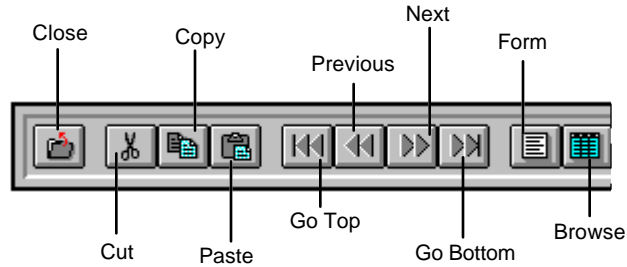


The child window's toolbar (which is also movable) is illustrated below with each button identified:



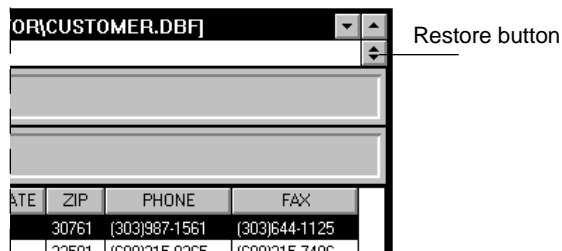
The Status Bar

When a child window has focus, the status bar can be used to get a quick description of its toolbar buttons. It can also be used to display a basic description for the currently selected field, but you have to provide the descriptions as part of the data server definition—it is not built into the self-configuring data window created by the Standard Program. (You will implement this feature when you create some data servers of your own in the next lesson.)

Opening Multiple Windows

Finally, to get the full flavor of the capabilities of the Standard Program, we will open a few more data windows and see what happens.

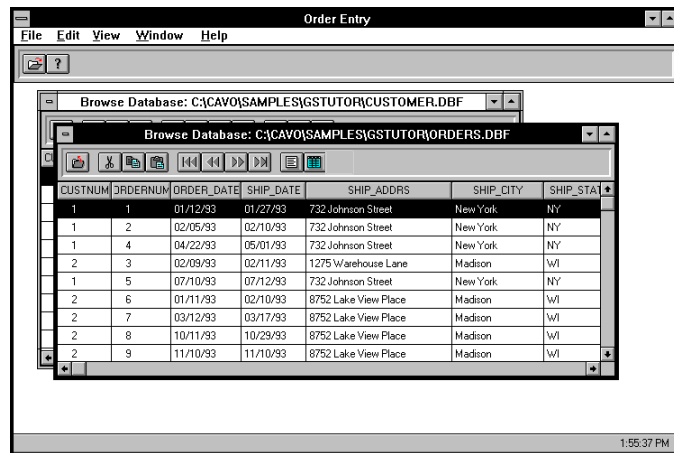
1. Return the window to browse view by clicking on the Browse toolbar button.
2. Restore the CUSTOMER.DBF window by clicking on its restore button:



Tip: The following instructions tell you how to open additional .DBF files individually. Since the shell window is a drag-and-drop client, however, you can also switch to the Windows File Manager, select the .DBF files, drag them over to the shell window for this application, and drop them. A separate data window will be opened for each file.

- Using either the Open toolbar button or the File Open menu command, load the ORDERS.DBF file located in the CA-Visual Objects \SAMPLES\GSTUTOR directory.

Switch to browse view, displaying the following:

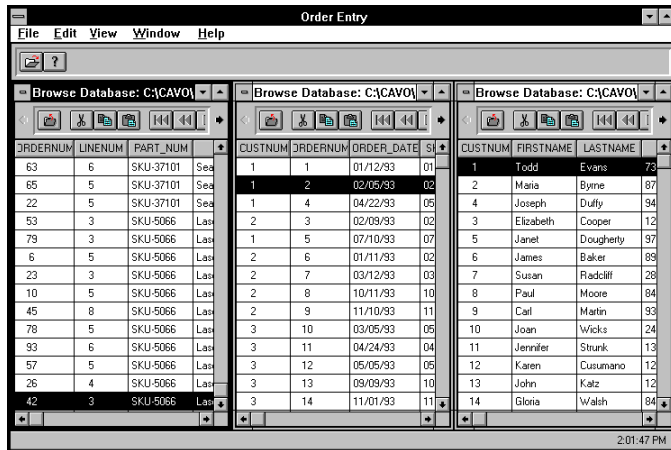


The screenshot shows the 'Order Entry' application window. It has a menu bar (File, Edit, View, Window, Help) and a toolbar. Below the toolbar, there are two database browser windows. The top one is titled 'Browse Database: C:\CAVOI\SAMPLES\GSTUTOR\CUSTOMER.DBF'. The bottom one is titled 'Browse Database: C:\CAVOI\SAMPLES\GSTUTOR\ORDERS.DBF' and displays a data table with the following columns: CUSTNUM, ORDERNUM, ORDER_DATE, SHIP_DATE, SHIP_ADDR, SHIP_CITY, and SHIP_STA. The table contains 9 records. The status bar at the bottom right shows the time 1:55:37 PM.

| CUSTNUM | ORDERNUM | ORDER_DATE | SHIP_DATE | SHIP_ADDR | SHIP_CITY | SHIP_STA |
|---------|----------|------------|-----------|----------------------|-----------|----------|
| 1 | 1 | 01/12/93 | 01/27/93 | 732 Johnson Street | New York | NY |
| 1 | 2 | 02/05/93 | 02/10/93 | 732 Johnson Street | New York | NY |
| 1 | 4 | 04/22/93 | 05/01/93 | 732 Johnson Street | New York | NY |
| 2 | 3 | 02/09/93 | 02/11/93 | 1275 Warehouse Lane | Madison | WI |
| 1 | 5 | 07/10/93 | 07/12/93 | 732 Johnson Street | New York | NY |
| 2 | 6 | 01/11/93 | 02/10/93 | 8752 Lake View Place | Madison | WI |
| 2 | 7 | 03/12/93 | 03/17/93 | 8752 Lake View Place | Madison | WI |
| 2 | 8 | 10/11/93 | 10/29/93 | 8752 Lake View Place | Madison | WI |
| 2 | 9 | 11/10/93 | 11/10/93 | 8752 Lake View Place | Madison | WI |

- Click the Next toolbar button to move the cursor to the second record.
- Now, open DETAIL.DBF (also located in \SAMPLES\GSTUTOR) in another window, switch to browse view, and click the Go Bottom toolbar button to move the cursor to the last record.

6. Tile the windows using the Windows Tile command, and notice how each window maintains its own record pointer:



7. When you are through, choose the Window Close All command.

Opening SQL Tables

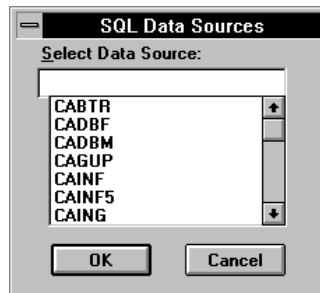
Using the File Open SQL menu command, you can open one or more SQL tables. To illustrate this feature, we will access a sample SQL database called SAMPLE.DB.

Important! *SAMPLE.DB is installed as part of the WATCOM SQL installation option. If you have not installed this component, you will not be able to follow the steps in this section. Refer to “Installing and Starting CA-Visual Objects” in this guide for information before continuing.*

To access SAMPLE.DB:

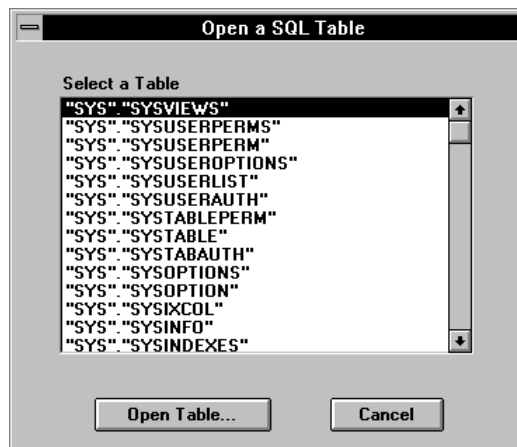
1. Choose File Open SQL.

