# Access 2007

## Reports

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# WORKSHOP DESCRIPTION

## Overview

Reports are used to retrieve and present data as meaningful information in hard copy format. Different types of reports include mailing labels, invoices, and monthly reports. Reports can group records into many levels, compute totals and averages by checking values from many records at once, and can be attractive and distinctive because you have control over the size and appearance of everything on the printed page.

## Prerequisites

Access 2007 Queries and Access 2007 Forms

## Objectives

Participants attending this workshop will:

- Identify terms associated with report creation
- Become familiar with report sections and formatting tips
- Create mailing labels
- Create a summary report
- Use bound and unbound controls in report modification

# GETTING STARTED WITH REPORTS

## What is a Report?

Reports are used to retrieve and present data as meaningful information.  Different types of reports include mailing labels, invoices, monthly reports, yearly summaries, and department phone lists.

- Reports display only the information you want, the way you want to see it.
- Reports group records into many levels and compute totals and averages by checking values from many records at once.
- Reports can be attractive and distinctive because you have control over their design.

# TERMS TO KNOW

## Control

Everything added to a report – text, a picture, a graph, even a field from a table is a control.

### Bound Control

A bound control is a control on a report, whose contents are bound to a particular field in the underlying table or query.  For example, a text box that displays an employee's last name is bound to the Last Name field in the Employees table.  Binding is the act of setting up the controls on the report.

### Unbound Control

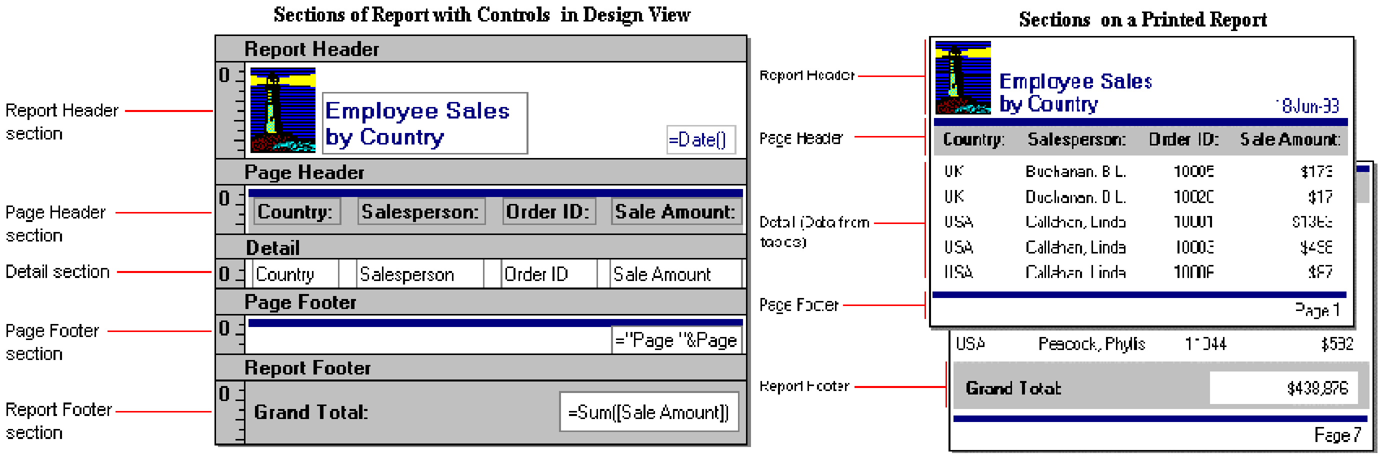
Information in a report you specify with the use of either the Wizard or Design View such as title and/or column headings or labels.

### Calculated Control

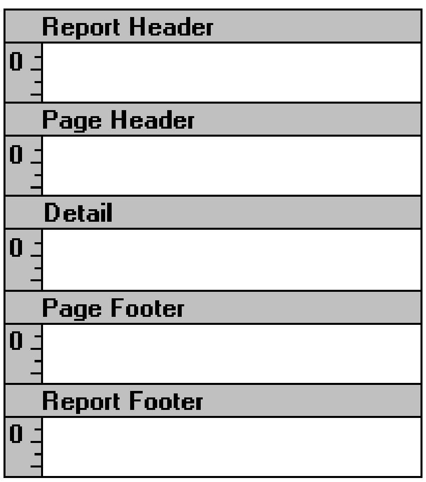
Any control in a report that involves a calculation of one or more fields, a date and/or time expression, or a page number.

