00:00AM | 7/15/2006 12:00:00AM | $670.80 |
| 10,252 | 7/9/2006 12:00:00AM | 8/6/2006 12:00:00AM | 7/11/2006 12:00:00AM | $3,730.00 |
| 10,253 | 7/10/2006 12:00:00AM | 7/24/2006 12:00:00AM | 7/16/2006 12:00:00AM | $1,444.80 |
| 10,254 | 7/11/2006 12:00:00AM | 8/8/2006 12:00:00AM | 7/23/2006 12:00:00AM | $625.20 |
| 10,255 | 7/12/2006 12:00:00AM | 8/9/2006 12:00:00AM | 7/15/2006 12:00:00AM | $2,490.50 |
| 10,256 | 7/15/2006 12:00:00AM | 8/12/2006 12:00:00AM | 7/17/2006 12:00:00AM | $517.80 |
| 10,257 | 7/16/2006 12:00:00AM | 8/13/2006 12:00:00AM | 7/22/2006 12:00:00AM | $1,119.90 |
| 10,258 | 7/17/2006 12:00:00AM | 8/14/2006 12:00:00AM | 7/23/2006 12:00:00AM | $2,018.60 |
| 10,259 | 7/18/2006 12:00:00AM | 8/15/2006 12:00:00AM | 7/25/2006 12:00:00AM | $100.80 |
| 10,260 | 7/19/2006 12:00:00AM | 8/16/2006 12:00:00AM | 7/29/2006 12:00:00AM | $1,746.20 |

# NOTES

# Lesson 2
# Formatting Features

## Lesson Objectives

After completing this lesson, you will be able to:

- **Use the Template Expert**
  *Choose a pre-formatted template. It's the fastest way to make dynamite reports*

- **Format objects**
  *Learn the best methods for controlling the formatting of the fields. Learn to use the Format Painter to copy and apply format properties*

- **Add lines and boxes to reports and format them**
  *Create professional looking reports by adding separator lines or boxes to surround groups. Format drawing objects to match the look and feel you wish*

- **Add and format graphics**
  *Graphic images add zip to reports. Crystal Reports imports most graphic image formats so you can dress up the printed output*

- **Set the page orientation and margins of the report**
  *Choose whether to print the report on a Landscape or a Portrait oriented page and learn how to define margin settings*

- **Place fields within Text Objects**
  *Combine fields with text quickly and easily. Crystal Reports trims field data automatically when you put a field into a text object, so it is simple to create text based documents in a report*

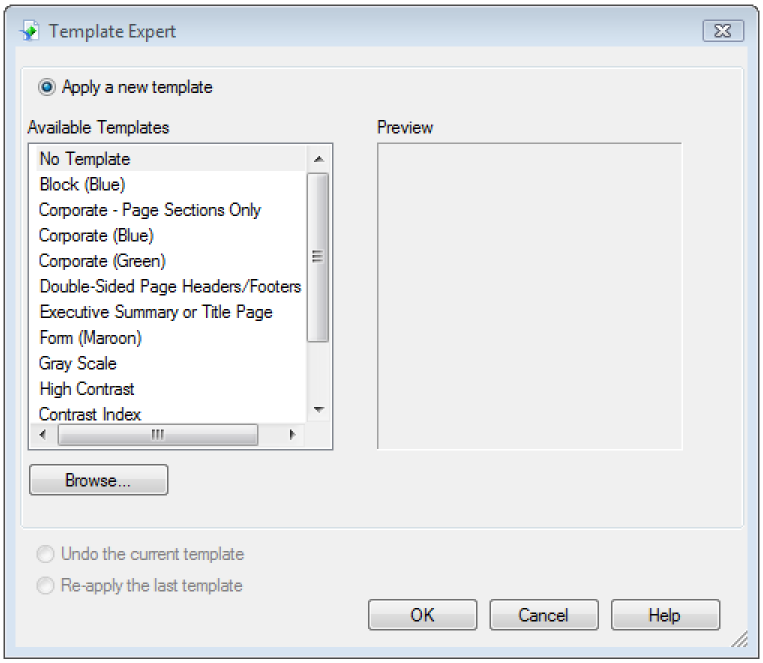
- **Format all or part of an object**
  *Format an entire object, a single character, or a field within a text object to call attention to important information*

- **Insert Special Fields into the report**
  *Tell Crystal Reports to automatically print the date and time, page numbers, titles and comments and refresh dates. You can quickly add these special fields from the menu bar*

## Quick Formatting with the Template Expert

Crystal Report's Template Expert contains several pre-formatted report styles that can quickly make your report into a professional looking printout. It applies borders, shading, lines, arrangement and other options to your report. To open the Template Expert, choose Report/Template Expert… or click the Template Expert button in the Experts toolbar.

The Template Expert applies multiple commands to your entire report. Even with the complexity of the process, you can undo this command. In the Template Expert, you can select a style from the list on the left. The image at the rights shows you an example of the style applied. Click **OK** to apply the style to the report.




The Template Expert gives you the ability to create your own customized templates either using pre-existing reports or creating special template reports using Template Field Objects. The considerations are complex and not possible to cover in this class. However, Creating Custom Templates is covered in detail in the Designer 2 workshop.

### ❖ Exercise 2.0 – Apply a Template Using the Template Expert

1. You should still have the **Basic2013.rpt** report open. If you do not, choose **File**, then select the report from the list at the bottom of the menu

2. Go to **Preview** view and make sure the report is saved
   *Look at the Save button in the toolbar. If it is grayed out, then the report is saved. If not, click the button to save the report.*

