

# Planning and Creating a Custom Database

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## Introduction

The Microsoft Office Access 2007 database wizards make creating databases easy, but you may need to create a database that does not fit any of the predefined template choices. In that situation, you may need to create the database “from scratch.”

Creating a database from scratch involves careful planning. You must:

- ◆ Determine the purpose and scope of your data base.
- ◆ Decide what tables your database will contain and what the content of those tables will be.
- ◆ Define how data in one table is related to data in another table.

When you create a database from scratch, you can take advantage of the tools that Access provides. If you don’t plan to create a database from scratch but instead plan to use only existing Access databases, you might not need the information in this chapter. Understanding database design concepts, however, will help you better understand how to create effective queries later on.

## What You’ll Do

**Create a Custom Database Template**

**Plan Tables**

**Create Tables in a Database**

**Create a Table by Entering Data**

**Create a Table Using a Template**

**Import Data into Tables**

**Link to Data in Tables**

**Working with Table Records**

**Work with a Table in Design View**

**Specify a Primary Key in Design View**

**Plan Table Relationships**

**Define Table Relationships**

**Create and Print a Table Relationship Report**

**Ensure Referential Integrity**

**Identify Object Dependencies**

**Modify Object Dependencies**

# Creating a Custom Database Template

## Create a Custom Blank Template Database

- 1 Start Access, or click the **Office** button and then click **New**.
- 2 In the left pane, click **Featuring**.
- 3 Click **Blank Database**.
- 4 Click the **Browse** button.
- 5 Click the **Save in** list arrow, and then select one of the following locations:

- ◆ **System template folder.**

C:\Program Files\Microsoft Office\Templates\1033\Access.

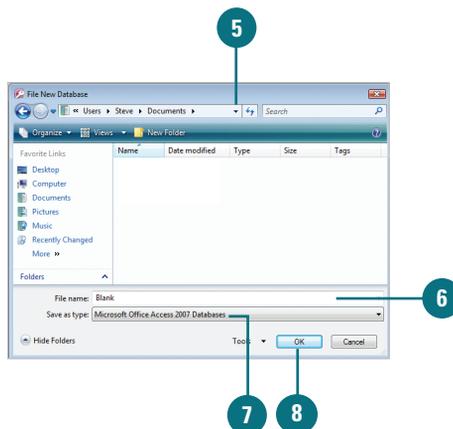
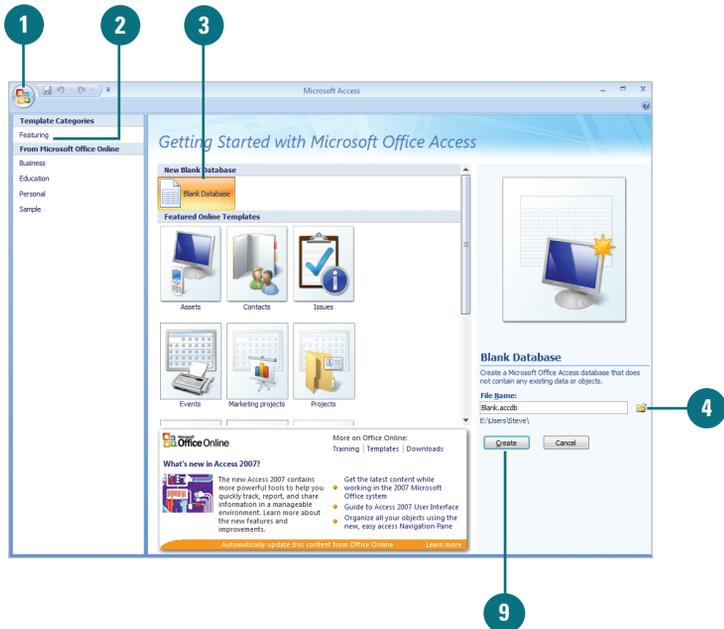
A template in the System folder overrides a template in the User folder.

- ◆ **User template folder.**

C:\Users\user name\Documents (Vista), or C:\Documents and Settings\user name\AppData\Microsoft\Templates (XP).

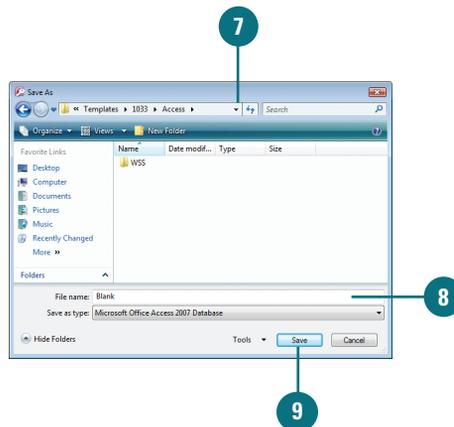
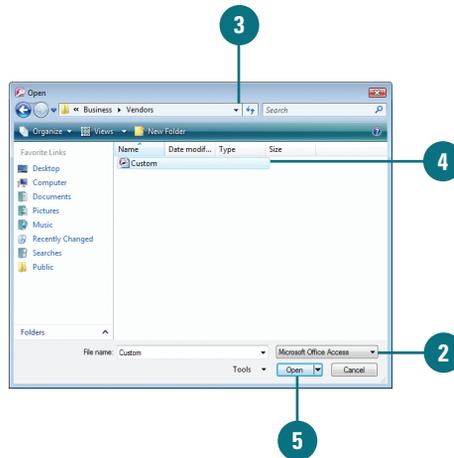
- 6 Click the **Save as type** list arrow, and then click a file type.
- 7 Type **Blank.accdb** (or **Blank.mdb**, if you are creating an earlier-version template) in the File name box.
- 8 Click **OK**.
- 9 Click **Create**.

When you create a blank database in the Getting Started with Microsoft Office Access 2007 dialog box, Access uses a database file called Blank.accdb for Access 2007 or Blank.mdb for earlier versions of Access located in the templates folder. If you want to create a custom blank template, you can save your own database file with the name Blank in the templates folder. The new custom blank template can contain any object type you want, such as forms, reports, macros, or additional tables. If you no longer want to use a custom blank database, delete or rename the file named Blank, and Access creates a new default blank database for you.



## Create a Custom Template Database from an Existing Database

- 1 Start Access, click the **Office** button and then click **Open**.
- 2 Click the **Files of type** list arrow, and then click a file type.
- 3 If the file is located in another folder, click the **Look in** list arrow, and then navigate to the file.
- 4 Click the database file you want to use as a blank template.
- 5 Click **Open**.
- 6 Click the **Office** button, click **Save As**, and then select the format you want: **Access 2007 Database**, **Access 2002 - 2003 Database**, or **Access 2000 Database**.
- 7 Click the **Save in** list arrow, and then select one of the following locations:
  - ◆ **System template folder.**  
C:\Program Files\Microsoft Office\Templates\1033\Access.
  - ◆ **User template folder.**  
C:\Users\user name\Documents (Vista), or C:\Documents and Settings\user name\AppData\Microsoft\Templates (XP).
- 8 Type **Blank.accdb** (or **Blank.mdb**, if you are creating an earlier-version template) in the File name box.
- 9 Click **Save**.



