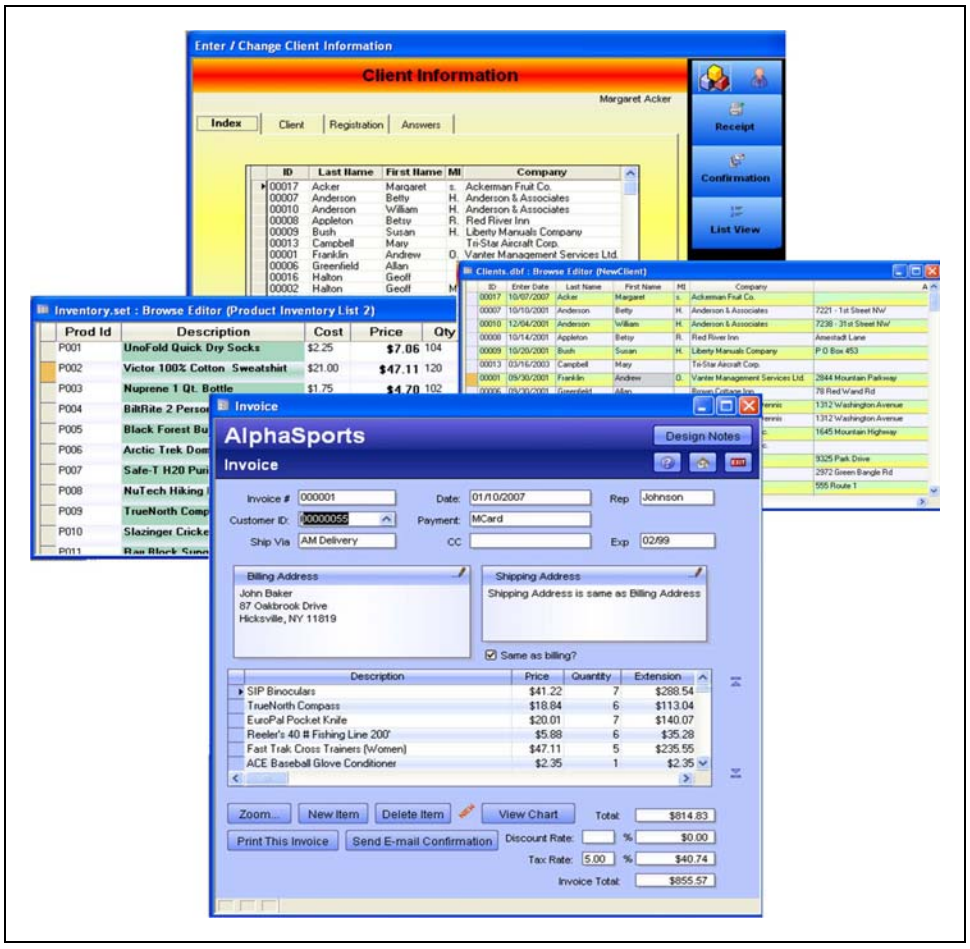
Chapter 4.

Forms and Browses



Forms and Browses are the heart of data entry.

With Alpha Five, it is easy to create tabbed interfaces that are familiar to Windows users. Forms organize the input of data. Browses also assist the user in entering and viewing data. And, best of all, the built-in design aides make everyone look like a pro!

Overview

We cover a LOT in this chapter. Since it so lengthy, we've broken it down into sections. Here's a quick review of the topics and where you'll find them when you need a refresher for your own application. Exercises are created in "teaching order," so look in around for what you need. Full details in the index. **New Version 10 features are in green.**

Preparation for the Lesson.

Open Alpha Five and navigate to the following file:

- c:\A5_Ver10Book\ABC_V10_Lessons\ABC Seminars.adb*
- 

Click on the Control Panel tab in the Window Bar at the bottom of the screen to bring the Control Panel to the front.


SPECIAL NOTES

As fields are added to the form, the *Summary Genie* may pop-up. Accept the default settings and click *Finish*. The genie may be deactivated by clicking the "magic lamp" in the upper right corner of the toolbox.

