C H A P T E R 7

Creating Forms with InfoMaker

About this chapter

Forms display data and provide a way to interact with the database. You can use forms to view information and to change it.

In this tutorial you will create a form that updates the contact table. The form includes the following:

♦ All columns in the contact table

♦ Buttons for printing and print setup

♦ A report that provides access to all the information in the contact table

Contents

This tutorial requires the Form painter
The Form painter component of InfoMaker is optional; you must have installed it to do this tutorial.


Create the basic form

Now you will create the basic form. To do this you select a predefined InfoMaker form style and the data to be displayed in the form.

1   Click the **Form painter** button in the PowerBar.

Your PowerBar may not match this one. It doesn't matter. You just need to use the Form painter button.

The Select Form dialog box displays. It lists the forms in the current library (TUTOR_IM) and has a New button for creating new forms.
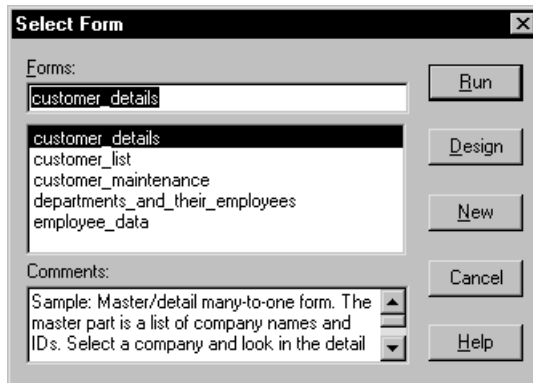
2   Click **New**.

The New Form dialog box displays. It contains the data sources and the form styles you can choose.
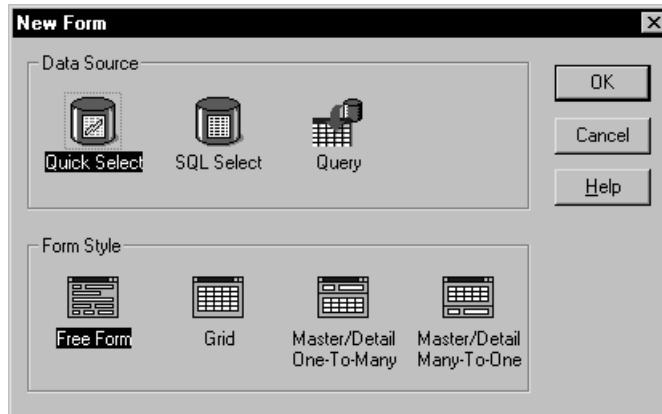
> **About data sources**
> **Quick Select** is for simply choosing columns and specifying selection criteria and sorting, which is what you want for this tutorial.
>
> **SQL Select** is for using other SQL options not available with Quick Select.
>
> **Query** is for specifying the name of a query that describes the data source. You define queries in the Query painter.

> **About form styles**
> A form style is a predefined way of presenting and processing information on the form. Usually the style includes the common database functions (insert, delete, and update).
>
> InfoMaker comes with a set of form styles. PowerBuilder users at your site can create additional styles, which will also display in the New Form dialog box.