# Planning Tables



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Although you can always make changes to your database when necessary, a little planning before you begin can save time later on. When you plan a database, consider how you will use the data. What kind of data are you collecting? What kind of data are you entering? How are data values related to one another? Can your data be organized into separate, smaller groups? What kinds of safeguards can you create to ensure that errors do not creep into your data? As you consider these questions, you should apply the answers as you structure your database.

## Plan Tables

Tables are one of the fundamental building blocks of a database. Database planning begins with deciding how many and what kinds of tables your database will contain. Consider organizing your database information into several tables—each one containing fields related to a specific topic—rather than one large table containing fields for a large variety of topics. For example, you could create a Customers table that contains only customer information and an Orders table that contains only order information. By focusing each table on a single task, you greatly simplify the structure of those tables and make them easier to modify later on.

## Choose Data Types

When you create a table, you must decide what fields to include and the appropriate format for those fields. Access allows you to assign a data type to a field, a format that defines the kind of data the field can accept. Access provides a wide variety of data types, ranging from text and number formats to object-based formats for images, sound,

video clips, and embedded macros (**New!**). Choosing the correct data type helps you manage your data and reduces the possibility of data-entry errors. To make it easier to create fields, Access provides the Add New Field column (**New!**) in Datasheet view so you can quickly enter a field name. If you already have a defined field in the database that you want to use again, you can drag the existing field from the Field List pane (**New!**) on to the datasheet and Access automatically creates a relationship or guides you through the process. You can also use field templates (**New!**) for creating new fields. A **field template** is a design for a field, complete with a name, data type, length, and predefined properties. You can drag field templates onto the datasheet. Field templates are XSD based so that you can set up standard definitions for shared use. If you create a field for numbers, you can use the Totals row (**New!**) to calculate values using functions such as sum, count, average, maximum, minimum, standard deviation, or variance.

## Specify a Primary Key

You should also identify which field or fields are the table's primary keys. Primary keys are those fields whose values uniquely identify each record in the table. A social security number field in a personnel table could be used as a primary key, since each employee has a unique social security number. A table with time-ordered data might have two primary keys—a date field and a time field (hours and minutes), which together uniquely identify an exact moment in time. Although primary keys are not required, using them is one way of removing the possibility of duplicate records existing within your tables.

# Creating Tables in a Database



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After creating a database file, you need to create the tables that will store the data. There are several ways to create a new table: in Datasheet view, in Design view, with Table Templates, SharePoint Lists, or by importing a table or linking to the data in a table from another Access database. Depending on the method you choose, creating a table can involve one or more of the following:

- ◆ Specifying the fields for the table
- ◆ Determining the data type for each field
- ◆ Determining the field size (for text and number fields only)
- ◆ Assigning the primary key
- ◆ Saving and naming the table

## Methods for Creating a Table

Type	Method	Description
Datasheet	Table button on the Create tab	When you create a table in Datasheet view, you can start viewing and entering data right away. Access automatically assigns a data type based on the kind of information you entered in the field, and it assigns a default field size for text and number fields. After you close and save the table, Access prompts you to identify a primary key or to allow Access to designate one for you.
Table Template	Table Templates button on the Create tab	When you create a table using table templates, you select the type of table you want. Access provides several table templates, including Contacts, Tasks, Issues, Events, and Assets.
Design	Design View button on the Create tab	In Design view, you must specify the fields, specify the data type for each field, assign the size (for text and number fields), assign the primary key, and save the table yourself.
SharePoint	SharePoint Lists button on the Create tab	When you create a table using data from a SharePoint list, you select the type of table you want. Access provides several table types, including Contacts, Tasks, Issues, Events, Custom, and Existing SharePoint List.
Importing	Access button on the External Data tab	If you want to use data from another Access database in the database you are creating, you can import it. When you import a table, all the field names and data types are retained with the imported data. However, you must name the new table and identify the primary key or have Access create a primary key for you. Also, you may need to change the field size and other properties after importing.
Linking	Access button on the External Data tab	When you link a table, the data is retrieved from a table in another database. Linking a table saves disk space because there is only one table rather than multiple tables with the same data. Linking a table saves time because there is no need to update the same information in more than one table.

# Creating a Table by Entering Data

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## Enter Data to Create a Table

- 1 Click the **Create** tab.
- 2 Click the **Table** button.
- 3 Enter the data.

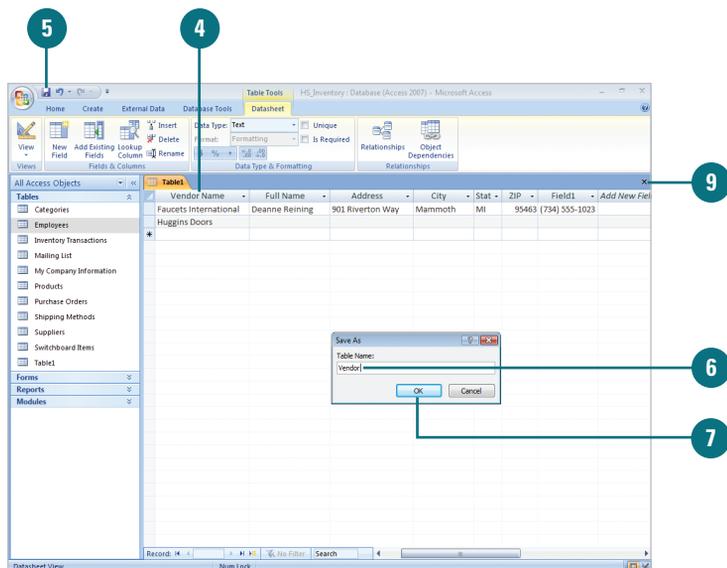
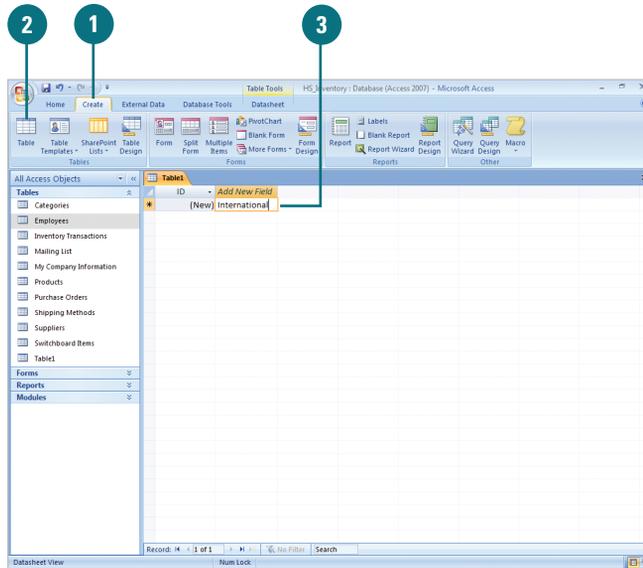
Press Tab to move from field to field or click in a cell.

- 4 To change a field name, double-click the field name, type the new name, and then press Enter.
- 5 Click the **Save** button on the Quick Access Toolbar.
- 6 Type a table name.
- 7 Click **OK**.
- 8 To have Access set the primary key, click **Yes**.
- 9 Click the **Close** button in the Table window.

### Did You Know?

*You can select or resize a column or row like in Excel.* To select a column or row in a table, click the Column or Row selector. To resize a column or row, drag the border between the Column or Row selector. You can also click the Home tab, and then click the More button to access commands to resize columns and rows.