## Sections of a Report

Information will appear on the report depending upon where certain controls are placed in the design of the report.




## How to Set up a Report




The **title and column headings** of the report are stored in the report design and are placed in the **Report Header and Page Headers** respectively.

**Data** is retrieved from the underlying table or query which the report is based on and can be viewed in the **Detail section** of the report.

**Totals** come from an expression which is stored in the report design. Totals can be placed in either the **Report Footer** or the **Page Footer**.

- If data is retrieved from more than one table, the report must be based on a query.
- Prevent blank pages by making sure the report width plus the margins do not exceed the paper size specified in **Page Setup** accessed when in **Design View** via the **Page Setup** tab on the ribbon.
- Set page/print orientation in **Design View** by clicking the **Page Setup** button via the **Page Setup** tab on the ribbon. It is best to set this <u>prior to</u> adding controls to a report.
- To move and/or size any report controls, the sizing/moving handles must be active.

# CREATE A REPORT

## Creating a report using AutoReport

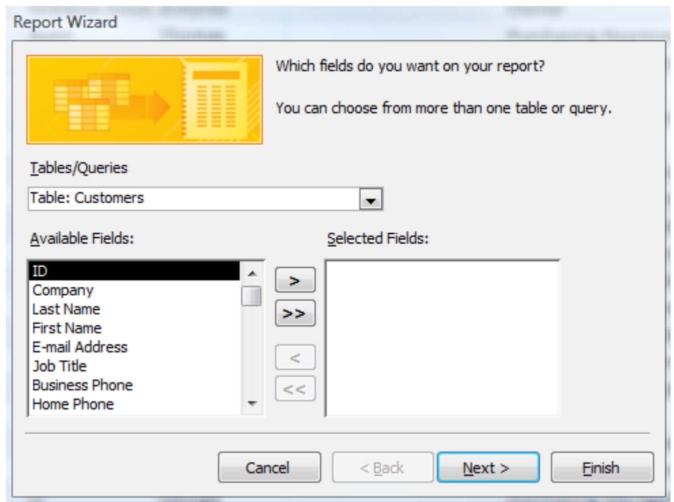
This is the easiest way to create a report in Access. The wizard sets up margins, alignments, and indentations where necessary. After the report is created, you may alter it to your specifications.

1. Open the **Northwind** database.
2. From the **Navigation Pane**, open the **Customers** table.
3. From the **Create** tab on the ribbon, click the **Report** button.
4. Save the report as **rpttblCustomers**.
5. Close the report.
6. Close the **Customers** table.

## Creating a report using the Report Wizard

The report wizard lets you create a report step by step. You have more customization options available to you when you use the wizard.

1. Select the **Create** tab on the ribbon and click the **Report Wizard** button. The New Report Dialog Box will appear.




2. Choose the table or query that contains the information on which the report will be based. Choose the **Employees** table.
3. Add the following fields **First Name**, **Last Name**, **Job Title**, **Address**, **City**, **State/Province**, and **ZIP/Postal Code**.
4. Click **Next**.
5. Add **Job Title** for the grouping level. Click **Next**.
6. Sort by **Last Name** and then by **First Name**. Click **Next**.
7. Choose the **Stepped** layout and **Portrait** orientation and click **Next**.
8. Choose a style and click **Next**.
9. Name your report **rpttblEmployees** and click **Finish**.
10. Close the report.

## Using Design View

Use Design View to create a report from scratch.

1. Select the **Create** tab on the ribbon and click the **Report Design** button.
2. Ensure the **Field List** is displayed. Click the **Add Existing Fields** button if it is not.
3. Add the following fields from the **Suppliers** table by dragging and dropping them into the **Detail** section of the report: **Company**, **First Name**, **Last Name**, **Job Title**, **Address**, **City**, **State/Province**, **ZIP/Postal Code**, and **Country/Region**.
4. View the report in **Print Preview** mode.
5. Save the report as **rpttblSuppliers**.

Note: It is often best to create a report using the most basic report of the Report Wizard and then make modifications in the Design View. In this way, the margins and formats for the headers, footers and detail section will be created automatically.