3   Click *Quick Select* and *Free Form* to select them (the words are highlighted).
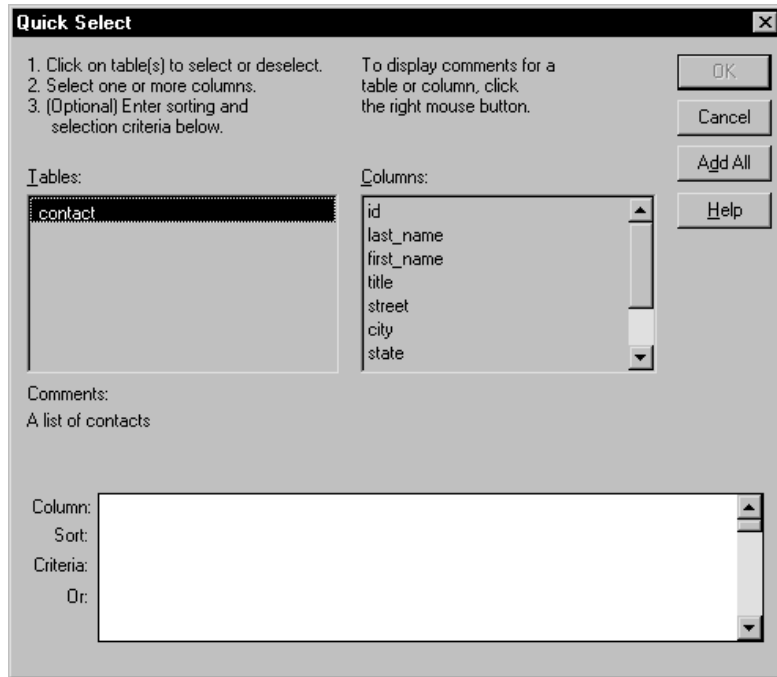
   Click *OK*.
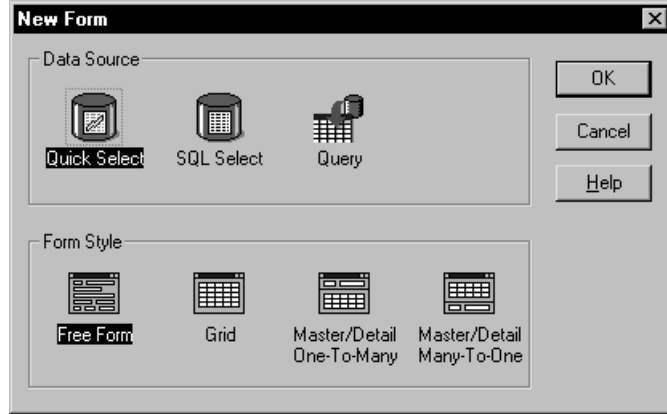
The Quick Select dialog box displays. In this dialog box you select the table to use and the columns you want included in the form.
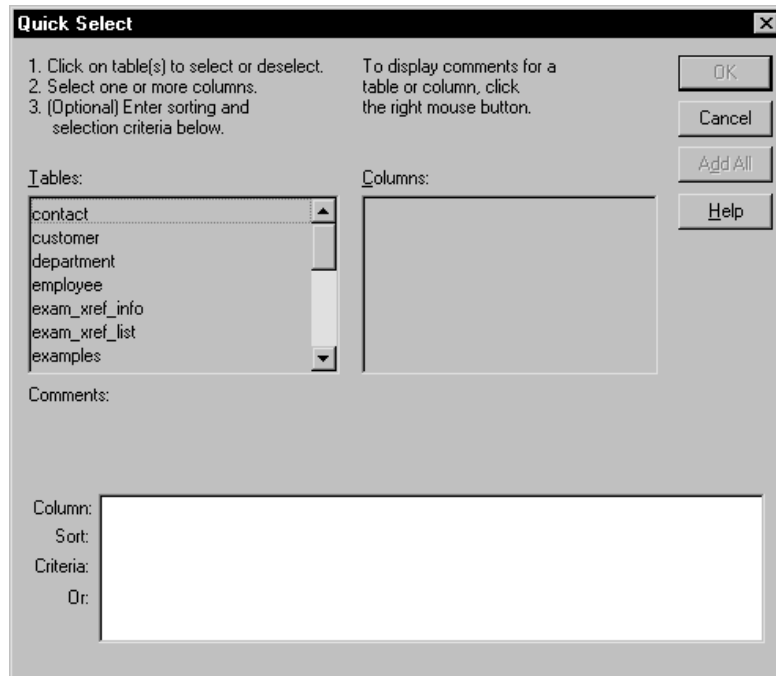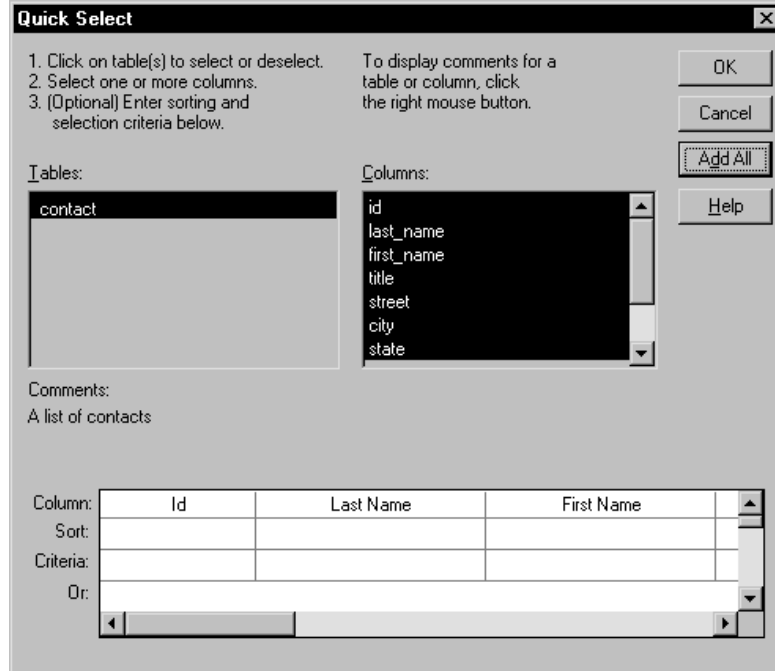