3. Click the **Template Expert** button

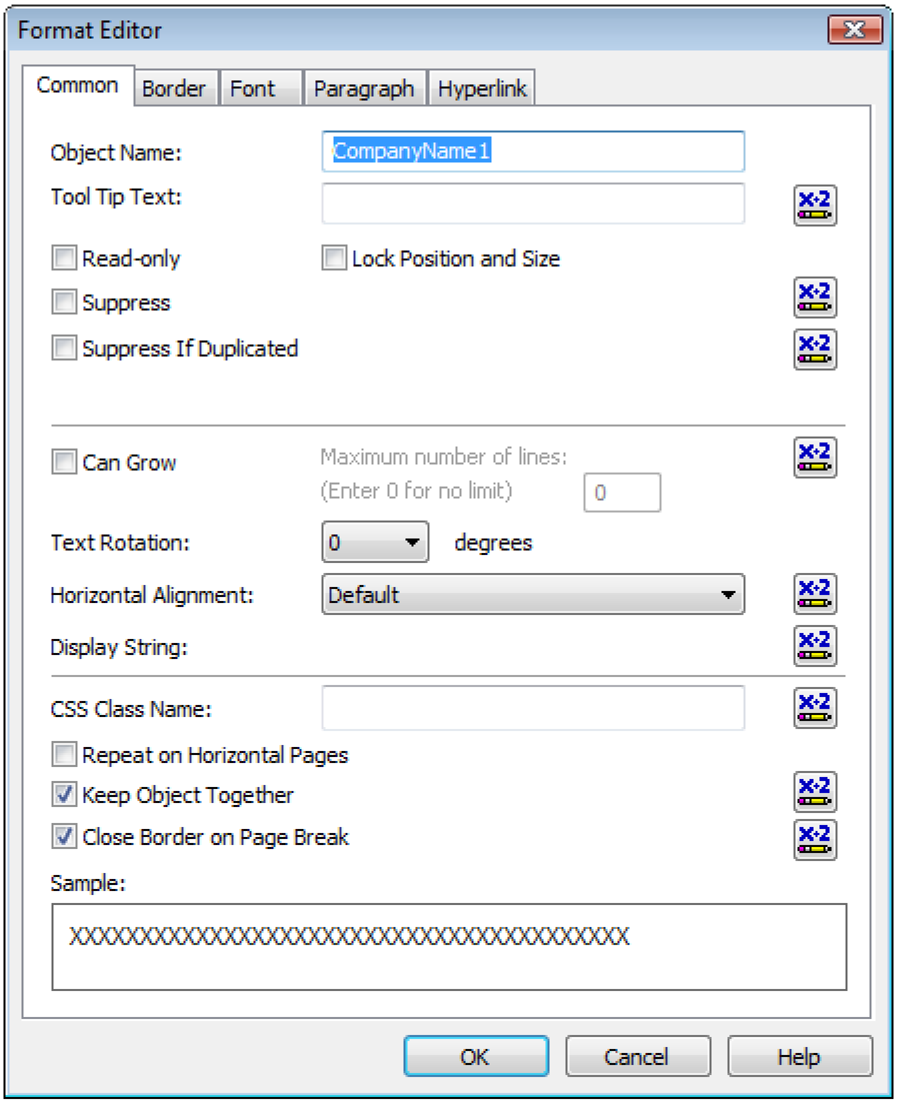
4. Select each of the templates to see what they look like, and then choose the one you like and click **OK**

5. Sometimes automatic styles do not provide the look you want for your report. To revert the report back to its original state, repeat step 3 and in the **Template Expert** dialog box select the radio button to ***Undo the current template*** and then click **OK**
   *The dialog box closes and the report is reverted back to its original state*

***WARNING: Using the "Undo the current template" option only reverts back one template instance, which means if you have tested different templates, you will need to close the report without saving the report. Therefore, it is advisable to save the report before using this feature.***

## Formatting Objects

You can format objects with greater control by using the Format Editor. The easiest method for opening the Format Editor is to RIGHT-MOUSE click on the object you wish to format. RIGHT click any report object or multiple selected objects, then choose Format Text… Depending on the object being formatted, the option may read Format Graphic..., Format Field... and so on. In any case, choosing this option will open the Format Editor. The Format Editor can also be opened once a object is selected by clicking the Format Editor button.




The Format Editor displays different choices depending on the type of object and the type of field you chose to format. The next few pages show a table of tabs you may see in the Format Editor and the types of fields for which they appear.

| Format Editor Tabs and Options | |
|---|---|
| **Option** | **Description** |
| **Common Tab** | |
| Object Name | This item is used to create a name for the object and is very useful when the object is viewed in the Repository Explorer, Report Explorer and when defining Report Parts hyperlinks. Only letters and numbers are allowed for the name. Spaces or other special characters will NOT be accepted |
| Tool Tip Text | Allows you to display help text when moving the mouse over the object |
| Read Only | This disables the ability to apply additional formatting changes, but is not intended to provide report security |
| Suppress if Duplicated | Causes the object to NOT display duplicate values in a column of data |
| Suppress* | Causes the object to NOT display on the report in Preview |
| Suppress Embedded Field Blank Lines | When checked, this option suppresses any blanks in fields embedded in the text field. This is often useful when displaying an address where the address line 2 may be blank |
| Lock Position and Size | This makes it impossible to move or resize the object |
| Can Grow* | For objects with variable lengths, this option allows the object to grow vertically to accommodate all the text. You can define a limit to the growth by typing a number in the Maximum Lines text box |
| Text Rotation | Use the Text Rotation options to rotate text within the object 90 or 270 degrees |
| Horizontal Alignment | Aligns the text left, centered, right or justified for non-text fields such as number fields |
| CSS Class Name | Use this field to specify a class name for the report object you're formatting. The class name can be used in your CSS to indicate a unique style for the selected report object. This feature is meant for web delivered reports |
| Repeat on Horizontal Pages | This format option allows you to repeat objects, such as text objects, for reports that have horizontal page breaks. The feature will greatly enhance reports containing a multi-page crosstab |
| Display String | This format option allows you to use the formula language to customize the formatting of the field. Use a formula to display number, currency, date, time, date and time, Boolean, or even string fields as a custom string. This type of conditional formatting is not limited to database fields; you can use it for running totals, formulas, parameter fields, summaries, and so on |
| Keep Object Together | Prevents the object from being split with a page break in the printed report |
| Close Border on Page Break | If the object is split with a page break and has a border, checking this option closes the border at the end of the page |

| Format Editor Tabs and Options | |
|---|---|
| **Option** | **Description** |
| **Number Tab** | |
| Style* | This list displays several pre-defined styles for the number. To apply a style, select it in the list, then click OK |
| Currency symbol (system default) | Click here to display a currency symbol on the number. You can display a Fixed symbol, which displays the symbol at the left edge of the field, or a Floating symbol, which display the symbol directly to the left of the number |
| Customize | Click this button to display an additional dialog box to customize the number style. Listed below are the options available for customized numbers |
| **Custom Style Number Tab** | |
| Use Accounting Format | When you select this option, three defaults are set automatically.  The negative symbol used, and its position, is determined by the Windows Regional Settings (it will be either the minus sign or the brackets).  The dash will be automatically chosen for "Show Zero Values as".  Zero values are automatically displayed as dashes (-) in your report, and the currency symbol is fixed on the left side |
| Suppress if Zero* | Hides the data if the value is zero |
| Decimals | Truncates the number to the number of decimals you define |
| Rounding* | Rounds the number to the number of decimals you define |
| Reverse Sign for Display | When this box has a check mark, Crystal truncates the number in fields where the number is longer than the length of the field. For example, if the field is set to display 6 characters, and the number is 5,407.65, the field displays 407.65. If there is no check mark, then the field displays ###### to indicate that the field is not long enough to display the number.  This is the default |
| Allow Field Clipping* | When this box has a check mark, Crystal truncates the number in fields where the number is longer than the length of the field. For example, if the field is set to display 6 characters, and the number is 5,407.65, the field displays 407.65. If there is no check mark, then the field displays ###### to indicate that the field is not long enough to display the number.  This is the default |
| Decimal Separator | Sets the character for the decimal separator |
| Thousand Separator | Sets the character for the thousand separator |
| Leading Zero | Includes a zero before the decimal point for numbers between zero and one. Example: 0.12. |
| **Custom Style Currency Tab** | |
| Show Zero Values As | This list lets you define how zero values display. Options are <Default Format>, - or 0. It is also possible to input your own values. |
| Enable Currency Format | Turns display of currency symbol on or off. You can choose to display the symbol at the left of the field by clicking the Fixed radio button |
| One Symbol Per Page | Displays the currency symbol on only the first item on each page |
| Position | Displays a list of all available positions for the currency symbol |
| Currency Symbol | Lets you type the symbol you want to use for the currency symbol. $ is the default |