# ADDING CONTROLS TO A REPORT

## Add a Label to the Report Header

1 **Open** the **rpttblSuppliers** report in **Design View**.
2 Select the **Arrange** tab.
3 Click the **Report Header/Footer** button.
4 Select the **Design** tab, click the **Label** button.
5 Click to place an insertion point in the page header.
6 Type the label **Suppliers**.
7 Resize, format, or move the label if necessary.

## Calculated Text Box

A calculated text box contains calculated fields or information not associated with the table or query. Information such as the time, date or a page number can be placed in a report with the proper commands.

### Time/Date Text Box

1 With the **rpttblSuppliers** report open in **Design View** select the **Design** tab.
2 Click the **Text Box** button and place the text box in the far left side of the Report Footer.
3 Place the insertion point in the text box by clicking in it.
4 To place the current date and current time, enter the following: **=Date() & " " & Time()**
5 Size, format, or move the text box as needed.

### Page Number Text Box

1 Add a **Text Box** onto the far right of the Page Footer.
2 If necessary, delete the label of the text box.
3 Click inside the text box.
4 To place just the page number type: **=Page**
   **4(a)** To place the code for Page # of # type: **="Page " & Page & " of " & Pages**
5 Delete the label.
6 Preview the report.
7 Save and close the report.

### Sum Total Text Box

You can add fields to your report to calculate data. In this exercise, you will total the freight field. You can further make the data meaningful by adding grouping and have the calculated freight field give you the total freight for each customer. Groups and sums can be added via the Report Wizard or can be added after a report is created.

1. Create a new report in **Design View** based on the **Orders** table.
2. Ensure the **Field List** is displayed. Click the **Add Existing Fields** button on the **Design** tab to display the **Field List**.
3. Add the **Customer ID** and **Shipping Fee** fields to the **Detail** section of the report.
4. Click on the **Group & Sort** button on the toolbar.
5. Click the **Add a group** button in the **Group, Sort, and Total** pane.
6. Add the **Customer ID** field in the **Field/Expression** field.
7. Click the **More** option in the **Group, Sort, and Total** pane.
8. Change the value from **without a footer section** to **with a footer section**.
9. Close the **Group, Sort, and Total** pane.
10. Click on the field to be calculated. Choose the **Shipping Fee** field, hold down the left mouse button and drag the field onto the **Customer ID Footer** section of the report. Release the mouse button.
11. Change the label to **Shipping Fee Total**.
12. Add lines above and below the **Shipping Fee Total** field in the **Customer ID Footer**.
13. Reduce the size of the **Detail** screen to eliminate empty space.
14. In the text box, type the following: **=Sum([Shipping Fee])**
15. Save the report as **rpttblOrders(ShippingFee)**.

### Adding a Picture

A picture or any OLE object can be placed onto a report.

1. On the **Design** tab, click the **Logo** button.
2. Navigate to **c:/Windows** and choose a graphic file (e.g. **Coffee Bean.bmp**).
3. Click **OK**.
4. Resize the picture to fit in the design of the report.

   **Note:** You can double-click on the image sizing border to automatically size the graphic. For some graphics it is best to open the properties for the image control and choose the **Format** tab and change **Size Mode** to **Zoom** or **Stretch**.

## PRINT SETUP, PREVIEWING, AND PRINTING

As you are nearing the end of setting up the controls of the report, it is necessary to set up the printing options of the report. Unless the defaults are changed, all reports will be oriented to print portrait-style with 1-inch margins on all sides.

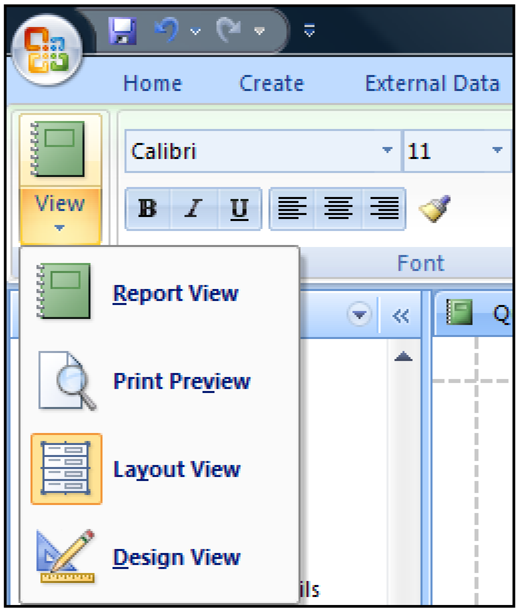
### Page Setup Dialog Box

- Select the **Page Setup** tab.
- Choose either **Portrait** or **Landscape** for the orientation.
- Change the margins as needed.