4   Click **contact** in the **Tables** box.

The contact table's columns display. You will include all columns in the form.

5   Click the **Add All** button.

All columns are selected. They display in a grid at the bottom of the dialog box.

You could reorder columns and enter sorting and selection criteria in this grid. But for your form you do not need to do any of these things.

6   Click *OK*.

Your form displays. It uses the columns and form style you selected. The text labels come from the repository. Instead of data, the names of the database columns appear where the data values will be displayed.

The repository

The repository stores information about data such as labels and display formats. When you create forms and reports, InfoMaker uses repository information to create the basic report or form.

You put information into the repository using the Database painter. For example, in the Table tutorial you define the label **Job Role:** for the title column. Then when you use the title column in a form or report, InfoMaker uses the label **Job Role**.

Preview (run) the form

Now you will preview the form. Running the form is the way you preview it while you are designing it and the way you use it when you have finished designing it.

1   Click the **Run** button in the PainterBar.

    InfoMaker runs your form, which includes going to the database and retrieving data.

    Notice that real values have replaced the column names in the form. The PainterBar now has buttons that let you view and change data.
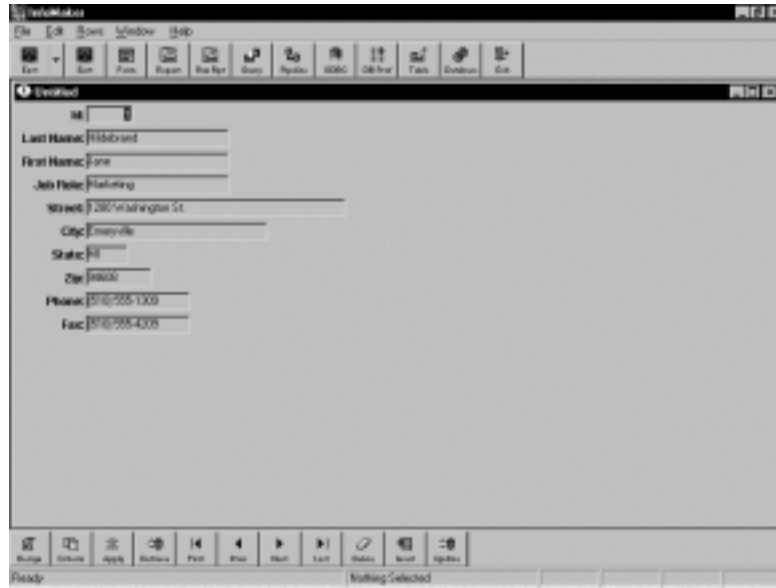
Now you will view the data using the form.

2   Click the **Next** button.

    Click the **Last** button.

    Click the **First** button.

This moves you among the rows. Later in this tutorial you will insert a new row.

3   Click the ***Close*** button in the PainterBar.

You return to the Form painter workspace.

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Save the form

Now you will save the form and give it a name.

1   Click the **Save** button in the PainterBar.

The Save Form dialog box displays with the pointer positioned for you to type a name for the form.