Access allows you to display many of its objects in multiple viewing modes. Datasheet view displays the data in your tables, queries, forms, and reports. Design view displays options for designing your Access objects. You can create a new table in both views. When you create a table in Datasheet view, you enter data and Access creates the table as you type. Access determines the data type of each field based on the data you enter (**New!**). When you finish entering data, Access will prompt you for the name of the table you've just created.



# Creating a Table Using a Template

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## Create a Table Using a Template

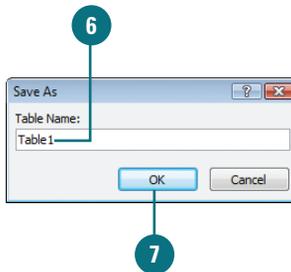
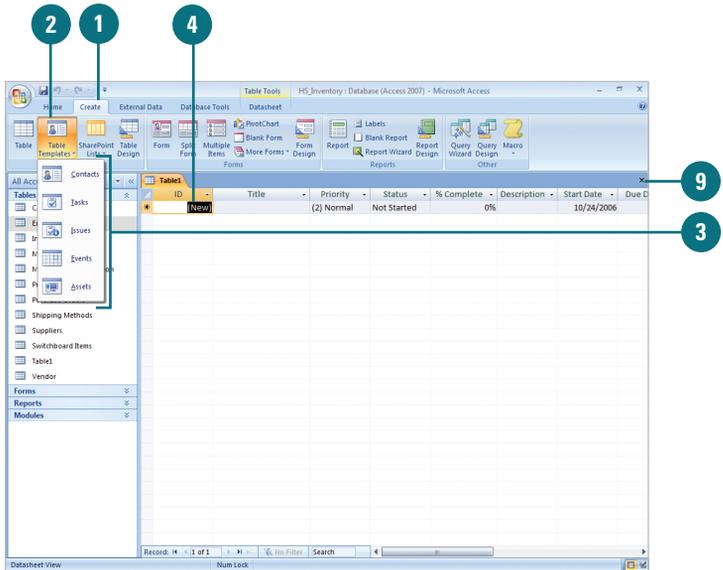
- 1 Click the **Create** tab.
- 2 Click the **Table Templates** button.
- 3 Click the table template (**Contacts, Tasks, Issues, Events, or Assets**) you want.
- 4 To change a field name, double-click the field name, type the new name, and then press Enter.
- 5 Click the **Save** button on the Quick Access Toolbar.
- 6 Type a table name.
- 7 Click **OK**.
- 8 To have Access set the primary key, click **Yes**.
- 9 When you're done, click the **Close** button in the Table window.

### Did You Know?

**You can insert a subdatasheet in a table.** In the Datasheet view of a table, click the Home tab, click the More button, point to Subdatasheet, and then click Subdatasheet. Click the Tables tab, click the table, specify the foreign key in the Link Child Fields box and the primary key in the Link Master Fields box, and then click OK.

**You can view a subdatasheet.** In the Datasheet view of a table, click the plus box next to the record to display the subdatasheet. Click the minus box to hide the subdatasheet.

A table template is a predefined table with fields you can quickly insert and use in a database. Access provides several table templates (**New!**) including: Contacts, Tasks, Issues, Events, and Assets. You can use the Create tab to quickly insert a table template. After you insert a table template, you can change fields to meet your own needs, and then name and save the table in the database.



# Importing Data into Tables

## Import a Table from a Database

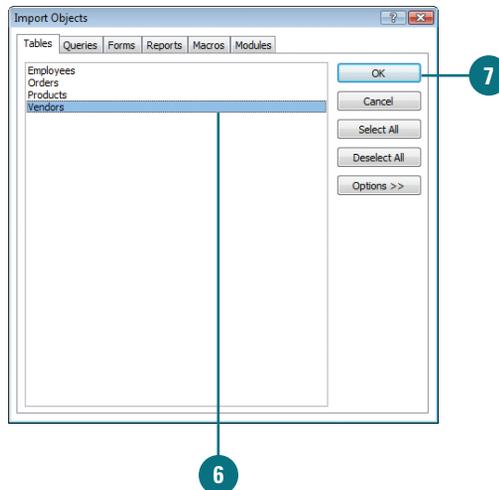
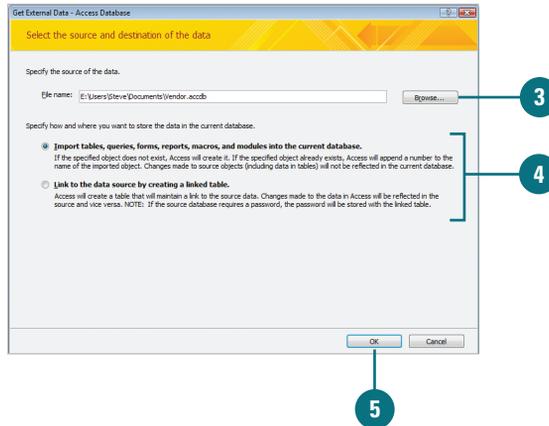
- 1 Click the **External Data** tab.
- 2 Click the **Import Access Database** button.
- 3 Click **Browse**, locate and select the database file that contains the data you want to import, and then click **Open**.
- 4 Click the **Import tables, queries, forms, reports, macros, and modules into the current database** option.
- 5 Click **OK**.
- 6 Click the tables you want to import. To deselect a table, click the table again.
- 7 Click **OK**.
- 8 To save import steps, select the **Save import steps** check box, enter a name and description, and then click **Save Import**.  
Otherwise, click **Cancel**.

### Did You Know?

*You can select fields in the order you want them to appear in the table.*

In the Sample Fields list, you can choose the fields you want to include in your table in any order. The fields you choose will appear in the table in the order you chose them.

You can create new tables from other Access databases by importing and linking tables. When you import a table, you copy data from a table in one Access database and place it in a new table in your database. You can also import data from other programs. After you select the table you want to import during the import process, you have the option of saving the import steps for use again in the future.

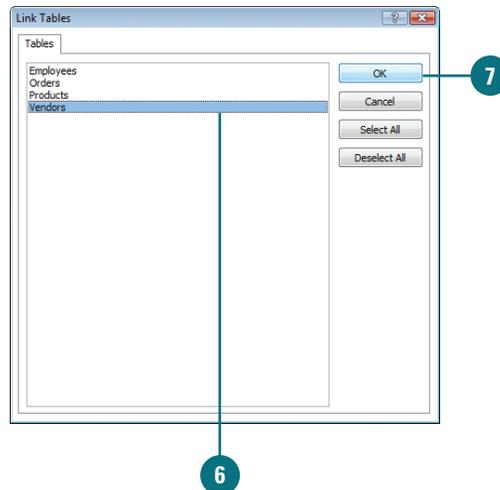
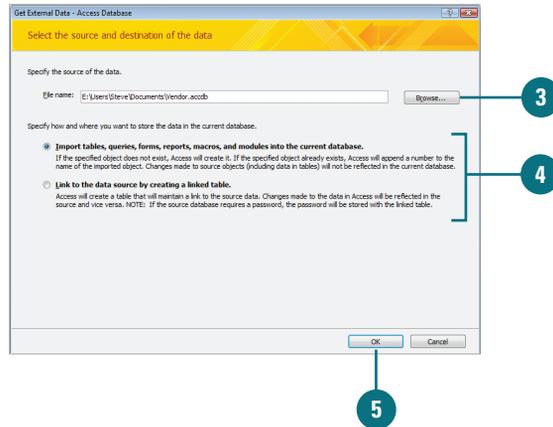


# Linking to Data in Tables

## Link to Data from a Database

- 1 Click the **External Data** tab.
- 2 Click the **Import Access Database** button.
- 3 Click **Browse**, locate and select the database file that contains the data you want to import, and then click **Open**.
- 4 Click the **Link to the data source by creating a linked table** option.
- 5 Click **OK**.
- 6 Click the tables you want to import. To deselect a table, click the table again.
- 7 Click **OK**.
- 8 To save import steps, select the Save import steps check box, enter a name and description, and then click **Save Import**.  
Otherwise, click **Cancel**.