| Format Editor Tabs and Options | |
|---|---|
| **Option** | **Description** |
| **Font Tab** | |
| Font* | Sets the font face for the object |
| Style | Defines regular, bold, italic or bold and italic styling |
| Size* | Sets the size of the font for the object. This also provides the ability to specify fractional point sizes such as 10.5, 12.5 and so on |
| Color | Sets the color for the text in the object |
| Effects | Turns on or off strikethrough and underline features for the object |
| Character Spacing Exactly | Use this option to specify the value that each character in your selected font occupies. The value is defined as the distance in the number of points measured from the start of one character to the start of the next. When you change the character spacing, you change only the spacing between adjacent characters, not the font size of the characters |
| **Border Tab** | |
| Line Style* | Defines the style of the line independently for each side of the object |
| Tight Horizontal | Trims the box to the size of the data in the object |
| Drop Shadow | Adds a shadow to the lower right of the object |
| Border Color* | Defines the color of the border line and drop shadow if added |
| Background Color | Defines the color of the background of the object |
| **Date/Time Tab** | |
| Style* | This list displays several pre-defined styles for the date and time. To apply a style, select it in the list, then click OK |
| Customize | Click this button to display an additional dialog box to customize the number style |
| **Custom Date/Time Tab** | |
| Order | Specifies the order of the date and time. There are four choices: Date Time, Time Date, Date, and Time |
| Separator | Defines the separator between the date and time |
| **Custom Style Date Tab** | |
| Date Type | Sets the date format based on settings of Short Date, Medium Date or Long Date |
| Calendar Type | If you are using Windows NT/95/98/2000 your operating system may support more than one calendar type. If so, choose the calendar type applicable |
| Format* | Defines the display of the month, day and year. Select display formats from the drop-down lists |
| Order | Sets the order of the three date sections: year, month, day or day, month, year or month, day, year |
| Day of Week | Displays the day of the week before or after the date and allows special formatting option when chosen |
| Link separators to date order | Select this option if you want any separators you specify to be considered when sorting date fields |
| Separators* | Defines the separator characters placed between the three date sections |
| Encl | Select Square or Round brackets to enclose the day of the week |
| Position | Choose whether the day of the week is leading or trailing |

| Format Editor Tabs and Options | |
|---|---|
| **Option** | **Description** |
| **Time Tab** | |
| Use System Default Format | When you select this check box, the program, by default, uses the date formats from the Regional Settings dialog box in the Windows' Control Panel |
| 12 Hour/24 hour | Chooses to use a 12-hour clock or a 24-hour clock (military time) |
| Hour:<br>Minute:<br>Second: | Defines the display for hours, minutes or seconds. Select display formats from the drop-down lists |
| **Paragraph Tab** | |
| First Line | Enter the distance in inches (or the default measurement for your report) that you want the first line of the paragraph to be indented from the left margin of the page |
| Left | Enter the distance in inches (or the default measurement for your report) that you want the paragraph to be indented from the left margin of the page |
| Right | Enter the distance in inches (or the default measurement for your report) that you want the paragraph to be indented from the right margin of the page |
| Line Spacing | Enter the spacing you want for lines as a multiple of the font size you are using, or as an exact number of points |
| Reading Order | Use the options in this area to define whether your text is to be read from left to right or from right to left |
| Text Interpretation | Use this list to select the type of pre-formatted data (string or memo fields only). Crystal Reports extracts information about the font, size, style, color, and paragraph and displays the data or text with the specified attributes. Your choices are:<br>• "**none**" to interpret the string or memo field or imported text as if it contains plain text<br>• "**RTF Tex**t" to interpret the string or memo field or imported text as if it contains Rich Text Format data<br>• "**HTML Text**" to interpret the string or memo field or imported text as if it contains HTML data |
| Horizontal Alignment | Use this option to align text left, right, center or justified. This option is on the Paragraph tab for text fields, but on the common tab for non-text fields |
| **Picture Tab** | |
| Crop From | Defines area of the picture to NOT display. This area is cut off from the picture |
| Scaling | Lets you reduce or enlarge the picture based on scale percentage |
| Size | Defines the actual size of the picture's width and height |
| Reset | Resets the picture format to the defaults specified in the Original size display box |
| Graphic Location | Provides ability to specify an URL or Disk file location for the graphic |

| Format Editor Tabs and Options | |
|---|---|
| **Option** | **Description** |
| **Boolean Tab** | |
| Boolean Text | Sets the display of the Boolean text |
| **Hyperlink Tab** | |
| No Hyperlink* | This is the default option meaning there are no hyperlinks defined for this object |
| A Website on the internet | Selecting this option allows the object to have a link to a static website address |
| Current Website Field Value | This option creates a link to a website defined in the data field |
| An E-mail Address | This option creates a "mailto:" command for submitting an email based on an address specified |
| A File | Select this option to create a hyperlink to a file on a specific computer or networked computer. Use the formula button to create a file path based on a field value |
| Current E-mail Field Value | This option creates a mailto command for submitting an email based on an address contained in a data field. |
| Report Part Drilldown | This option only works with the DHTML Viewer and is used to allow drilldown navigation between Report Parts within the same report |
| Another Report Object | This option lets you define a hyperlink path for linking objects in the same or different reports |
| Hyperlink Information | This feature will vary in its options based on the selection(s) made in the Hyperlink Type or DHTML viewer options |
| **Subreport Tab** | |
| Subreport Name | This item is used to create a name for the subreport and is very useful when the subreport is used in the Report Explorer and when defining Report Parts hyperlinks |
| On-demand Subreport | Select this check box to create a hyperlink to a subreport |
| On-demand Subreport Caption | This is used in conjunction with the "On-demand Subreport" option and allows the caption hyperlink to be conditionally set |
| Subreport Preview tab | Click the X+2 button to enter text that the user will see to identify the hyperlink to the subreport |
| Re-import when opening | Select this check box to import the subreport from the original file whenever you open the main report. If you have made changes to the original file, your subreport is automatically updated when opening the main report |
| Suppress Blank Subreport | When a subreport doesn't return data, it will be suppressed if this option is checked on |

## Format Painter

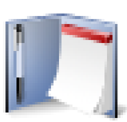
Another formatting option available is the Format Painter, which is similar to format painters in standard office suites. The Format Painter allows you to copy a large number of formatting properties from one previously formatted object to other objects with a click of the mouse.

The object containing the formatting you copy from is called the source object. You may only select one source object at a time. To apply the copied format, you simply click the Format Painter button on the Standard Toolbar or choose Format|Format Painter from the menu or right click and choose Format Painter from the pop-up menu.

As you move the cursor over other objects, called target objects, you will either see the paintbrush, which means you can apply the format to the object or, which means you cannot apply the formatting from the source object to the target object. For example, you cannot copy formatting from a bitmap object to a database field.