2   Type **contact_maintenance.**

3   Click in the **Comments** box and type **This form updates my contact table.**

(Your list of forms may be different from the list shown here.)
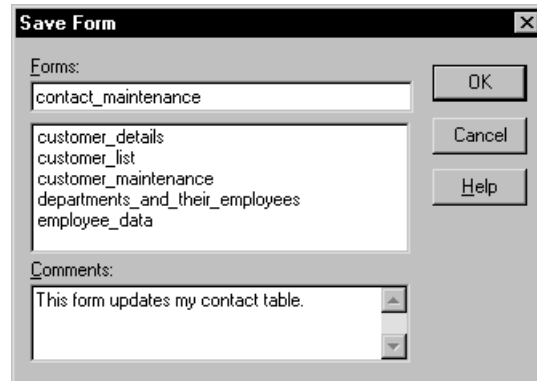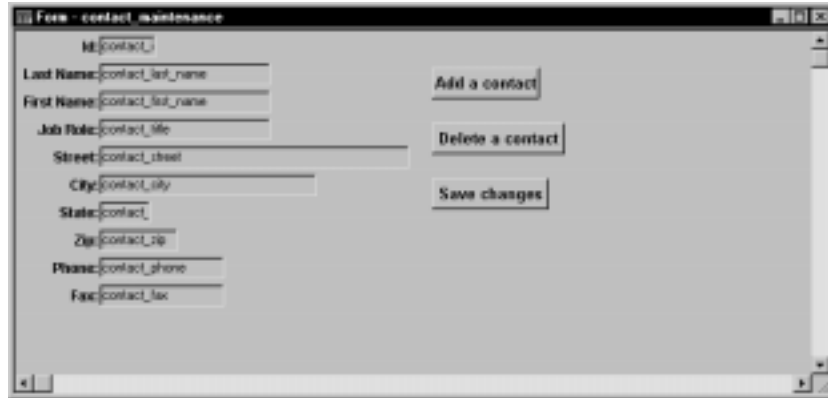

4   Click **OK**.

InfoMaker saves your form.

About saving
Anytime you have completed a unit of work, you should save. To save, select File➤Save from the menu bar or click the Save button or press CTRL+S.

Add buttons to the form

Now you will add three buttons to the form. Later when you run the form, you can click the buttons to add and delete contacts.

About controls

The items you see on a form are called controls. For example, a button is a type of control.

The controls you can use on a form are listed in the Controls menu and are represented by buttons in the PainterBar. To see the list of controls, click *Controls* on the menu bar.

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1 Select **Controls ➤ CommandButton** from the menu bar.

2 Move the pointer to an empty area of the form and click.

If you need to move the button, drag it.

How to drag

Position the pointer over an object, and press and hold the left mouse button. While pressing the button, move the mouse until the object is where you want it. Then release the mouse button.

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A button with the text **none** displays. The text **none** also displays in a text box in the StyleBar.

If the text box does not display
This means the button is not selected. To select the button, click it. Small black boxes in the corners indicate that it's selected.

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3   Make sure the button is still selected.

Type **Add a contact**.

The text displays on the button as you type and in the text box in the StyleBar.

4   Click **B** (for bold) on the StyleBar.

The text displays in bold. Next you will make the button work. To do this you will associate an InfoMaker action with the button.


Using the StyleBar

You can use the StyleBar to change text fonts, font size, and style (bold, italic, and underline). You can also use it to specify text alignment (left-aligned, centered, and right-aligned).

To use options on the StyleBar, you select a control with text and then click the appropriate button on the StyleBar.

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5   Move the pointer to the *Add a contact* button.

Press the right mouse button to display the popup menu for the button.

Select *Action* from the popup menu.

The Select Action dialog box displays. It lists the actions you can assign to the button.
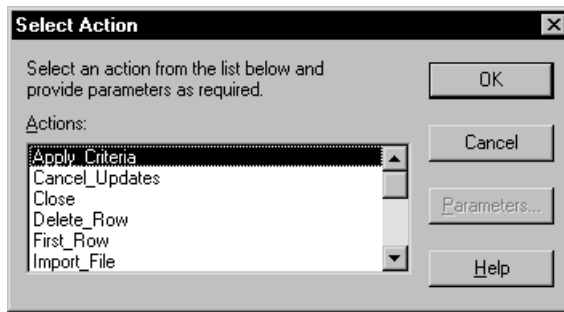
About InfoMaker actions
An action is what you want to happen when the button is clicked.

Whenever you associate an InfoMaker action with a button, InfoMaker creates the code to enable the button to perform the action. You do not see the code. All you have to do is select the action for the button.

InfoMaker comes with predefined actions. PowerBuilder users at your site can create additional actions, which will also display in the Select Action dialog box.