Because this is a long chapter, it has been broken into a series of exercises. The quill and inkwell marks the beginning and end of each segment.

Understanding form design

Forms are used for entering, changing and viewing data.

Objects are placed on forms. Much the same as a remote control, magazine and lamp are objects placed on a table, fields, labels and buttons are objects that are placed on a form.

Forms may also be printed, but usually you will want to create a separate form or report that is formatted specifically for printing. Forms can be imported from the Report Editor. (See "Importing a layout" on page 244.)

There are three types of forms, two of which, **Default** and **Custom** are created by the Genie. The third, **Blank Form**, is ready for your personal design. All forms can be modified to suit your needs.

- **Blank Forms** begin as a blank sheet of electronic paper.
- **Default Forms** contain every field in the table or set. These are the quickest to make, but often contain more fields than are useful for data entry.
- **Custom Forms** are also easy and quick to make. This style is more useful because it can be limited to specific fields.

In this exercise, we will briefly demonstrate the process for creating a **Default Form** and using **Stylesheets**. We will then create a simple, basic **Custom Form**. At that time we will illustrate how fields are placed on the form and will examine the components of **Form Design**.

Finally, we will create a new form from scratch so we can give the user all the Windows bells and whistles, including tabbed interfaces and embedded browses.

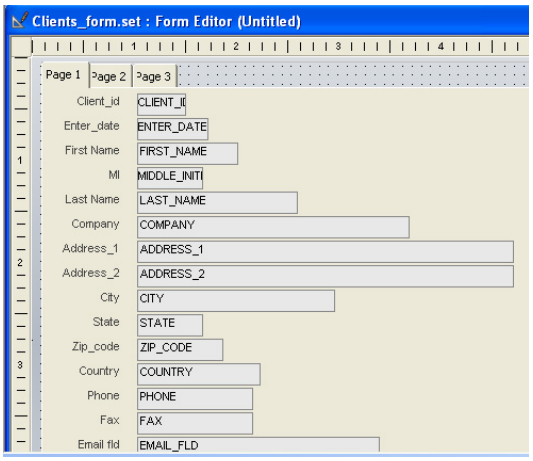
Creating a default form

The default form contains all the fields in the table or set. This is the most basic type of form and is designed completely by the genie, making it very simple to create. We will also look at the Alpha Five **Stylesheets** feature.

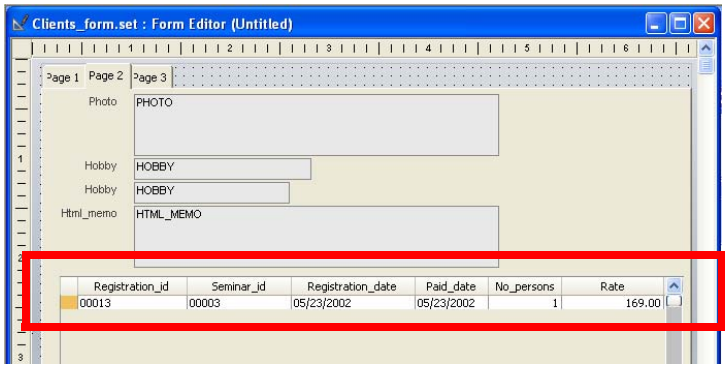
1. At the *Alpha Five Control Panel Tab*, click the **Forms** tab.

*. Depending on how Alpha Five is opened, the file extension **.adb** may not appear. (For instructions on opening an existing database, see "Opening an existing database" on page 14.)

2. Click **New** button.
3. *Data Source*: Choose **Clients_form (Set)**. (Click Next)
   - Sets are identified by a three-box graphic at the left of the listing.
   - A single box means it is a table.
4. Choose **Default Form (contains all of the fields in the Table/Set**.) (Click Next)
5. *Stylesheet*: Choose **Subtle Glass.**
   - Stylesheets will help your designs maintain a consistent appearance. There are several pre-designed stylesheets. Custom stylesheets can also be created.
   - Stylesheets are discussed at length page 517 in the **Bonus Pages**.
6. Click Next and then Finish.