# SETUP PREVIEW BUTTONS

## Layout View Button

Layout view shows the layout of the current report with data. You can make some changes to the report in **Layout View**. If you wish to view the report exactly as it will be printed, choose **Print Preview** instead.




## Print Preview Button

Shows how a report, form, datasheet, or module will appear when printed. Includes all records in the report. **Report View** also gives you an accurate layout of the report with all of the data. **Report View** also retains the standard ribbon.

# CREATING MAILING LABELS USING THE LABELS WIZARD

The quickest way to create printed labels based on a table or a query is to use the **Labels Wizard**.

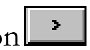
1. Close any open reports.
2. Open the **Customers** table in **Design View**.
3. Change the data type for the **Address** field to **Text**.
4. Change the field size to **255** characters.
5. Save the table. Click **Yes** to the message.
6. Switch to **Datasheet View**.
7. In the create tab, click on the **Labels** button.

The label wizard will now activate.

**8** Select the appropriate **Avery** number based on the dimensions of the label sheet you will be using and click **Next**. Choose **C2160**. Click **Next**.

Note: to customize the label size: 1. Choose **Customize**. 2. In the next window, choose **New**. 3. Give your label a custom name and change the size by clicking in the fields that are set to **0.00**. 4. Click the **OK** button. 5. If you have created custom label sizes, you can view them by clicking the **Show custom label sizes** checkbox after starting the label wizard.

**9** Choose the formatting options you would like. Change the font to **Times New** Roman, **8** point size, **Normal** font weight and click **Next**.

**10** Choose the fields you would like to include on your labels by selecting the field from the **Available fields:** list and clicking the add field button  when on the appropriate line. Choose the following fields: **Company**, **First Name**, **Last Name**, **Address**, **City**, **State/Province, ZIP/PostalCode**, and **Country/Region**.

Note: in the **Prototype label:** panel, be sure to add the appropriate spaces and punctuation.

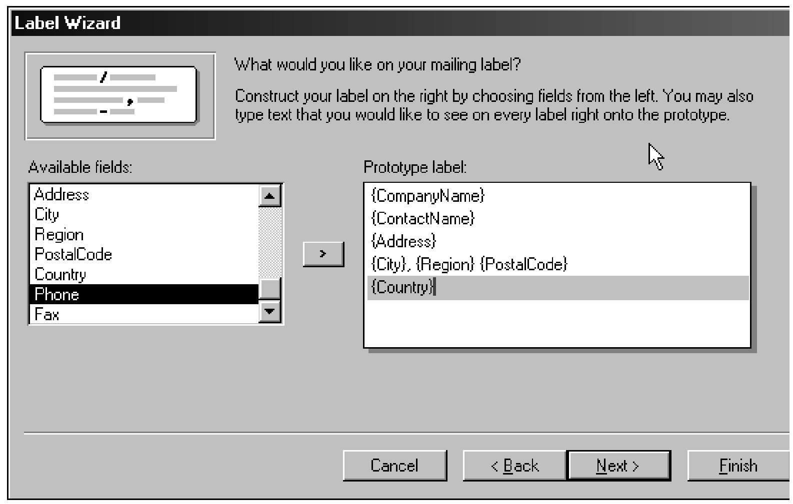



**Figure 1. The Labels Wizard Fields window**

**11** Click **Next**.

**12** Choose the fields you would like to sort your labels by and click **Next**. Choose **Country** and **Company** and click **Next**.

**13** Name your report **rpttblCustomers(Labels)** and click **Finish**. Close the report.

# CREATING A SUMMARY REPORT

## Create the Order Totals query

**1** From the **Create** tab, click the **Query Design** button.

**2** Add the **Customers**, **Orders**, and **Order Details** tables to the grid then close the **Show Table** window.

**3** Add **Company** from the **Customers** table; **OrderID** from the **Orders** table; and **UnitPrice**, **Quantity**, and **Discount** from the **Order Details** table.