A dialog box similar to the following is displayed:



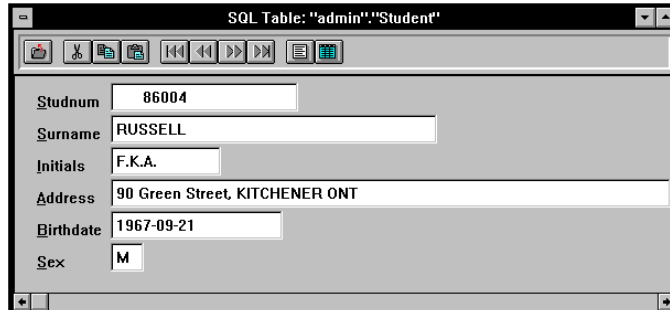
2. You can either type Sample and choose OK, or scroll the list box until Sample appears and double-click it.
3. When prompted for a user ID and password, choose OK.

The following dialog box is displayed, showing all the tables in the Sample database:



4. You can double-click on any table shown or highlight a table and click the Open Table button. For example, scroll down and double-click on "admin"."Student".

The Standard Program opens this table in a self-configuring data window as shown below:



The screenshot shows a window titled "SQL Table: 'admin'. 'Student'". Inside the window is a form with the following fields and values:

| Field | Value |
|-----------|--------------------------------|
| Studnum | 86004 |
| Surname | RUSSELL |
| Initials | F.K.A. |
| Address | 90 Green Street, KITCHENER ONT |
| Birthdate | 1967-09-21 |
| Sex | M |

You can open as many tables as you like in this manner, just as you did previously with the .DBF files. In fact, we've arbitrarily separated these two exercises, having you close all the .DBF windows before opening this one. You can open data windows for .DBF files and SQL tables simultaneously. Except by looking at the title bars, you will not be able to tell the difference between these data windows because they have exactly the same behavior. You may want to experiment a little at this point.

5. When you are through, choose the Window Close All command.
6. Then, choose File Exit or double-click on the system menu to close the Standard Program.

You are returned to the CA-Visual Objects desktop.

Summary

In this lesson, you've seen and learned quite a lot about the Standard Program generated by CA-Visual Objects. You've been given a basic description of the structure of an MDI application, and you've seen how the Standard Program implements that structure by looking at both the generated source code and the running application.

The Standard Program demonstrates many of the features available in CA-Visual Objects. A lot of these features are fully automatic, such as:

- The minimize and maximize buttons, system menu, and title bar that are part of every shell and child window that you create
- The scroll bar behavior that is built into every child window
- The ability to open multiple documents simultaneously
- The ability to open both .DBF files and SQL tables in a self-configuring data window
- The ability to open multiple documents simultaneously
- The event handling built into every application

Other features, such as displaying information on the title and status bars and the ability to navigate and change the contents of a database, require a minimum amount of programming because they are built into the GUI Classes library as methods and properties of the various window classes.

Still other features—such as menus, toolbars, data windows, and data servers—are facilitated by the code generators associated with the various editors in the IDE (which you will see in subsequent lessons). The IDE editors take full advantage of the automatic event handling mentioned earlier, making it easy for you to connect events to items on a menu and controls on a window, as you will also see in subsequent lessons. Finally, the editors understand the relationships between menus, toolbars, and windows of various types and, therefore, allow you to make the connections between them as part of the design process.

The Standard Program, even with all of its functionality, will seldom be enough to handle all of your business needs, but it provides a great starting point for creating a customized application. In this lesson, you've already done a very small bit of customization by changing the shell window's title bar caption, but let's move on to a more in-depth alteration.