- The Form Editor opens to a three page tabbed interface. The first page contains all of the fields in the one-to-one links in the set.
- The second and third pages contain the one-to-many links in the set. These appear as **Embedded Browses** (red box below).*



7. Click the Page 2 tab to access the page.

Previous to Version 9, you had to press the tab twice in Design Mode. Tabbed forms created in earlier versions may still require the tab to be clicked twice.

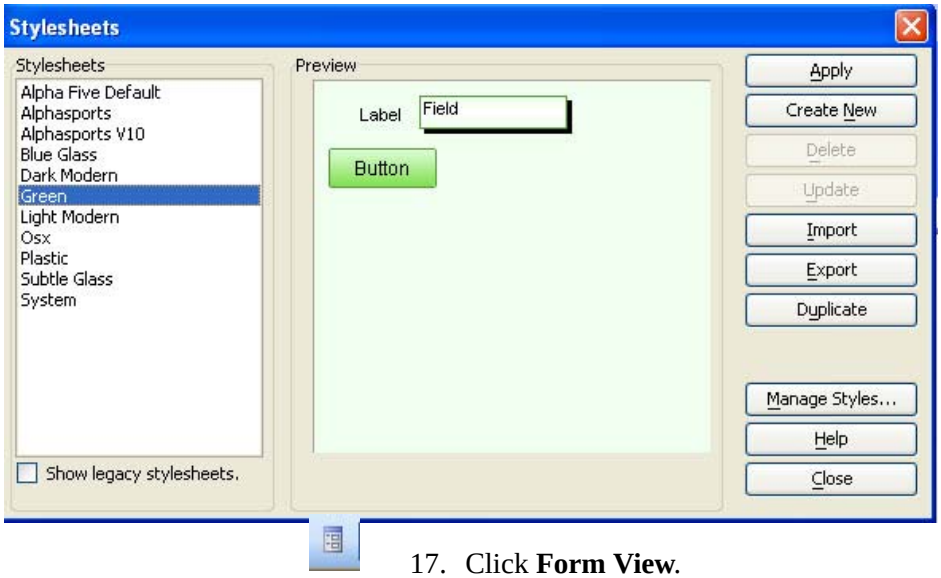
The Default Form may be edited. The positions of the fields can be changed and fields can be removed.

STYLESHEET GALLERY

8.  Click the button at the left of the top row of buttons (Form view) to see the results of the stylesheet selection.
   - It takes you from Design Mode to Form View.
9. Examine the background and font colors of the form.
10.  Click the top left again. (This time the bubble help says Design Mode.)

*. Embedded browses will be discussed in this chapter. (See “Creating an Embedded Browse” on page 113.)

11. Choose **Stylesheets** > **Apply or Create a Stylesheet** from the top menu.



- The Style Sheet Gallery appears.

12. Click on **Green**.

- The checkbox at the bottom will reveal "Legacy Stylesheets." These were created in earlier versions of Alpha Five. Feel free to choose one of these if it appeals to you.

13. Click **Apply**.
14. Click **Entire Form**.
15. Click **Close**.
16. Click the tabs to see the color changes.
17. Click **Form View**.
    - This view shows the new appearance with data.
18. Repeat above to experiment with some other styles, if you like.

MORE ABOUT STYLESHEETS

Look in the Bonus Pages! "Understanding Styles and Stylesheets" on page 517 gives instructions on creating custom stylesheets, as well as updating and managing them.*

19. Click X in the upper right corner at either Form View or Design Mode. Close the form without saving as follows:
    - Form view: Click **Cancel** at the "Save Form As" dialog box.
    - Design Mode: Click **No** at the "Save changes to current form" dialog.