Data types are important with the Format Painter. If you use the Format Painter from a numeric source object to an alpha object then not all the formatting options will be copied. Formats like font color; background color and borders that are independent of the datatype will be copied but specific data type formatting like number of decimal places will only be copied if painting an object of the same data type.

To use the Format Painter on multiple objects hold down the Alt key and the paintbrush icon will remain as you click on multiple objects. DOUBLE-CLICK the Format Painter button to also paint several objects.



***Note: Turn off the Format Painter by pressing the ESC key.***

If you have used the Highlighting Expert to conditionally format a field, the Format Painter will not copy the format properties. However, if you have used conditional formatting via the X+2 buttons, the format properties will be copied. Conditional formatting and the Highlighting Expert are covered later in the course.

### ❖ Exercise 2.1 - Format a Single Field

1. Return to **Basic2013.rpt** and select the report title in the Report Header with the text "**Customer Sales**". RIGHT click the **report title**, then choose **Format Text…**
   *The Format Editor dialog box is displayed.*

2. Using the above table, set the following formats:

   a) Name the text object **ReportTitle**

   b) Add a double line border

   c) Add a drop shadow

   d) Change the border color to a color of your choice

   e) Change the background color to a color of your choice

   f) Change the title font and font size

3. Resize the field to display all the title text on one line

4. Select the **Last Year's Sales** field

5. RIGHT click the field, choose **Format Field…**

6. Making sure the **Display Currency Symbol** check box is checked on and set to **Fixed**, choose the style with a thousands separator, but no decimals then click **OK**

### ❖ Exercise 2.2 - Format Multiple Fields

1. Multiple select the field titles in the **Page Header** section
   *This is usually easier to do from Design view.*

2. RIGHT click one of the titles
   *Notice that the shortcut menu is different from when you have one field selected.*

3. Choose **Format Objects…**
   *The Format Editor dialog box opens.*

4. Change the font color and make the titles bold

5. Remove the underline on the titles, and then click **OK**

6. Make sure all the titles are left aligned, except **CustomerID** and **LastYearsSales**, which should be right-aligned

7. When you are finished, deselect the titles
   *You might need to resize some titles to display all the bold text.*

8. Preview the report

### ❖ Exercise 2.3 - Format Fields Using the Format Painter

1. Select the column heading **CustomerId**

2. Increase the Font size by one point

3. Make the heading italic and colored red

4. Using the **Format Painter**, copy the formatting to the other column headings

5. Select the **LastYearsSales** field. Using the Format Painter, copy the formatting to the **Customer Id** field. Notice the Customer Id field now has 2 decimal points and a currency symbol. This is not what you want so click the undo button to remove the formatting

6. Using the **File|Save As** command, save this report and name it **Format.rpt**

## Inserting Lines and Boxes

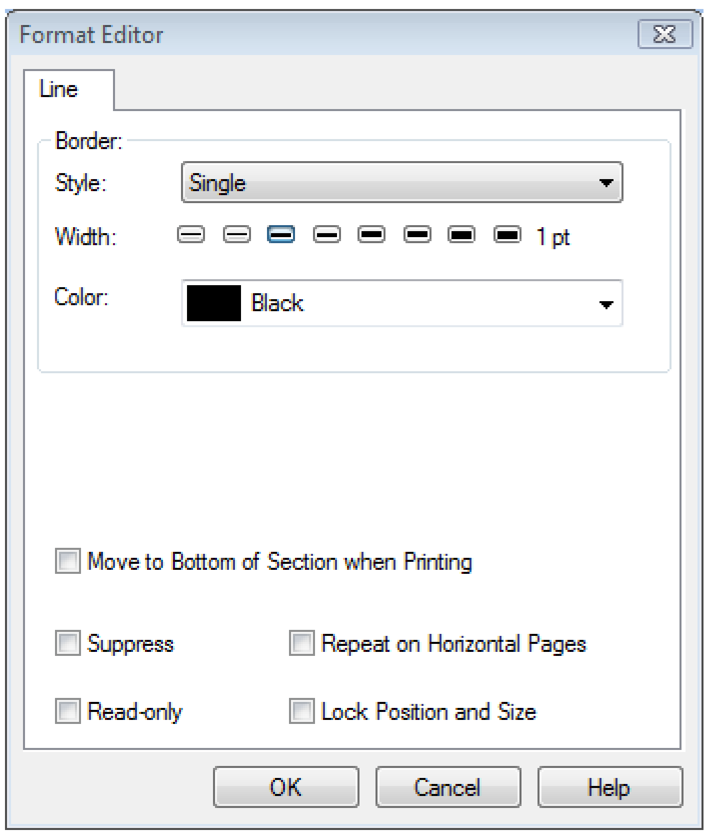
A valuable feature of Crystal Reports is its ability to integrate graphics into reports to make them more attractive and useful. This lesson discusses how to add lines and boxes as separators or to draw attention to particular figures or groups.

### Drawing a Line

To draw a line, choose Insert/Line from the menu or click the Insert Line button in the Insert Toolbar. The mouse pointer changes to the shape of a pencil. Drag the pencil to draw a line wherever you wish (under a title, sub-total, grand total etc.).

When you select and place the pointer over the line, the mouse pointer changes to a 4-directional arrow. This mouse pointer allows you to move the line just like any other object on the report. A selected line has handles at each end. To size the line, simply point to a handle to see a two-headed arrow, click and drag the arrow either direction to shorten or lengthen the line.

If you wish to change the style of the line, select it, then choose Format/Format Line… from the menu. An even faster way to format the line is to RIGHT click it, then choose Format Line…



### ❖ Exercise 2.4 - Insert and Format a Line

1. Make sure you still have the **Format.rpt** report open. Click the **Design** tab to return to **Design** view

2. You need to have some space under the field titles in the **Page Header**. If you do not, drag the Page Header border down to make some space