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6   Scroll through the list of actions and double-click *Insert_Row*.
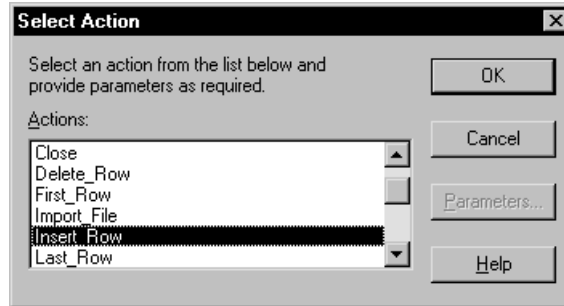
InfoMaker creates the code that enables your *Add a contact* button to display a blank form so you can add information for a new contact. You will see the button work later.

Now you will add two more buttons.

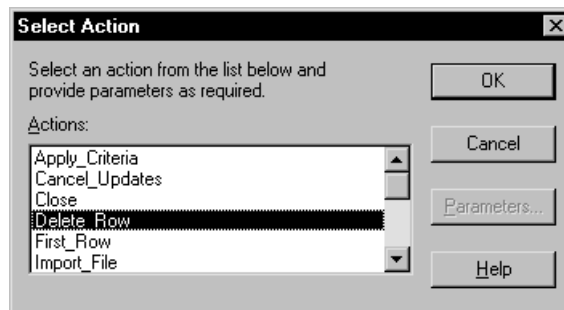7   Select **Controls ➤ CommandButton** from the menu bar.

Move the pointer below the **Add a contact** button and click.

Type **Delete a contact**.

Display the **Delete a contact** button's popup menu and select **Action**.

Select the action **Delete_Row** from the **Select Action** dialog box.

Click **OK**.

8   Select **Controls ➤ CommandButton** from the menu bar.

Move the pointer below the **Delete a contact** button and click.

Type **Save changes**.

Display the **Save changes** button's popup menu and select **Action**.

Select the action **Update_Row** from the **Select Action** dialog box.

Click **OK**.

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Now you have three buttons. InfoMaker has created the code that enables the buttons to work.
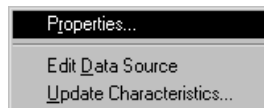
Enhance the form

In this section you will:

♦   Add a title

♦   Change the background for data

♦   Move the buttons

♦   Add a report

Add a title

1   Move the pointer to an unused area of the form and click the right mouse button.

The popup menu for the form displays.

About the popup menu
Whenever you click the right mouse button, a popup menu displays. The menu changes depending on the position of the pointer (on a control, on an unused area of the form, or on an unused area of a toolbar).

To see this, move the pointer to different places and click the right mouse button.

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2   Select *Properties* from the popup menu.

The form's property sheet displays. The General tab is on top, with the information in the box for the Title option highlighted.

```
 Form                                              ☒
┌────────────────────────────────────────────────────┐
│ ┌General┐ Pointer                                  │
│                                                    │
│   Title:                                           │
│   ┌──────────────────────────────────────────┐     │
│   │contact_maintenance│                       │     │
│   └──────────────────────────────────────────┘     │
│                                                    │
│   Color:                                           │
│   ┌────────────────────────┐ ┌─┐                   │
│   │ ▭  Silver              │ │▼│                   │
│   └────────────────────────┘ └─┘                   │
│                                                    │
│   □ H Split Scrolling        □ HScroll Bar         │
│                                                    │
│   ☑ Live Scrolling           □ VScroll Bar         │
│                                                    │
│                                                    │
│  ┌────────┐  ┌────────┐  ┌────────┐  ┌────────┐    │
│  │   OK   │  │ Cancel │  │ Apply  │  │  Help  │    │
│  └────────┘  └────────┘  └────────┘  └────────┘    │
└────────────────────────────────────────────────────┘
```
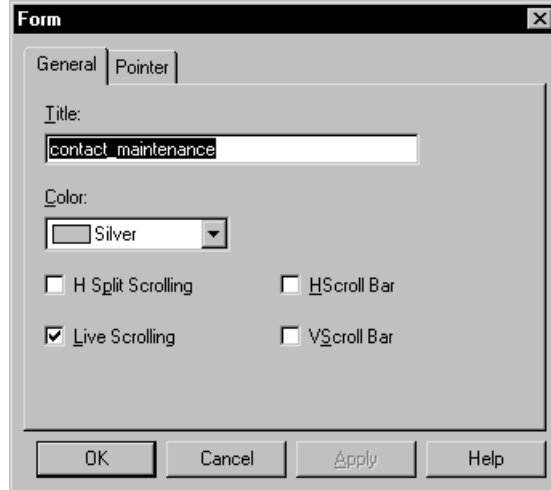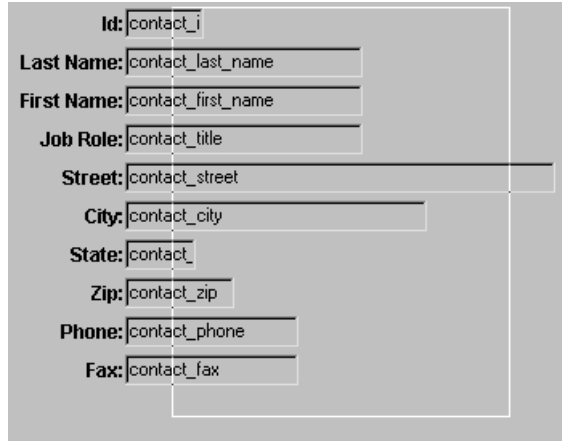
3   Type **Maintain Contact Information** and press **OK**.