Creating a Custom Form

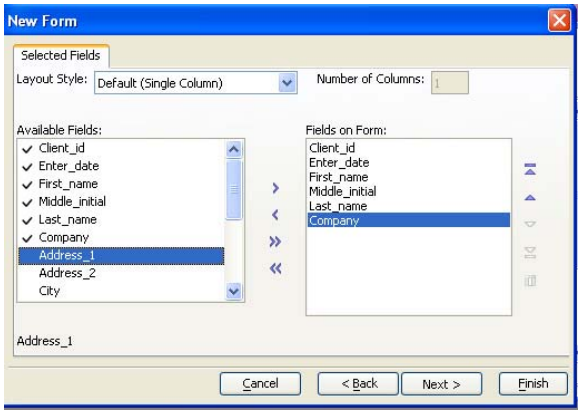
Next, we will create a form that contains specific fields. We will also examine the form design tools.

20. At the *Alpha Five Control Panel Tab*, click the **Forms** tab.
21. Click **New** button.
22. *Data Source*: Choose **Clients_form (Set)**. (Click Next)
23. Choose **Custom Form (contains fields that you select)**. (Click Next)
24. Select the following fields.

HINT!

For this type of field selection dialog, highlight your first choice and then click the RIGHT ARROW button repeatedly to enter your choices into the Fields on Form window. (In this case, click the button 6 times.)

*. See "Remember the Bonus Pages!" on page xiii.



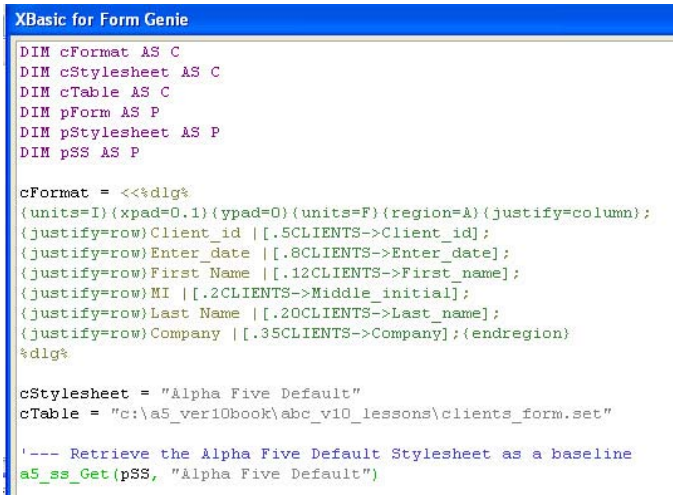
- Client ID
- Enter Date
- First Name
- Middle Initial
- Last Name
- Company

25. Click Next.

26. *Stylesheet*: **Alpha Five Default** (or any other you choose). (Click Next.)

VIEW XBASIC CODE

Now we will check out another very useful Alpha Five feature. Throughout the program are opportunities for you to view the Xbasic code that is created by the Genie. As you advance in learning the program, you can take advantage of this by cutting and pasting the code to your own scripts.



At this time, we will only look at the code. You will learn more about Xbasic in a later chapter.

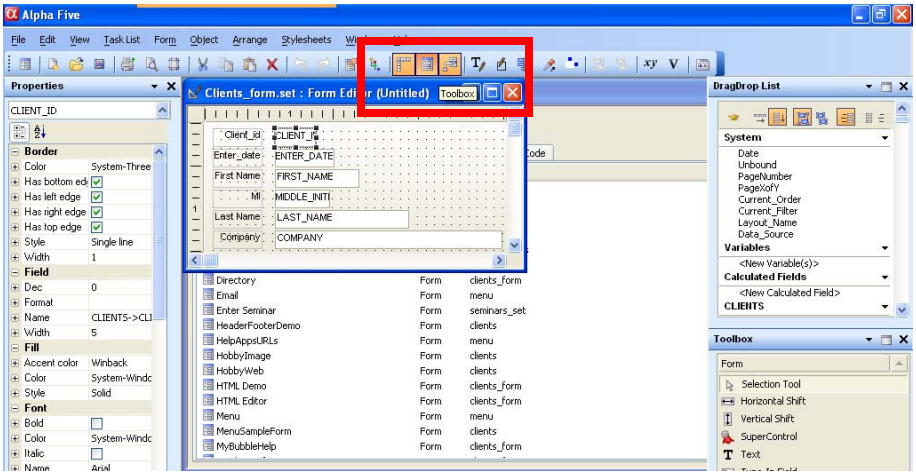
27. Click **Show Xbasic.**

- The Xbasic Form Genie window appears.