3. Click the **Insert Line** button
*The mouse pointer changes to the shape of a pencil.*

4. Drag a line in the **Page Header** under the field titles the width of the report

5. RIGHT click the line, choose **Format Line…**

6. Choose a style, width and color that you like

7. Click **OK**

8. Save the report (**Format**) and preview the report

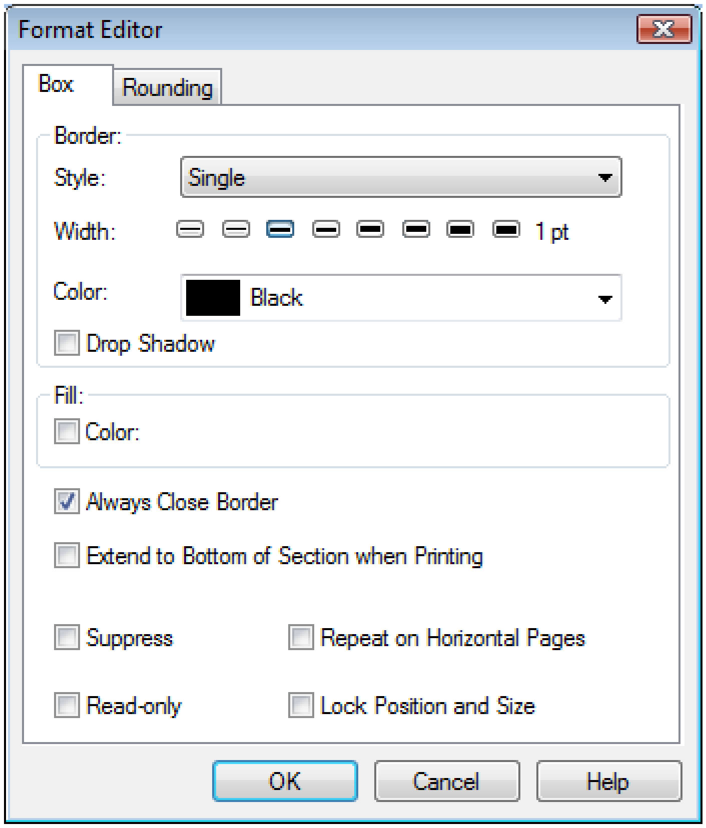
## Drawing a Box

Drawing boxes is much like drawing lines. You can click the Insert Box button on the Insert Tools Toolbar or choose Insert/Box from the menu system. Again, you get a pencil mouse pointer. Drag with the pencil to draw a box.

Be careful what sections you are working in when drawing a box. If you want a box around only a group header, make sure you do not release the mouse button while pointing into any other section. On the other hand, Crystal Reports does let you draw boxes around multiple sections so you can enclose objects in different sections within a single box.

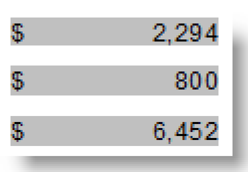
***TIP: It is always better to work in Design view when drawing lines or boxes. You can more easily see the sections in which you are working.***

To move or resize the box, select it first. Then, just like any other object, move it by dragging with the 4-dimensional arrow, or resize it by dragging one of the handles. Just like a line, you can format the box by RIGHT clicking it while it is selected.



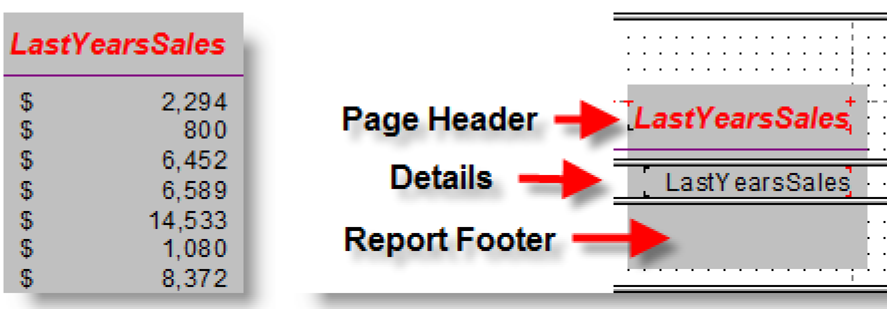

Suppose you want to call special attention to the Last Year's Sales of each customer. You can shade the cell by enclosing it in a box, then specifying a background color. You could also just put a background color on the field object itself, but that would display each specific value with shading, like this:

What you want is a continuous shaded area around all the values plus the field title. For that, you have to draw a box.



### ❖ Exercise 2.5 - Insert and Format a Box

1. Make sure you are in **Design** view
2. Click the **Insert Box** ☐ button on the **Insert** toolbar
3. Point the pencil above and to the left of the **LastYearsSales** title in the **Page Header** section
4. Drag down and to the right until the pencil is pointing to the right of the **LastYearsSales** field in the **Details** section. Continue to drag the mouse down into the bottom of the Report Header section and then release the mouse button
5. RIGHT click on the box (you must be pointing to the box border), and then choose **Format Box…**
6. Choose a **Silver** border color
7. Choose a **Silver** fill color, click **OK**
8. Save the report (**Format**) and preview the report
   *The box should surround the Last Year's Sales field and its title continuously, like this:*




**Preview Mode** **Design View**

## Inserting Graphics

Adding pictures, logos or other graphics images to a report can increase the attention the report receives. Crystal Reports allows you to add graphics to any Section of the report. To insert a picture, choose Insert/Picture from the menu bar or click on the Insert Picture button on the Insert toolbar. The Open dialog box displays where you can choose the appropriate graphics file.

Once you open the file, the mouse pointer appears with a shadow border the size of the graphics image you selected. Simply click in the report where you want the picture to be inserted.

When the picture is in the report, you can format it, move it or resize it just like any other object.

### ❖ Exercise 2.6 - Insert a Graphic

1. Return to **Design** view

2. Scroll to the right if necessary to see the space in the **Report Header** to the right of the title object

3. Click the **Insert Picture** button on the **Insert** toolbar

4. You should be in the directory where you saved the sample class files. In the **Images** folder, double click the **Northwind2008Logo.jpg** file
*Crystal Reports returns you to the report. The mouse pointer has a shadow box attached that is the actual size of the graphics image.*

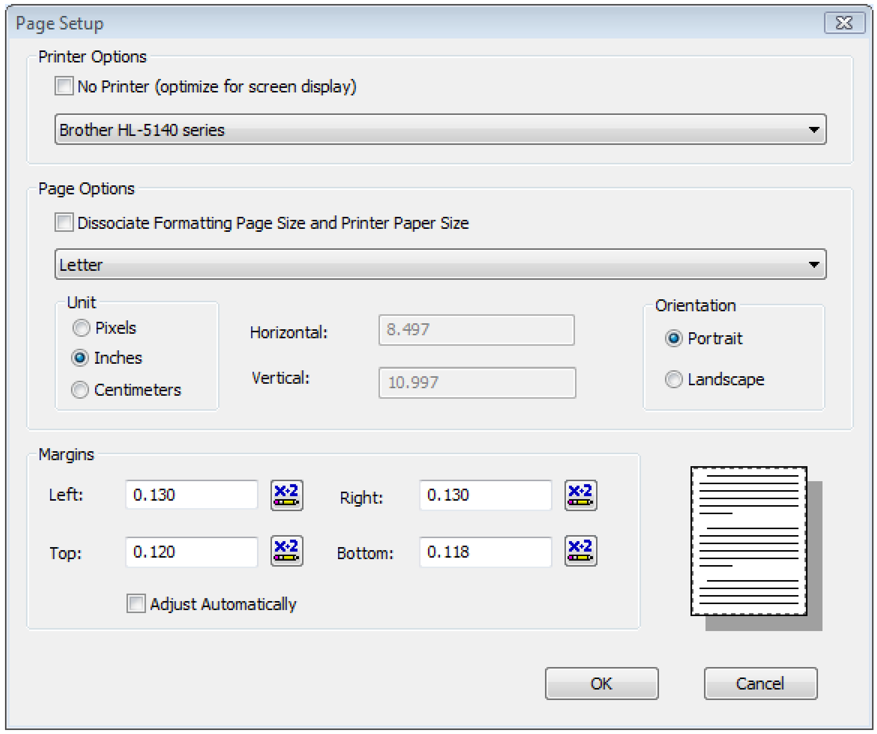
5. Click in the **Report Header** to the right of the title to place the graphic
*Crystal Reports places the graphic where you click.*

6. Save the report (**Format**) and preview the report. Make whatever changes are necessary

The report should look like the following illustration:

## Working with the Page Commands

It may be that your report needs to be landscape instead of portrait, which is the default, or you may want to change the margins. To change the layout of a page you choose File|Page Setup.