The title does not display now. When you run the form, the title will display.

Change the background for data

Now you will change the background for all data values to be white. This will make it easier to enter data. You will use lasso select to select the objects.

1   Move the pointer near the bottom of the data and on the right.

2   Press and hold the left mouse button and drag diagonally to the left and up until the white box (the lasso) touches all the data.

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Id: contact_i
Last Name: contact_last_name
First Name: contact_first_name
Job Role: contact_title
Street: contact_street
City: contact_city
State: contact_
Zip: contact_zip
Phone: contact_phone
Fax: contact_fax

3   Release the mouse button.
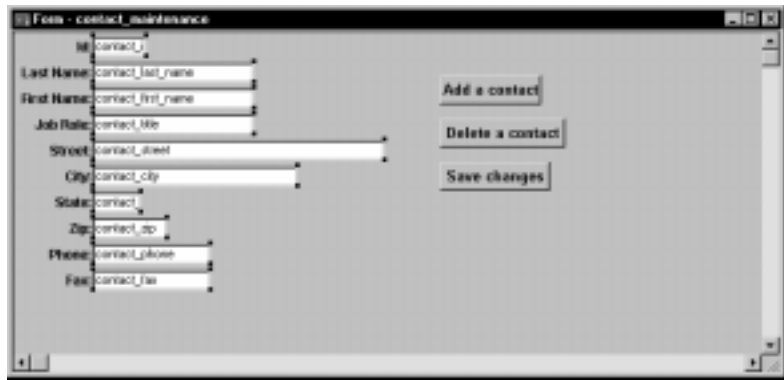
All the objects inside the white box are selected. Black boxes display in all the corners.
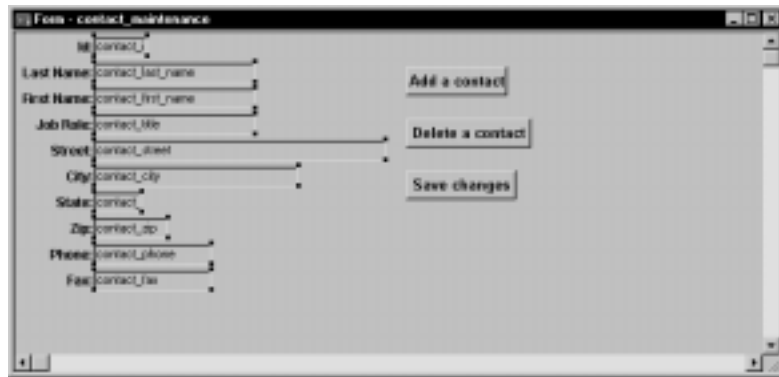
4   Move the pointer to the Background Color (Bg Clr) dropdown toolbar.

Click the **arrow** to display the color menu.

Click the **plain white** box (not the white box with the letter w in it).

All the areas on the form used to display data values now have white for a background color.

Move the buttons

Now you will move the buttons to make room for the report you are about to add.

1   Select a button.

(You can use lasso select or click one.)

Small black boxes in the corners mean it is selected.