NOTE

No doubt, some of you are licking your chops, anxious to get your teeth into writing code. Others have faces that pale at the mention of it. To the first, I say "Be Patient," and to the second "Don't panic!" Alpha Five has been designed with both of you in mind. It can be used with or without the more advanced development vehicles.

28. Close the Genie by clicking the **X** in the upper right corner.



29. Click **Finish**.

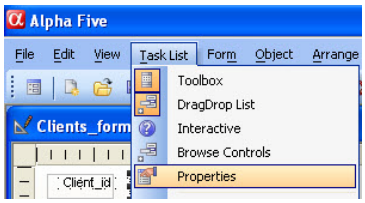
- The form opens with only the fields that we indicated.

THE DESIGN TOOLS

In the illustration at left, **Bubble Help** appears below the **Toolbox** button (red box) because the cursor is placed on the button. The following may also be seen in the screen shot.

- The **Top Menu** is the row of text options at the top of the window**.** See "Understanding the Top Menu" on page 75.

- The **Forms Toolbar** is the row of buttons below the **Top Menu**. See “Understanding the forms toolbar” on page 79.
- The **Toolbox** and **DragDrop List** are at the right. If you do not see them on your screen, click their buttons on the **Forms Toolbar**. The buttons turn orange when they are pressed. See “Using the Toolbox” on page 91 and “Using the DragDrop List” on page 95.



- The **Properties Dock Panel** is at the left of the screen. If you do not see it, choose Top Menu > Task List > Properties. see “Using the Properties Pane” on page 102.

We will also use:

- The **Right Click Menu**.

30. Hover your cursor over the **Company** field.
    - Bubble help gives you information on the field.
31. Click the **Company** field to give it focus - black boxes surround the field.
    - The Properties Dock Panel (aka Properties Pane) changes to show the available selections for the field.
32. Right click on the field to see the **Right Click Menu**.*

- Next, we will examine all the design tools in detail.

Understanding the Top Menu

PLEASE TAKE A MOMENT TO READ THIS

As in most Windows programs, many of the sub-menu items are duplicated elsewhere; we will define only those that are unique. Open the menus as you read along to become familiar with the extensive features.

- **File** and **Edit** menus contain typical Windows items and their Keyboard Shortcuts.
- **View**
  - **Trace Window.** Alpha Five reports errors here. (See “Understanding the Trace Window” on page 482.)
  - **Script Recorder Window**. Scripts are custom actions that you can create for your application. This handy tool will allow you to create scripts by recording your selections.
  - **Code Editor**. Allows you to create and edit scripts.
  - **OLE Automation Browser:** Allows you to investigate the properties, methods, events and constants of ActiveX controls on your computer. (Advanced)
  - **HTML Editor.** Allows you to create web pages.
  - **Debugger**. A tool for proofing scripts. Totally revamped for Version 10.

*. (See also “Using the Right Click Menu” on page 86.)