In the Page Option selection you choose the size of paper (letter, legal etc), unit of measurement and orientation (Portrait or Landscape).

You can also define margins for a report. By default, Crystal sets the margins to the narrowest possible settings available on the printer. Usually, these result in margins .25" wide or less. If the Adjust automatically radio button is checked then the margins change as you change orientation and also paper size.

A new feature in Crystal Reports 2013 is the ability to set margins programmatically. If not using a formula, simply type the margin based on the unit of measurement system. If you want a margin to be 1/4th inches, type .25. If using centimeters or pixels, enter the appropriate number.

If using a formula, the formula must return a measurement unit referred to as a **TWIP** (**TW**entieth of an **I**nch **P**oint). The number of TWIPs returned by the formula will be converted to a margin measurement based on the selected unit of measurement. Below is a helpful conversion table:

| Unit of Measurement | TWIPs (Approximately) |
|---|---|
| 1 Inch | 1440 |
| 1 Centimeter | 567 |
| 1 Millimeter | 56.7 |
| 1 Pixel | Dependent on screen pixel size |

### ❖ Exercise 2.7 – Set Margins for a Report

You are going to create a report that is formatted as a letter. The narrow default margins do not look appropriate for this type of report. Therefore, you need to change them to 1" margins.

1. Start a new report using the **File/New/Blank Report** menu option
2. Open the My Connections folder, then open the **Northwind 2008** database, if necessary
3. Add the **Employees** table, and then click **OK**
4. Choose **File/Page Setup…**
5. Type **1** in the *Left Margin:* text box, then press TAB
6. Continue to type **1** in each of the other boxes, pressing TAB after each entry
7. Click **OK** when finished
8. Leave the report open

## Working with Text Objects

You have already learned how to create a text object, but you have not yet explored the power of text objects and how flexible these objects can be in Crystal Reports. In this lesson, you are going to go into more depth, learning how to place fields inside Text Objects and how to import formatted text. You are also going to see how to format parts of a text object.

### Adding Fields into a Text Object

Placing fields inside text objects lets you merge database data with text that you type on a report. Crystal Reports makes it simple to create things like form letters or other text based documents with this ability.

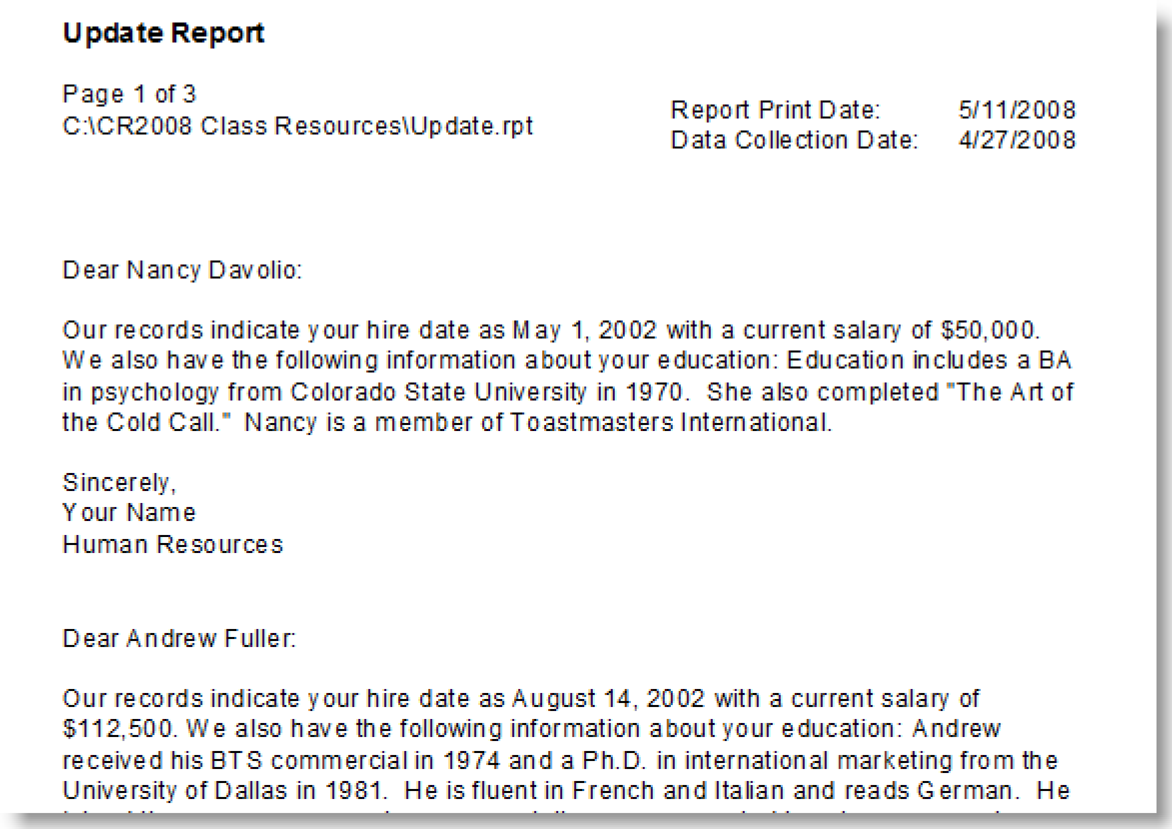
To add a field to a text object, you must first create the text object. Place it on the report in the appropriate section and make sure you are in Edit mode (flashing insertion bar in the text box). Now you can simply drag existing fields from the report into the text object. You can also insert fields from the Field Explorer dialog box. As you drag the field into the text object or point to the text object to click to insert the field, the mouse pointer drops the attached field once the mouse is inside the text object.

***TIP: Crystal Reports inserts a field into a text object at the location of the insertion bar. Before you click or release the mouse button, be sure that the insertion bar is located where you want the field to be inserted. You can move the insertion bar by moving the mouse.***

***WARNING: The mouse pointer MUST be shaped like the arrow without the field visibly attached when you release the mouse button or the field is not included as part of the text object.***

The biggest advantage to adding fields to text objects is that Crystal Reports automatically trims the field for each value it inserts. This way there is no extra space at the end of the field when you print the report.

To work with this feature, you are going to create an employment update letter that looks like the following:



**Update Report**

Page 1 of 3
C:\CR2008 Class Resources\Update.rpt

Report Print Date: 5/11/2008
Data Collection Date: 4/27/2008

Dear Nancy Davolio:

Our records indicate your hire date as May 1, 2002 with a current salary of $50,000. We also have the following information about your education: Education includes a BA in psychology from Colorado State University in 1970. She also completed "The Art of the Cold Call." Nancy is a member of Toastmasters International.