You can create new tables from other Access databases by importing and linking tables. When you link a table, the data stays in its original location, but you can display and access that data from within your database. If data in the original database changes, the changes will appear in your linked database, too. After you select the table you want to link during the linking process, you have the option of saving the import steps for use again in the future.



# Working with Table Records

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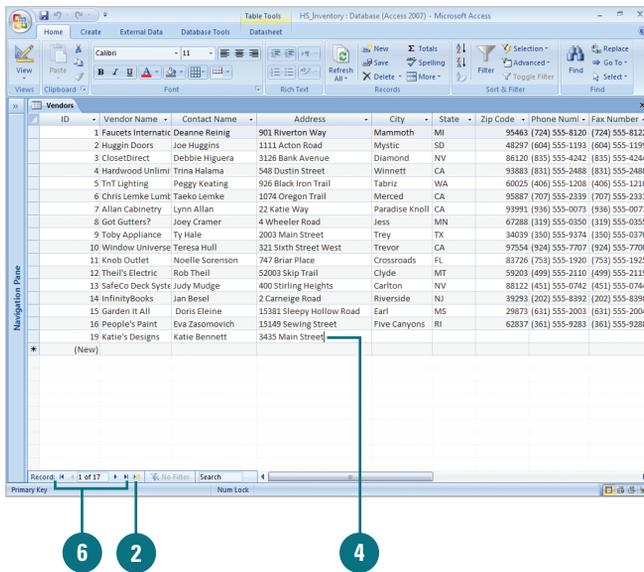
## Enter a New Record and Move Around in a Table

- 1 In the Navigation pane, double-click the table you want to open.
- 2 Click the **New Record** button.
- 3 Press Tab to accept the AutoNumber entry.
- 4 Enter the data. If you make a typing mistake, press Backspace.
- 5 Press Tab to move to the next field or Shift+Tab to move to the previous field.
- 6 When you reach the end of the record, click one of the Record buttons:

- ◆ **First Record** button.
- ◆ **Previous Record** button.
- ◆ **Specific Record** box. Enter a record number in the box, and then press Enter.
- ◆ **Next Record** button.
- ◆ **Last Record** button.

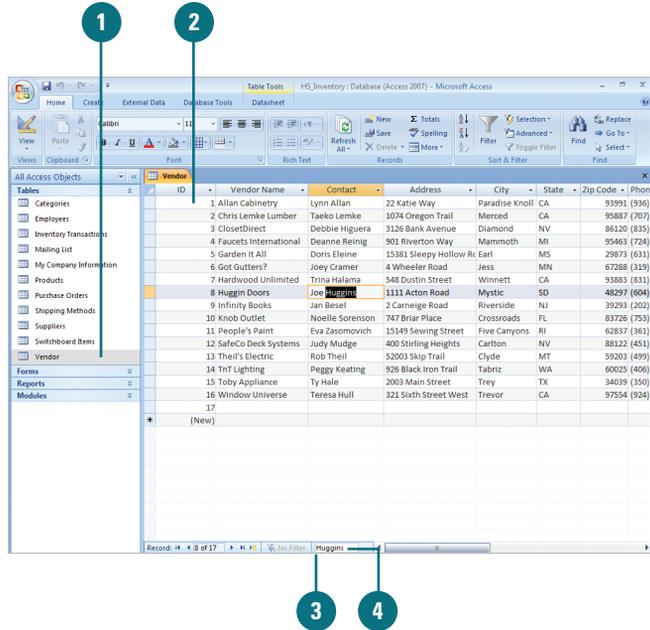
**TIMESAVER** You can also use buttons in the Records group on the Home tab to perform the same commands.

A **database** is made up of groups of fields organized into tables. A **field** is a specific category of information, such as a name or a product. Related fields are grouped in tables. You usually enter data into fields one entity at a time (one customer at a time, one product at a time, and so on). Access stores all the data for a single entity in a record. You can view a table in Datasheet or Design view. Design view allows you to work with your table's fields. Datasheet view shows a grid of fields and records. The fields appear as columns and the records as rows. The first field in a table is often an **AutoNumber** field, which Access uses to assign a unique number to each record. You can't select or change this value. You can use Record buttons at the bottom of the table in Datasheet view to quickly move around and search for data in a table.



## Search for Records

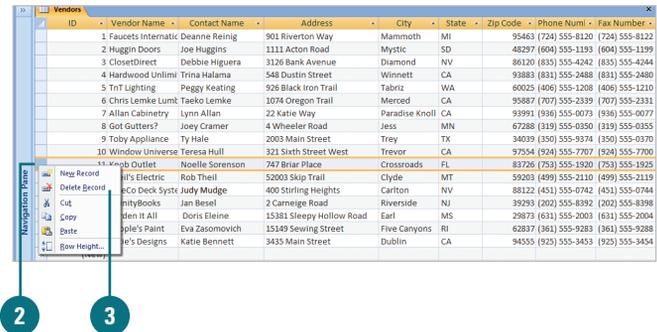
- 1 In the Navigation pane, double-click the table you want to open.
- 2 If you want, click in the table field where you want to start the search.
- 3 Click in the Search box.
- 4 Type the text you want to find in the table.
- 5 Press Enter to find the first instance of the text you want to find.
- 6 Press Enter again to find the next instance of the text you want to find.
- 7 When you're done, delete the text in the Search box.



## Delete a Record from a Table

- 1 In the Navigation pane, double-click the table you want to open.
- 2 Right-click the row selector with the record you want to delete.
- 3 Click **Delete Record**, and then click **Yes** to confirm.