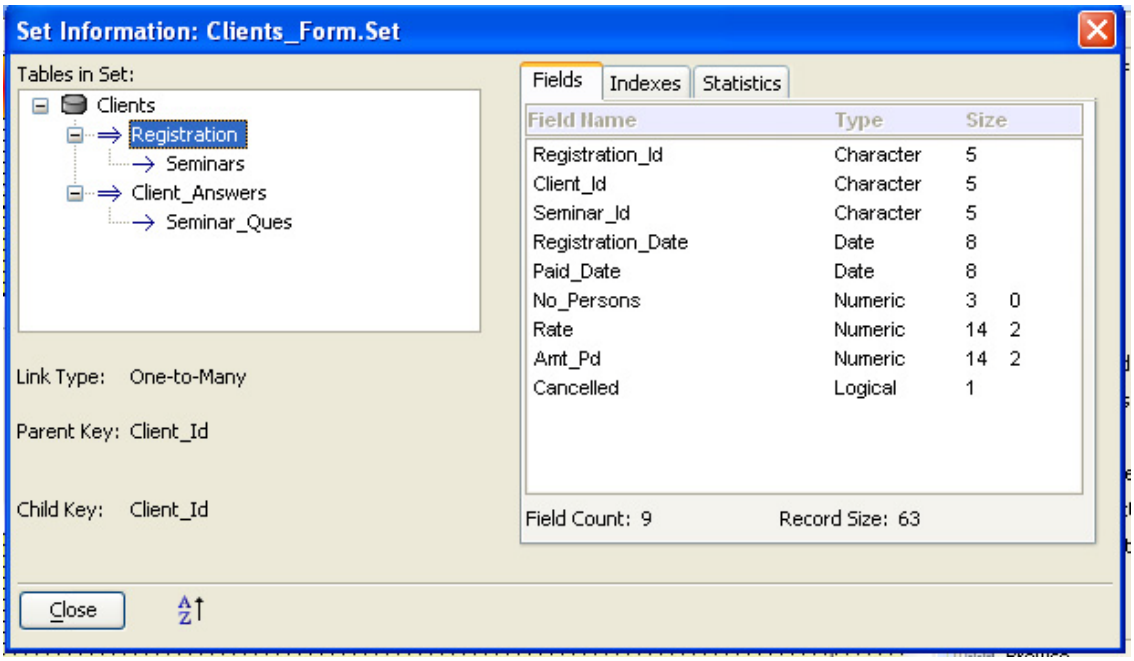
VIDEO HELP*

Go to Top Menu > Help > What's New in Version 10 > Desktop Applications > Debugger.

- **Status Bar**. Information bar at the bottom of the screen. Toggles Show / No Show.
- **Window Bar**. Buttons at the bottom of the screen that access the Control Panel and other open windows. Toggles Show / No Show.
- **Settings**. Global preferences for the database.
- The next seven items are duplicated by buttons. See "Understanding the forms toolbar" on page 79.
- **Object bubble help** can be turned on or off. It appears when you hover the cursor over an object (field, label, etc.) on the form or the DragDrop List.

VERY USEFUL IN FORM AND REPORT DESIGN

- **Structure Information** shows the tables in the set and their relationship.The double bar arrow indicates one-to-many. The single bar arrow means the relationship is one-to-one.



a. Click on **Structure Information**, then click on a Table.

b. Click on the **Fields** tab.

- The fields in the table are listed with their type and size.

c. Click the A-Z button at the lower left. The fields are shown in alphabetical order, helpful for a large table.

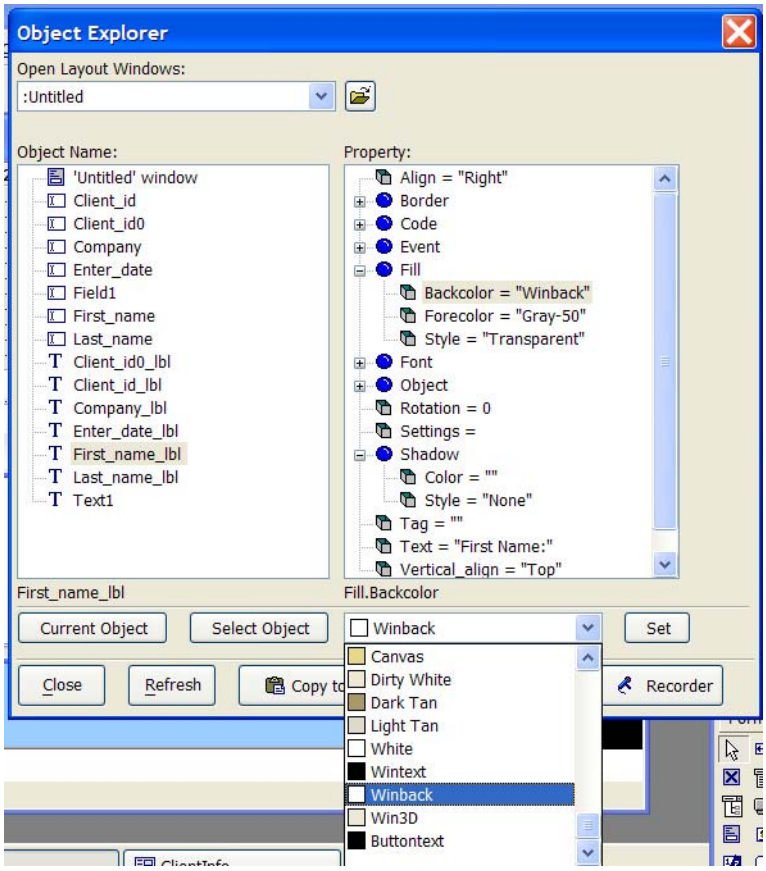
d. Click on the **Indexes** tab to see those created for each table. (See "Understanding Indexes" on page 326.)