Sincerely,
Your Name
Human Resources

Dear Andrew Fuller:

Our records indicate your hire date as August 14, 2002 with a current salary of $112,500. We also have the following information about your education: Andrew received his BTS commercial in 1974 and a Ph.D. in international marketing from the University of Dallas in 1981. He is fluent in French and Italian and reads German. He

## ❖ Exercise 2.8 - Insert a Data Field into a Text Object

1. Click the button. Add the text object at the left edge of the Details section
2. Type "**Dear**" in the text box, then press the SPACEBAR
3. LEFT-MOUSE drag the **FirstName** field in the **Field Explorer** dialog box into the new text box
   *Be sure the mouse pointer is shaped like an arrow without a box attached.*
4. Release the field into the text object
   *Crystal Reports adds the field into the text object after the space.*
5. Click into the text object, and then press the SPACEBAR
6. Follow the same procedure to add the **LastName** field
   *Crystal Reports adds the LastName field to the text object.*
7. Click in the text object after the **LastName** field and type a colon "**:**" Then click away from the text object to exit the text edit mode
8. Resize the text object to be about 6" wide
9. RIGHT-MOUSE click the text object and choose **Format Text...**

10. From the **Common** tab in the Format Editor check on the *Can Grow* option and then click **OK**

11. Double click the text object to return to Edit Mode. Position the flashing insertion bar at the end of the line of text after the colon. Press ENTER twice, then type, "**Our records indicate your hire date as**" then press the SPACEBAR

12. Add the **HireDate** field to the text object

13. Click in the text object, press the SPACEBAR, then type "**with a current salary of**", then press the SPACEBAR

14. Add the **Salary** field followed by a period and a space

15. Click in the text object, then type "**We also have the following information about your education:**", then press the SPACEBAR

16. Add the **Notes** field to the text object
*The Notes field is a memo field containing information about the employee's educational history.*

17. Complete the closing to the letter as you would like

18. Save the report and name it **Update.rpt**. Preview the report
*Notice that there is no extra space between the first name and last name because Crystal Reports automatically trims the fields. You should also notice there is a problem with the longer entries.*

***TIP: You can import pre-formatted, text-based objects from an existing file onto your report. To do this, simply double click the text object where you want to import the text, or create a new text object, then right click on it to bring up the shortcut menu. From the shortcut menu, choose Insert from File. Select the file where you want from the open dialog box, then click the Open button. The object is imported from the file onto your report and replaces the original object.***

## Formatting Part or All of an Object

You can format an entire text object or you can apply a different format to the fields. You can use the Format Editor to make these changes, or, if the formatting choice is one located on the Format toolbar, you can use the Format toolbar buttons and drop-down lists to change how the text looks.

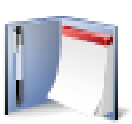
If you want to format the entire text object, you already know how. Select it, then choose the appropriate options from the Format toolbar or RIGHT click it and choose Format Object…

If you want to format only a field within the text object, you must select just the field. To do this, you must be in Edit Mode. Remember, when you are in Edit Mode, there is a flashing insertion bar in the text box and a small ruler above or below the text object. To get to Edit Mode, double click the object.

You can highlight individual characters in the object to format them by dragging the mouse pointer over them just as you would highlight words in any word processing program. You can highlight a field within a text object by clicking it one time while in Edit Mode.

### ❖ Exercise 2.9 - Format All and Part of an Object

1. Return to **Design** view. Select the entire text object you added
2. Change the font to Times New Roman, 12 pt. using the Format toolbar drop-down lists
   *Notice that all the field contents are formatted.*
3. Double click the text object to enter Edit Mode
   *You should see a flashing insertion bar in the field and a small ruler.*
4. Click the **HireDate** field once
   *The field becomes highlighted.*
5. RIGHT click the highlighted field, then choose **Format {Employees.HireDate}...**
6. Scroll down in the Style list then choose **March 01, 1999**. Click **OK**
7. Right click the highlighted field, then choose Text Formatting… On the Font Tab, click on the Drop-down *Style:* list, and then choose Bold. Click **OK**
8. Deselect the text box. Save the report (**Update**) and preview it
   *You should see the hire date as a text based date in bold letters.*



***NOTE: It is strongly recommended to return to design view when formatting a field within a text object.***

## Inserting Special Fields

Crystal Reports contains several special fields, unrelated to the fields in the database, which you can use to make the report more useful. To insert a special field, first make sure the Field Explorer is open. In the Field Explorer, click the icon beside Special Fields node to see the fields of that type. You can insert a special field using one of the same four techniques you use to insert database fields. You can also place special fields in text objects to combine text with the special field information.

| Special Fields | |
|---|---|
| **Special Field** | **Description** |
| Content Locale | Displays the locale setting of the machine that your report is running on (the machine's locale is usually found in the Control Panel's Regional Settings) |
| Current CE User Id | Displays the ID number of the current Business Objects Enterprise user if one exists |
| Current CE User Name | Displays the name of the current Business Objects Enterprise user if one exists |
| Current CE User Time Zone | Displays the current time zone of the current Business Objects Enterprise user if there is one |
| Data Date | Prints the date when the data in the report was last refreshed |
| Data Time | Prints the time when the data in the report was last refreshed |
| Data Time Zone | Prints the time zone in which the data was last retrieved (refreshed) |
| File Author | Automatically prints the Author in the File / Summary Info window along with other information about the report for future reference |
| File Creation Date | Inserts the date the report was created |
| File Path and Name | Inserts the file path and name of the current report |
| Group Number | Allows the numbering of each group in the group header or group footer |
| Group Selection Formula | Inserts the Group Selection Formula used for the report in the Group Selection Formula Editor |
| Horizontal Page Number | Numbers the horizontal pages created by report objects, such as cross-tabs and OLAP grids, that can expand over a number of horizontal pages |
| Modification Date | Shows the date when the report was last saved based on the PC's calendar/clock |
| Modification Time | Shows the time when the report was last saved based on the PC's clock |
| Page N of M | Insert the page number with a total page count, i.e., Page 1 of 5 |
| Page Number | Automatically prints the page number on each page |
| Print Date | Takes the date from your PC's calendar/clock and prints it on the report |
| Print Time | Takes the time from your PC's clock and prints it on the report |
| Print Time Zone | Prints the time zone in which the report was last printed |
| Record Number | Assigns a number to each record in the report and acts as a counter field |
| Record Selection Formula | Inserts the Record Selection Formula that was created for the report in the Record Selection Formula Editor |
| Report Comments | Automatically prints any comments you make about the report in the File / Summary Info window along with other information about the report for future reference |
| Report Title | Automatically prints the report title in the File / Summary Info window along with other information about the report for future reference |

| Special Fields | |
|---|---|
| **Special Field** | **Description** |
| Selection Locale | Shows the Preferred Viewing Locale (PVL) at the time of the last data refresh |
| Total Page Count | Calculates and prints the total pages in the report |

***WARNING: Using Page N of M or Total Page Count will increase the processing time of the report.***

***NOTE: Information for the special fields: Report Title, Report Comments and File Author comes from the document Properties dialog box Summary tab. You can open this dialog box by choosing File/Summary Info.***