2   Drag the button to the top of the form.

Select and drag the other two buttons until your form looks like this.

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Now the buttons are near the top of the form. There is more room for the report you are about to add.

Add a report

Now you will add a report to provide information when you are working with the form. You can scroll in the report while you are filling out the form for a new contact. This means, for example, that you could look up an area code or zip code if it's already present for another contact.

1   Select **Controls➤Report** from the menu bar.

Move the pointer into the workspace. Where you next click will position the report that you are adding to the form.

2   Move the pointer to the empty space on the right part of the form and click.

The box that will hold the report displays on the form.

3   Move the pointer to the box and press the right mouse button to display the popup menu.

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4   Select **Properties**.

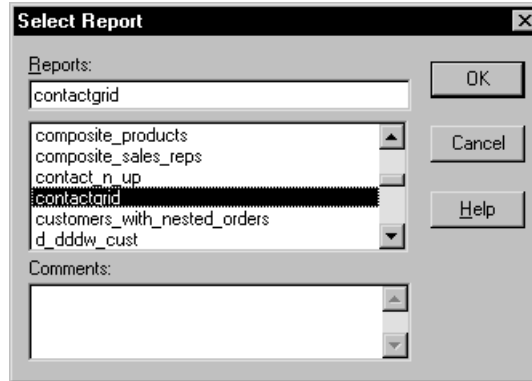The property sheet for the box displays.

You will use this property sheet to specify a few things about the report. First you are going to select the report whose contents display in the box.
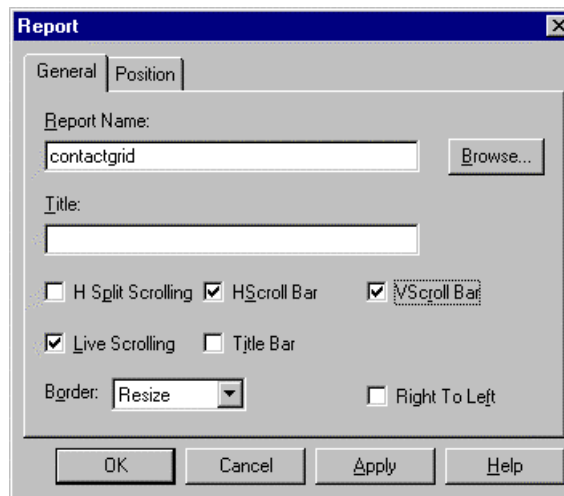
5   Click the **Browse** button.

In the Select Report dialog box, scroll the list of reports.
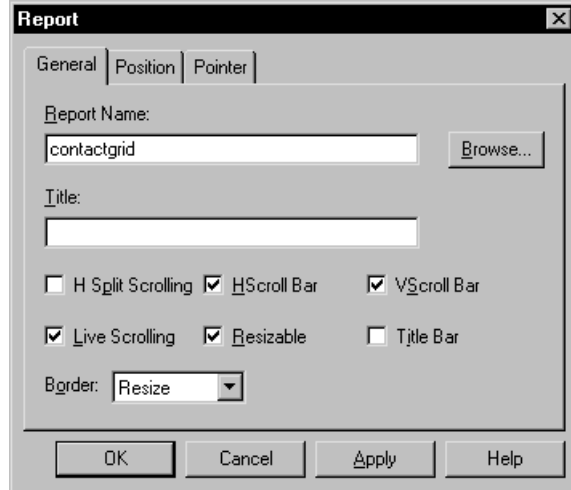
Select **contactgrid** and click **OK**.

Select Report

Reports:

contactgrid

composite_products
composite_sales_reps
contact_n_up
contactgrid
customers_with_nested_orders
d_dddw_cust

OK

Cancel

Help

Comments:

Contactgrid displays in the Report Name box in the property sheet.

Report

General | Position

Report Name:

contactgrid   Browse...

Title:

☐ H Split Scrolling ☑ HScroll Bar   ☑ VScroll Bar

☑ Live Scrolling   ☐ Title Bar

Border: Resize   ☐ Right To Left

OK   Cancel   Apply   Help

Next you will specify that the report is to have the Resize border, scrollbars, and the ability to be resized when you run the form.

6   Select *Resize* from the *Border* dropdown listbox (you'll have to scroll the list).

Select the *HScroll Bar*, and *VScroll Bar* checkboxes.