**4** Save the query as **qryOrderTotals**.

**5** Sort **Ascending** by **Company**.

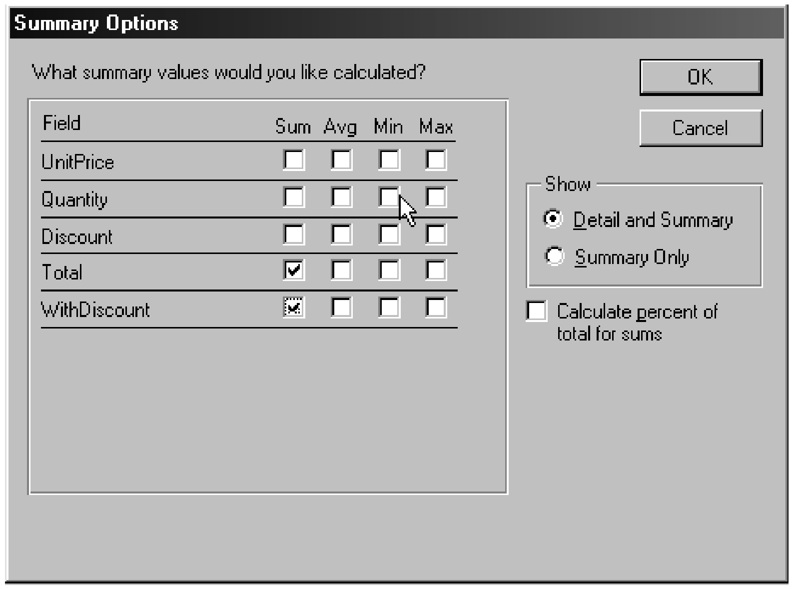
**6** Add a total price calculating fields to the right of the **Discount** field by clicking in the field row and typing **Total: [Unit Price]*[Quantity]**. Run the query to test the results.

Note: to view or write the contents of a calculated field it is often easier to **Zoom** the field by pressing **Shift+F2**.

7. Add a second calculating field to the right of the **Total** field by typing **WithDiscount: [Total]-[Total]*[Discount]**. Run the query.
8. Add a 10% discount to all orders with a total of $1,000 and greater.
9. Save and close the query.

## Create the New Total Orders Summary report

1. From the **Create** tab, click the **Report Wizard** button.
2. Base the report on the **qryOrderTotals** query.
3. Add all of the fields to the report then click **Next**.
4. In the **How do you want to view your data?** panel, choose **by Customers**, then click **Next**.
5. Do not add a grouping. Click **Next**.
6. Sort ascending by **Total**.
7. Click the **Summary Options** button and select **Sum** for the **Total** and **With Discount** fields.
8. Show **Detail and Summary**.
9. Click **OK** then **Next**.
10. Use the **Stepped** layout in **Landscape**, then click **Next**.
11. Set the style to **Urban**, then click **Next**.
12. Title the report **rptOrderTotalsandSummary**.
13. Click **Finish** to display the report.




# MODIFYING THE REPORT

1. Open the **rptOrderTotalsandSummary** report in **Design View**.
2. Resize the **Sum** calculation fields and change the fields to currency format.

   **Note:** View the properties of the fields, select the **Format** tab, and change the **Format** field.

3. Edit the report header control **rptOrderTotalsandSummary** to read **Order Details and Summary**.
4. Ensure all labels are aligned properly over their data column.

5 Edit the page header label for the **WithDiscount** field to read **Adjusted Total**.
6 In **Layout** view, move the **Total** field and label to be after the **Discount** field.
7 Change the **Company Name** label to **bold**, ***italic*** and **10** point. Resize the field so that the data in the field displays properly.
8 In the **CompanyName** footer area list only the count information. Delete the following: **="Summary for " & "'CompanyName' = " & " " &**. Add the **=** to the beginning of the calculation.

**Note:** The field should now contain the following: **=[CompanyName] & " (" & Count(*) & " " & IIf(Count(*)=1,"detail record","detail records") & ")"**

9 Preview the changes.
10 Close the report.