**TIMESAVER** Click the row selector, click the Home tab, and then click the Delete button.



# Working with a Table in Design View

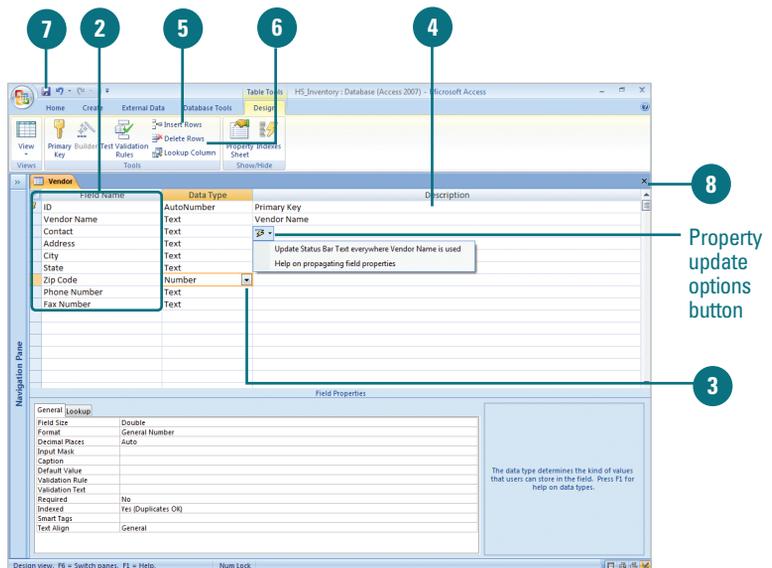
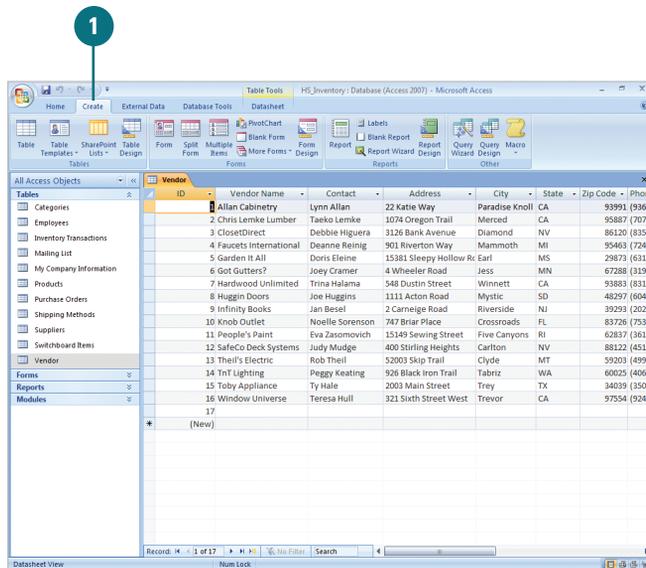
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## Create or Modify a Table in Design View

- 1 Click the **Create** tab, and then click the **Table Design** button, or select the table you want to modify in the Navigation pane, and then click the **Design View** button.
- 2 Click in a **Field Name** cell, and then type a modified field name.
- 3 Click in a **Data Type** cell, click the Data Type list arrow, and then click a data type.
- 4 Click in a **Description** cell, and then type a description. If the **Property Update Options** button appears, select an option, if necessary.
- 5 To insert a field, click the row selector below where you want the field, and then click the **Insert Rows** button on the Ribbon.
- 6 To delete a field, click the row selector for the field you want to delete, and then click the **Delete Rows** button on the Ribbon.
- 7 Click the **Save** button on the Quick Access Toolbar, and then if necessary, enter a table name and click **OK**.
- 8 When you're done, click the **Close** button in the Table window.

Most Access objects are displayed in Design view, which allows you to work with the underlying structure of your tables, queries, forms, and reports. To create a new table in Design view, you define the fields that will comprise the table before you enter any data. In Design view for tables, each row corresponds to a field. You can edit, insert, and delete fields in your database tables in Design view. You insert a field by adding a row, while you delete a field by removing a row. You can also change field order by dragging a row selector to a new position.



# Specifying a Primary Key in Design View

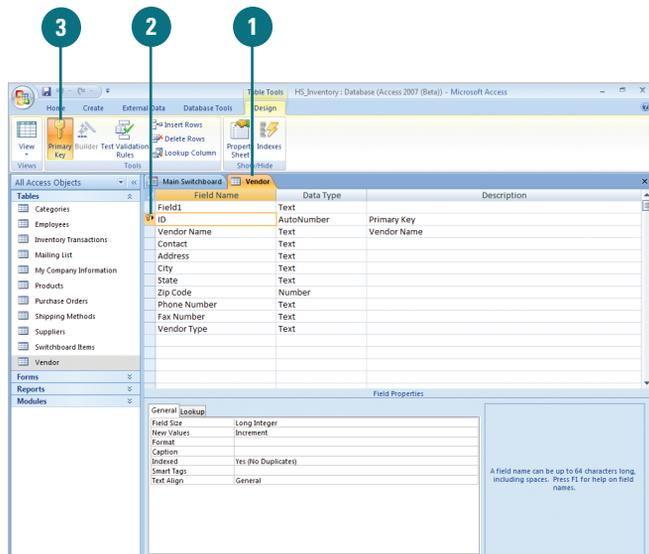
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## Specify a Primary Key

- 1 In Design view, create a field that will be that table's primary key, and then select an appropriate data type.
  - ◆ If you choose the AutoNumber data type, Access assigns a value to the primary key for a new record that is one more than the primary key in the previous record.
  - ◆ If you choose any other data type, such as Text, Number, or Date/Time, during data entry, you must enter a unique value in the appropriate format for the primary key of each new record.
- 2 Click the row selector of that field.
  - ◆ To create more than one primary key, press and hold Ctrl, and then click the additional row selector for each field.
- 3 Click the **Primary Key** button.
- 4 To remove a primary key, delete any table relationships associated with the primary key, select the row selector for the Primary key, and then click the **Primary Key** button.

A primary key is one or more fields in a table that provide a unique identifier for every row. You use the primary key in other tables to refer back to the table with the primary key. In Design view, you can use the Primary Key button to assign or remove the primary key designation for the selected field or fields. When you create a new table in Datasheet view, Access automatically creates a primary key and assigns it the field name "ID" and the data type AutoNumber. When you create a table in Design view, you can specify more than one field as a primary key, known as a composite key, so you are responsible for determining the data type of the primary key. Whatever data type you choose, values for the primary key must be unique for each table record.



# Planning Table Relationships



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When you place data into separate tables, you need some way of merging this data together for forms and reports. You can do this by establishing table relationships that indicate how data in one table relates to data in another.

## Specifying Common Fields

Data from several different tables is related through the use of common fields. A common field is a field existing in two or more tables, allowing you to match records from one table with records in the other tables. For example, the Customers table and the Orders table might both contain a Customer ID field, which functions as a primary key that identifies a specific customer. Using Customer ID as a common field allows you to generate reports containing information on both the customer and the orders the customer made. When you use a primary key as a common field, it is called a **foreign** key in the second table.

## Building Table Relationships

Once you have a way of relating two tables with a common field, your next task is to express the nature of that relationship. There are three types of relationships: one-to-one, one-to-many, and many-to-many.

A table containing customer names and a second table containing customer addresses exist in a one-to-one relationship if each customer is limited to only one address. Similarly, a one-to-many relationship exists between the Customers table and the Orders table because a single customer could place several orders. In a one-to-many relationship like this, the “one” table is called the **primary**

### Table Relationships

Choice	Description
One-to-one	Each record in one table is matched to only one record in a second table, and visa versa.
One-to-many	Each record in one table is matched to one or more records in a second table, but each record in the second table is matched to only one record in the first table.
Many-to-many	Each record in one table is matched to multiple records in a second table, and visa versa.

**table**, and the “many” table is called the **related table**.

Finally, if you allow several customers to be recorded on a single order (as in the case of group purchases), a many-to-many relationship exists between the Customers and Orders tables.