e. Click on the **Statistics** tab to see how many records exist and other information about the Table.

*. There are several videos in Top Menu > Help > What's New in Version 10. Look for the camera icon.

f. Click CLOSE.

g. Click VIEW on the Top Menu to reopen the list.



- **Object Explorer** shows all properties of all objects on the form. *

ADVANCED

If you are new to form design, you may skip ahead to "Task List" on page 77. Come back here after you finish this chapter. It will have more meaning at that time.

a. Choose **Object Explorer**.

b. Click on first_name_lbl (label).

c. Drill down† a couple of categories to see the Properties that can be changed in both Design and Form Views.

d. Changes are made by choosing from the lower window and clicking **Set**.

NOTE

This feature is best used in Form View for quickly modifying an object without returning to Design Mode because there are easier ways to set these properties in Design mode.

e. Click **Close.**

f. Go to **Form view**.

g. Re-open the **Object Explorer**.

h. Place your cursor in a text box.

i. Click **Current Object** to quickly go to the object you want to modify.

j. Experiment with options to change font, color, etc.

ROLL- UPS

Certain windows can be rolled up so they can remain handy, yet are out of the way.

k. Click **Roll-Up**.

l. Click **Expand Object Explorer**.

m. Click CLOSE

n. Return to **Design Mode** and then reopen the **View** list to continue.

- **Code Explorer** lists the Events (see below) that have been designed for the form. Modified for Version 10 to allow code to be edited.
- **Task List**

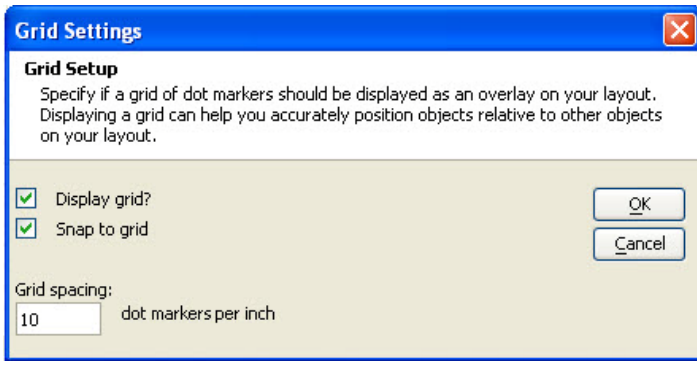
*. **Xbasic scripts:** A primary use for the Object Explorer is to quickly find the name of the object in a form with many fields. This can be useful in Xbasic scripts. For more information, go to A5 Help > User Guide > Form Design > Object Properties > Object Explorer. This entry also contains an interesting discussion on the names of objects. The name of the object may also be found by right clicking on the field in Design Mode and choosing Properties.

†. **Drill down** means to click on the + sign next to the menu item to open the next set of selections.

- **Toolbox** and **DragDrop List** are duplicated on the Forms Toolbar (see "Using the views" on page 89 and "Using the DragDrop List" on page 95.).
- **Interactive** opens a window at the lower right where a line of code may be tested.
- **Browse Controls:** Allow you to insert buttons and images in both Embedded and Stand Alone Browses. (See "Using Browse Controls" on page 98.)
- **Properties:** Opens the Properties Pane aka Properties Dock Panel.
- **Restore Default Layout** opens the **DragDrop List** and **Toolbox** at the right side of the screen, one above the other.