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Report   ✕

General | Position | Pointer |

Report Name:

contactgrid   Browse...

Title:

☐ H Split Scrolling ☑ HScroll Bar   ☑ VScroll Bar

☑ Live Scrolling   ☑ Resizable   ☐ Title Bar

Border: Resize   ▼

OK   Cancel   Apply   Help

7   Click **OK**.

The report looks like this.

Id	Last Name

When you run the form, the report displays as a resizable window with horizontal and vertical scrollbars. This gives you flexibility in looking at data while working on the form.

8   Resize the report to show more data.

To resize, move the pointer near an edge until the pointer becomes a double-pointed arrow.

Then press the left mouse button, hold, and drag.

This determines the size and position of the window when you start running the form. Because it is resizable, you can change the report window while you are running the form.

When you finish resizing, the report should look something like this.

Use the form to update the database

Now you will use the form to add a new contact to the database.

1   Click the **Run** button in the PainterBar.

Your finished form displays with data in place. The report on the form gives you a way to see all your contact data.

2   Click the **Add a contact** button in the form.

An empty form displays. You will use this form to enter a new contact.

The cursor is in the Id box, but you don't know the next available number. You will look in the report to see what number was used last.

3   In the report window, use the scrollbar to scroll down to the last row of the report and check the value in the **Id** column.

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If the data has not been changed since installation, the value will be 60. So the next available number is 61.

Id	Last Name	First Name	Job Role	
49	Lull	John	Sales	93 Lav
50	Shishov	Irina	Marketing	567 Pa
51	Trayers	Ken	Sales	234 He
52	Long	Peter	Training	78 Gra
53	Tippet	Debbie	Customer support	85 Abe
54	Hodson	Jack	Customer support	69 Linc
55	Kosko	Kim	Product development	334 Ple
56	McEvoy	Jim	Sales	23 Hav
57	Goodall	Sandra	Sales	56 Sun
58	Elkins	John	Training	899 Gc
59	Masalsky	Kurt	Customer support	29 Gar
60	Collins	Mary Beth	Customer support	56 Linc

4   Click the *Id* column and type *61*.

Maintain Contact Information		
Id: 61		Add a contact De
Last Name:		Id | Last Name
First Name:		49 | Lull

5   Press TAB and type *Carter* for Last Name.

Press TAB and type *Jimmy* for First Name.

Press TAB.

6   Press TAB and type *ma* for title or, if a drop down box is presented select MARKETING for Job Role.

Job Role or Title?

In the Getting Started with InfoMaker manual there is a tutorial on working with tables. In this tutorial, the title column has a drop down box defined and the column header is changed from title to Job Role. Depending on which tutorials you have completed, you will see either Job Role or Title in you form.

To look at the InfoMaker Getting Started tutorials see the following URL:
calas.sybase.com/dynaweb/imcore/imgs/@Generic__BookView

Define a DropDownListBox edit style of job roles, change the column header and label to Job Role, and enlarge the display width of the column to 1.5 inches

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7   Press **TAB** and type *Peanut Way* for Street.

8   Press **TAB** and type *Atlanta* for City.

9   Press **TAB** and select *GA* for State (another dropdown listbox).

10 Press **TAB**.

To determine what to enter for Zip, scroll the report until you find another *Atlanta* entry.

Then click the *Zip* box in the form and type the zip code you see in the report.

11 Press **TAB** and type *4045557833* for Phone.

Notice that you type only the digits. The form formats the phone number. An Edit Mask edit style was defined for this column to handle the formatting. This edit style is stored in the repository.

12 Press **TAB** and type *4045554291* for Fax.

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This is what your screen should look like now.

13 Click the **Save changes** button in the form to update the database with the new contact.

The database is updated.

Note that the report always displays the information from the database when you start running the form. If you update the database, the report does not show the updates. To update the report, you return to the workspace and rerun the form.

14 Click the **Design** button in the PainterBar to return to the Form painter workspace.

Click the **Run** button again and scroll the report to the 61st row in the report.

Notice that your report has been updated.

15 Click the **Design** button in the PainterBar to return to the Form painter workspace.

16 Select **File➤Close** from the menu bar.

If you haven't already saved the current version of the form, you will be prompted to save changes.

17 Click **Yes**.

This closes the Form painter. You return to the PowerBar.

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