## Maintaining Referential Integrity

Table relationships must obey standards of **referential integrity**, a set of rules that control how you can delete or modify data between related tables. Referential integrity protects you from erroneously changing data in a primary table required by a related table. You can apply referential integrity when:

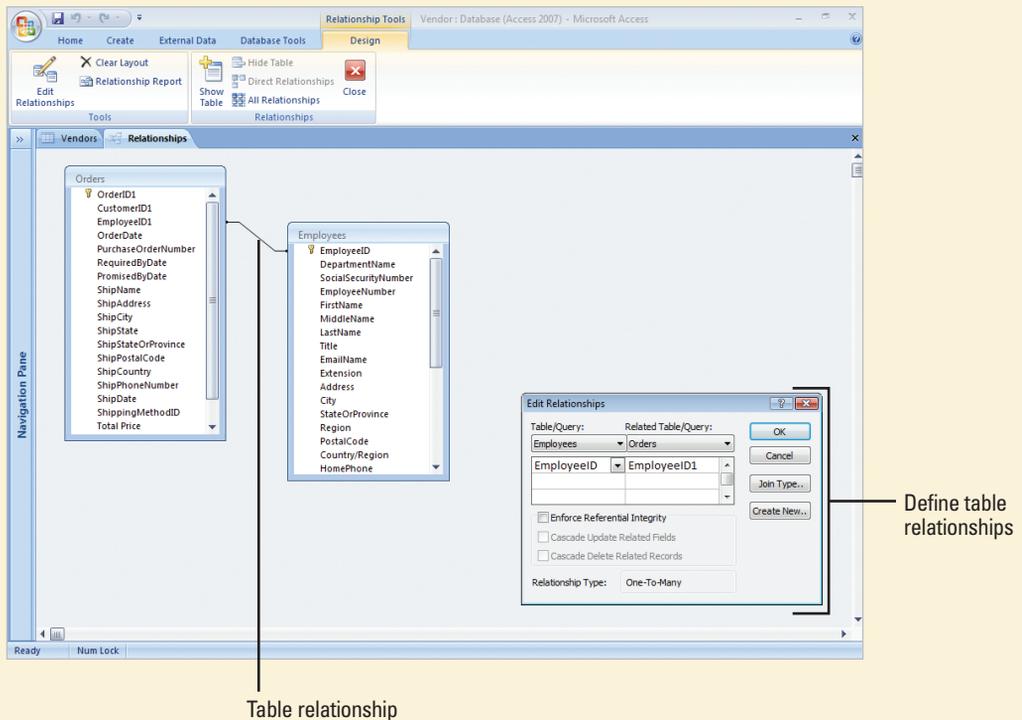
- ◆ The common field is the primary table’s primary key.
- ◆ The related fields have the same format.
- ◆ Both tables belong to the same database.

Referential integrity places some limitations on you.

- ◆ Before adding a record to a related table, a matching record must already exist in the primary table.
- ◆ The value of the primary key in the primary table cannot be changed if matching records exist in a related table.
- ◆ A record in the primary table cannot be deleted if matching records exist in a related table.

Access can enforce these rules by cascading any changes across the related tables. For example, Access can automatically copy any changes to the common field across the related tables. Similarly, if a record is deleted in the primary table, Access can automatically delete related records in all other tables.

As you work through these issues of tables, fields, and table relationships, you will create a structure for your database that will be easier to manage and less prone to data-entry error.



# Defining Table Relationships

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AC07S-4.2.3

## Define Table Relationships

- 1 Click the **Database Tools** tab.
- 2 Click the **Relationships** button.

If relationships are already established in your database, they appear in the Relationships window. In this window you can create additional table relationships.

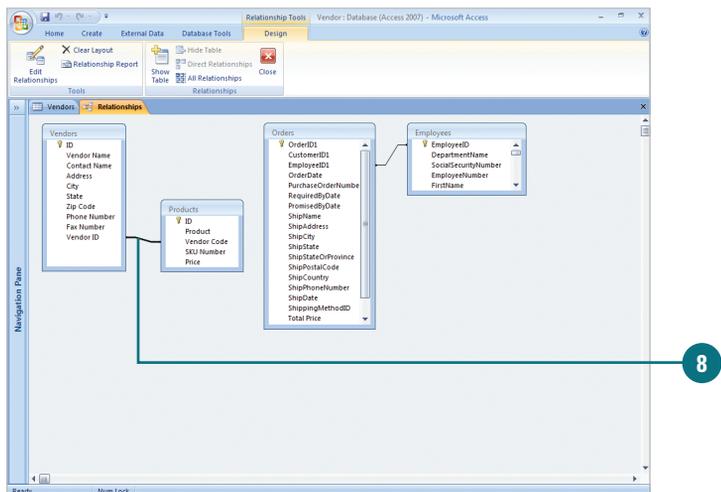
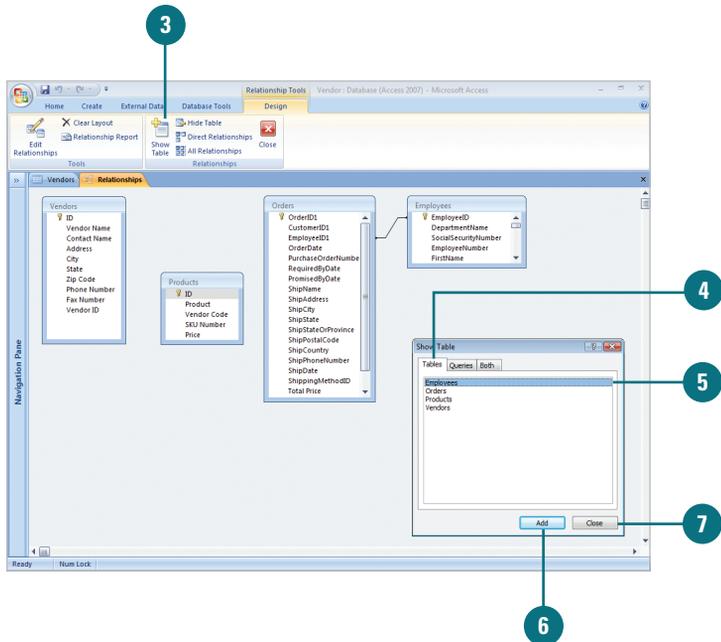
- 3 If necessary, click the **Show Table** button to display the Show Table dialog box.
- 4 Click the **Tables** tab.
- 5 Click the table you want.
- 6 Click **Add**.

The table or query you selected appears in the Relationships window.

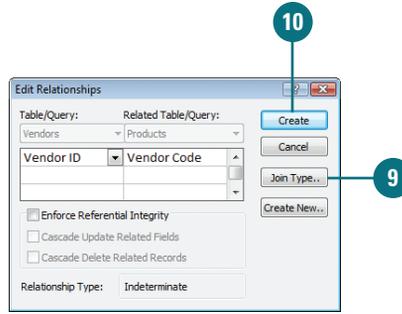
Repeat steps 5 and 6 for each table you want to use in a relationship.

- 7 Click **Close**.
- 8 Drag the common field in the first table to the common field in the second table. When you release the mouse button, a line appears between the two tables, signifying that they are related. Also, the Edit Relationships dialog box opens, in which you can confirm or modify the relationship.