### ❖ Exercise 2.10 - Insert a Special Field in the Report

1. Return to Design view. Choose **File/Summary Info**
2. Type **Update Report** in the *Title* text box, then click **OK**
3. Click the Field Explorer button on the Standard toolbar to open the Field Explorer if it is not already open. Click the expand icon beside **Special Fields** category. Insert the **Report Title** special field in the **Report Header** section
4. Format the **Report Title** special field to be bold with a 12 pt. Font
5. Insert the **File Path and Name** special field in the **Page Header** on the far left side

### ❖ Exercise 2.11 - Insert Special Fields in Text Objects

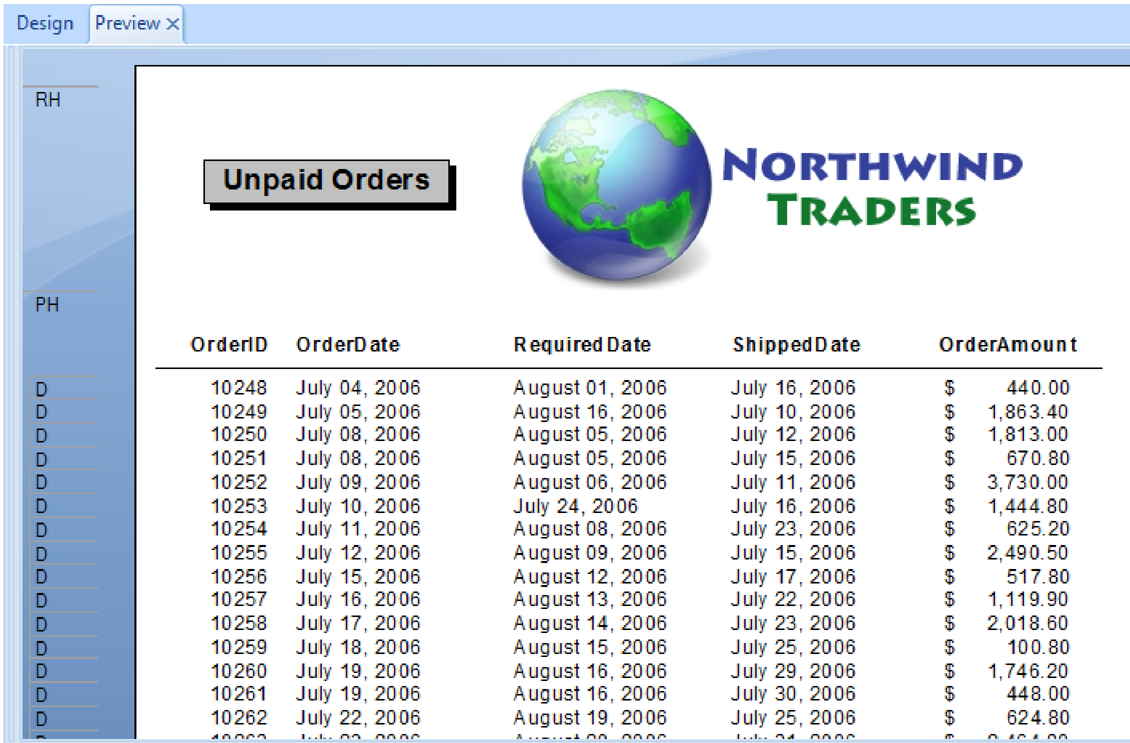
1. Click the **Insert Text Object** button, and then insert the text object in the **Page Header** section, upper right area
2. Type the text "**Report Print Date:**" then press the SPACEBAR. Insert the **Print Date** special field in the text box after the colon and space. Press ENTER. Type the text "**Data Collection Date:**" and then press the SPACEBAR. Insert the **Data Date** special field after the colon and space
3. Resize the text box so the text displays on two lines (make it taller and wider)
4. Insert the **Page N of M** special field in the **Page Header** above the **File Path and Name** special field
5. Format all objects in the **Page Header** to be italicized
6. Save the report (**Update**) and preview it. Make any changes necessary. Save and close the report

## Challenge Exercise – Formatting Features

Format the Unpaid Orders.rpt report created in the challenge exercise for the second lesson.

1. To open the **Unpaid Orders** report, choose **File**, and then select the report from the list at the bottom of the menu
2. Click once on the report title text object in the **Report Heade**r to select it
   *Blue slash lines (also called the selection border) and sizing handles appear around the object.*
3. Format the title to be centered in its text object. Add a double lined border, a drop shadow, and any border and background color you choose. Make the text bold and 14pt
4. Multiple Select the **Field Titles** in the **Page Header** section. Make them bold and not underlined
5. Make sure you have enough space under the field titles in the **Page Header** and draw a line under the field titles the width of the report. Format the Line with any style, width and color you choose
6. Insert the **Northwind Traders** logo in the **Report Header** to the right of the title object
7. Remove the thousand separator and decimal values from the **Order ID** field
   *HINT: click the Comma button in the formatting toolbar to turn off the comma and the Decrease Decimals button to remove decimal values.*
8. Add a fixed currency symbol to the **Order Amount** field
9. Format the **Order Date**, **Required Date** and **Ship Date** to display the date only with the full name of the month, two digit day and four-digit year
10. Use guidelines to position the fields so they look good to you
11. Use the **Save As…** command to save the report. Name it
    **Formatted Unpaid Orders.rpt.** Preview the report
12. When finished, close the report

The finished report should look similar to the following example:




| OrderID | OrderDate | RequiredDate | ShippedDate | OrderAmount |
|---|---|---|---|---|
| 10248 | July 04, 2006 | August 01, 2006 | July 16, 2006 | $ 440.00 |
| 10249 | July 05, 2006 | August 16, 2006 | July 10, 2006 | $ 1,863.40 |
| 10250 | July 08, 2006 | August 05, 2006 | July 12, 2006 | $ 1,813.00 |
| 10251 | July 08, 2006 | August 05, 2006 | July 15, 2006 | $ 670.80 |
| 10252 | July 09, 2006 | August 06, 2006 | July 11, 2006 | $ 3,730.00 |
| 10253 | July 10, 2006 | July 24, 2006 | July 16, 2006 | $ 1,444.80 |
| 10254 | July 11, 2006 | August 08, 2006 | July 23, 2006 | $ 625.20 |
| 10255 | July 12, 2006 | August 09, 2006 | July 15, 2006 | $ 2,490.50 |
| 10256 | July 15, 2006 | August 12, 2006 | July 17, 2006 | $ 517.80 |
| 10257 | July 16, 2006 | August 13, 2006 | July 22, 2006 | $ 1,119.90 |
| 10258 | July 17, 2006 | August 14, 2006 | July 23, 2006 | $ 2,018.60 |
| 10259 | July 18, 2006 | August 15, 2006 | July 25, 2006 | $ 100.80 |
| 10260 | July 19, 2006 | August 16, 2006 | July 29, 2006 | $ 1,746.20 |
| 10261 | July 19, 2006 | August 16, 2006 | July 30, 2006 | $ 448.00 |
| 10262 | July 22, 2006 | August 19, 2006 | July 25, 2006 | $ 624.80 |

# NOTES