You can define table relationships in several ways. After you create tables in your database, you can define table relationships between them. You can define and manage relationships using buttons on the Database Tools tab. This gives you control over your table relationships and also gives you a quick snapshot of all the relationships in your database. After you define a relationship, you can double-click the connection line to modify or add to the relationship.



- 9 Click the **Join Type** button if you want to specify the join type. Click **OK** to return to the Edit Relationships dialog box.
- 10 Click **Create** to create the relationship.



## Did You Know?

**You can view the relationships you want to see.** Click the Design tab under Relationship Tools, click the Show Direct Relationships button to see tables that are directly related to each other. Click the All Relationships button to see all the relationships between all the tables and queries in your database.

**You can print the Relationships window.** Click the Design tab under Relationship Tools, click the Relationships Report button in the Relationships window you want to print, click the Print button, select the print settings you want, and then click OK.

**You can delete a table relationship.** In the Relationships window, right-click the line that joins the tables that you no longer want related to one another, and then click Delete. In the message box, click Yes to confirm that you want to permanently delete this relationship. You will not be able to undo this change.

## Join Types

Join Types	Description
Include rows only where the joined fields from both tables are equal	Choose this option if you want to see one record in the second table for every record that appears in the first table. The number of records you see in the two tables will be the same.
Include ALL records from "xxx" (the first table) and only those records from "yyy" (the second table) where the joined fields are equal	Choose this option if you want to see all the records in the first table (even if there is no corresponding record in the second table) as well as the records from the second table in which the joined fields are the same in both tables. The number of records you see in the first table might be greater than the number of records in the second table.
Include ALL records from "yyy" (the second table) and only those records from the "xxx" (the first table) where the joined fields are equal	Choose this option if you want to see all the records in the second table (even if there is no corresponding record in the first table) as well as the records from the first table in which the joined fields are the same in both tables. The number of records you see in the second table might be greater than the number of records in the first table.

# Creating and Printing a Table Relationship Report

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AC07S-1.2.3

## Create and Print a Table Relationship Report

- 1 Click the **Database Tools** tab.
- 2 Click the **Relationships** button.

If relationships are already established in your database, they appear in the Relationships window.

- 3 Do any of the following to display the table relationships you want to use to create a report:
  - ◆ **Hide tables.** Click the table you want to hide, and then click the **Hide Table** button.
  - ◆ **Add tables.** Click the **Tables** tab, click the table you want, click **Add**, and then click **Close**.

- 4 Click the **Relationship Report** button.

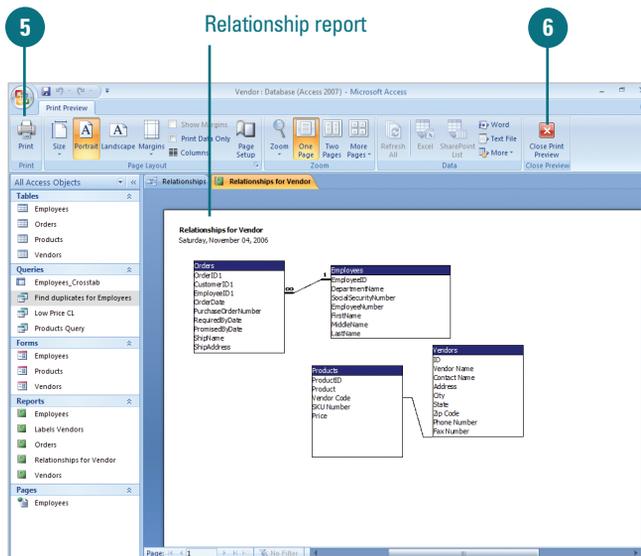
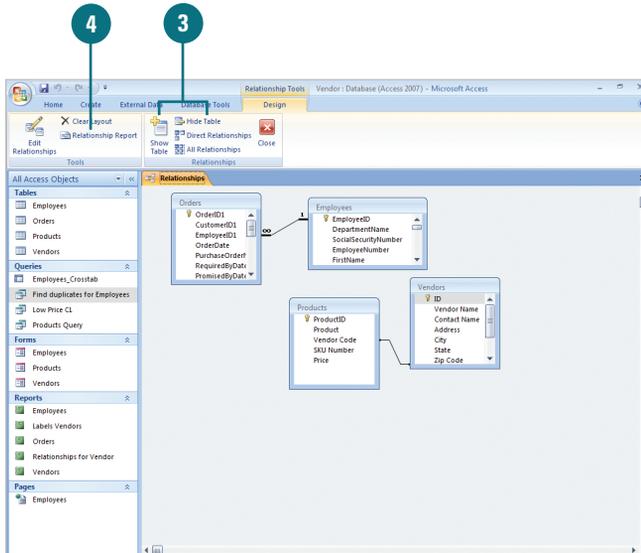
The report appears in Print Preview.

- 5 To print the report, click the **Print** button, specify the settings you want, and then click **OK**.

- 6 Click the **Close Print Preview** button.

The relationship report appears in Design view.

After you create a table relationship, you can create and print a report. In the Relationships window, the Relationship Report button creates a report with the currently displayed relationship and switches to Print Preview, where you can print the report. When you close Print Preview, the report appears in Design view. If you want, you can make changes to the report. To complete the process, you need to save and name the report or close it without saving it. Instead of printing the report, you can also use exporting tools in Print Preview to save the report in another format, including a PDF or XPS document.



- 7 Click the **Save** button on the Quick Access Toolbar.
- 8 Type a name for the relationship report.
- 9 Click **OK**.

### Did You Know?

**You can show direct relationships.** In the Relationships window, click the Direct Relationships button to display only tables that relate to each other.

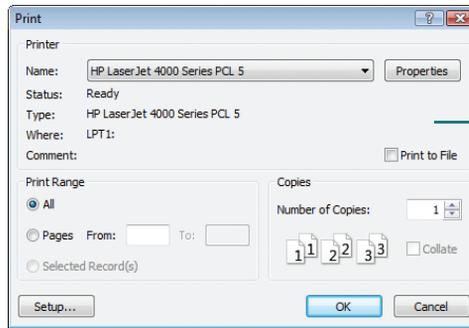
**You can clear relationships.** In the Relationships window, click the Clear Layout button, and then click Yes to remove the layout of the Relationships window.

### See Also

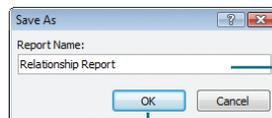
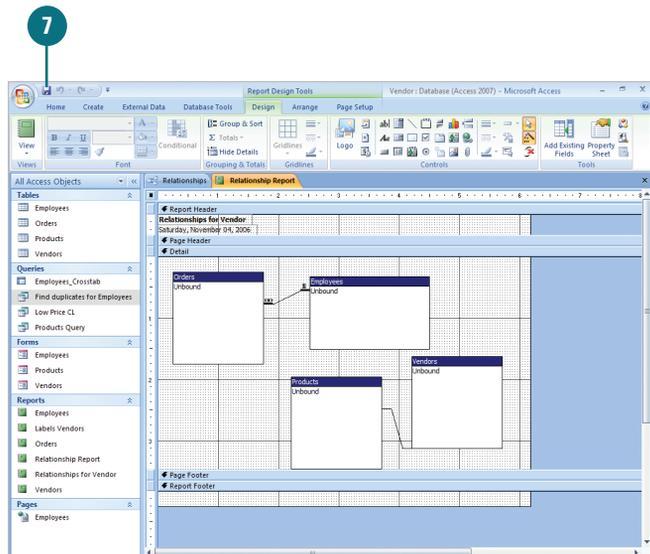
See “Creating a PDF Document” on page 300 or “Creating an XPS Document” on page 301 for information on using and saving a file with different formats.

### Did You Know?

**You can show direct relationships.** In the Relationships window, click the Direct Relationships button to display only tables that relate to each other.



Specify the print options you want



9

# Ensuring Referential Integrity

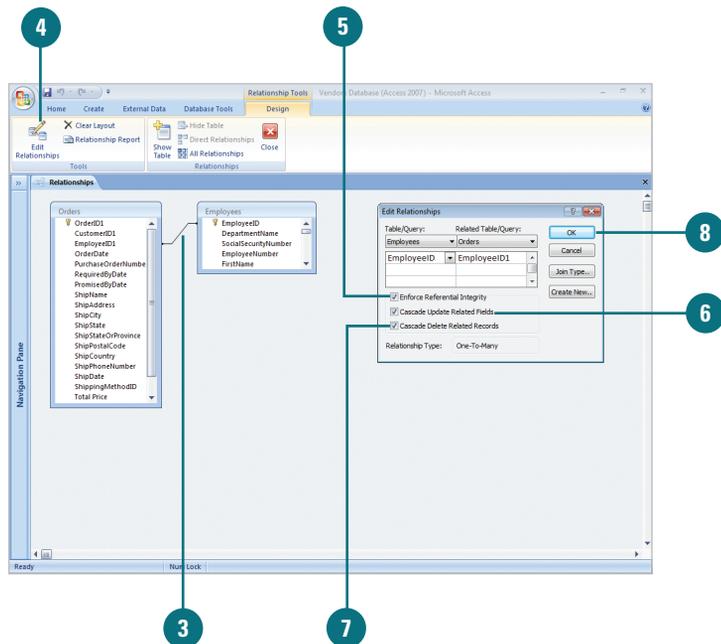
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## Ensure Referential Integrity

- 1 Click the **Database Tools** tab.
- 2 Click the **Relationships** button.
- 3 Click the join line for the relationship you want to work with.
- 4 Click the **Edit Relationships** button.
- 5 Select the **Enforce Referential Integrity** check box to ensure that referential integrity always exists between related tables in the database.
- 6 If you want changes to the primary field of the primary table automatically copied to the related field of the related table, select the **Cascade Update Related Fields** check box.
- 7 If you want Access to delete records in the related tables whenever records in the primary table are deleted, select the **Cascade Delete Related Records** check box.
- 8 Click **OK**.

Referential integrity in table relationships keeps users from accidentally deleting or changing related data. If a primary table contains a list of employees and related tables contain additional information about those employees, and an employee quits, his record is removed from the primary table. His records should also be removed in all related tables. Access allows you to change or delete related data, but only if these changes are cascaded through the series of related tables. You can do this by selecting the Cascade Update Related Fields and Cascade Delete Related Records check boxes in the Edit Relationships dialog box.



# Identifying Object Dependencies

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AC07S-6.2.4.1

## View Dependency Information

- 1 In the Navigation pane, click the database object in which you want to view dependencies.
- 2 Click the **Database Tools** tab.
- 3 Click the **Object Dependencies** button.
- 4 Click the **Objects that depend on me** or **Objects that I depend on** option.

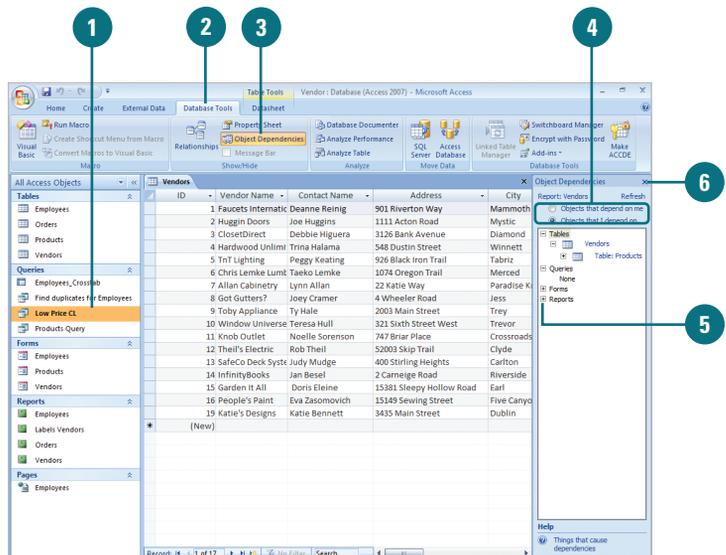
The Object Dependencies task pane shows the list of objects that use the selected object.

- 5 To view dependency information for an object listed in the pane, click the **Expand** icon (+) next to it.
- 6 When you're done, click the **Close** button on the task pane.

### Did You Know?

**You can view a list of database objects.** Click the Office button, click point to Manage, click Database Properties, and then click the Contents tab. When you're done, click OK.

As you develop a database, you create a relationship between objects to share data and provide the information in forms and reports. When you make changes to one object, it might affect another object. For example, if you no longer need a field in a table, instead of deleting it right away and possibly creating problems, you can check object dependencies to make sure that the field you want to delete is not used in another table. Checking for object dependencies helps you save time and avoid mistakes. Access generates dependency information by searching name maps maintained by the Name AutoCorrect feature. If Track Name AutoCorrect Info is turned off on the Current Database pane in the Options dialog box, you cannot view dependency information.



## Dependency Information

Object	Dependent	Description
Table	Table or query	A relationship is defined between the objects
Table	Form	Fields in the selected table look up values
Query	Table or query	Query is bound to the table or query
Form	Table or query	Form is bound to the table or query
Form	Form	Form includes the other form as a subform
Report	Table or query	Report is bound to the table or query
Report	Form	Report includes the form as a subform
Report	Report	Report include the other report as a subreport

# Modifying Object Dependencies

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AC07S-6.2.4.1

## Modify Dependency Information

- 1 In the Navigation pane, click the database object in which you want to view and modify dependencies.
- 2 Click the **Database Tools** tab.
- 3 Click the **Object Dependencies** button.
- 4 Click the **Objects that depend on me** or **Objects that I depend on** option.

The Object Dependencies task pane shows the list of objects that use the selected object.

- 5 Click the **Expand** icon (+) next to an object to view dependency information.
- 6 Click the object you want to open in Design view.
- 7 Modify the object in Design view, and then click the **Close** button in the Design view window.
- 8 When you're done, click the **Close** button on the task pane.

As you view dependencies for an object in the Object Dependencies task pane and determine you can make changes without effecting other objects, you can open an object in Design view directly from the Object Dependencies task pane and modify it. If you need to look at other objects, you can open more than one from the Object Dependencies task pane. If you are having problems viewing dependency information, you need to turn on the Track Name AutoCorrect Info option on the Current Database pane in Access Options.