• **Form**

- **Form View** is the same as the left button on the *Toolbar*.
- **Form Properties** contains settings for the form.
- **Events** are actions that can be set for the form using Action Scripting or Xbasic.



- The **Grid** is on the background of the form in *Design Mode*.

a. Click **Grid** to open.

b. *Grid Spacing*: The default is 10 dot markers per inch.

- *Grid Spacing* affects the distance between fields as they are dragged onto the form. To have the fields touching, accept the default of 10. To space them apart, try a larger grid.*

c. *Snap to Grid* means that objects move to the grid when they are near it. This helps align items. Snap may be turned off.

d. *Show Grid:* You may elect to show or not show the grid.

e. Change the *Grid Spacing* to 15.

f. Click OK to see the change in the grid, then reopen the Form menu.

g. Reset the spacing so that objects are touching (10 dot markers per inch) because we will use that setting for our exercises. (Click OK)

- **Dynamic Guidelines:** Aids for lining up objects on the form. Toggles on/off. We recommend you keep them on. (See "Using Dynamic Guidelines" on page 86.)
- **Calculated fields** and **Variables**†. (See *Toolbar* below)

• **Object**

- **New** covers the same tasks as the *Toolbox*.
- **Properties**: (see *Toolbar, Right Click Menu* and *Hot Keys below.*)
- **Events** (see *Toolbar, Right Click Menu* and *Hot Keys below.*)
- **Pop-up Event Editor** (see *Toolbar* below).

*. See step 3 on page 125.

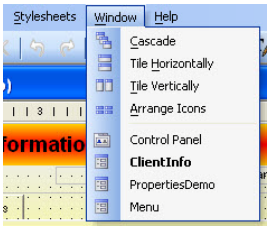
†. See "Introducing Variables" on page 433.

- **Size-to-Fit** (see *Right Click Menu below* and *Arrange Toolbar.)*

- **Arrange**
  - Most of these items are on the *Arrange Toolbar.*
  - **Set Tab Order** sets the order of movement from field to field by the TAB key.

    By Example (see *Toolbar* below)

    By Table: Fields are listed and may be moved up or down.
- **Stylesheets**
  - Consistent colors and fonts make an application more pleasing to the end user.
  - See "Stylesheet Gallery" on page 72, and **Bonus Pages**: "Understanding Styles and Stylesheets" on page 517.
  - See also *"Using the Right Click Menu" on page 86* for additional Stylesheet aids.
- **Window:**



  - **Cascade, Tile Horizontally, Tile Vertically, Arrange Icons** are typical Windows choices.
  - **Open Windows:** Items after the thin gray line are open Alpha Five windows. This is a handy method for moving back and forth between open windows, especially if you like to work with the View > Window Bar closed to allow for larger work space. The form with focus* (**ClientInfo** in example at left) is bolded.

Understanding the forms toolbar

In addition to some common Windows buttons, the Toolbar contains very useful form design buttons.

33. With your mouse, hover the cursor over the top row of buttons to become familiar with their descriptions and short cut keys.

- Reading left to right, the first set of buttons activate:

  a. *Button 1*: **Form View.**

HINT!

You can switch back and forth between Design and Form Views while testing the design. While you are not required to save design edits when testing in Form Mode, it is recommended that you become a **Frequent Saver**.

b. *Buttons 2, 3, 4*: **New Layout, Open layout, Save Layout.**

c. *Buttons 5, 6, 7*: **Print, Print Preview, Print Setup**.

d. *Buttons 8, 9, 10, 11*: **Cut, Copy, Paste, Delete**.

*. The active window is said to have "focus."

e. *Button 12:* **Undo.** Keyboard shortcut is ALT + BACKSPACE.*

f. *Button 13:* **Redo**.

Several layers of Undo and Redo are available. As in other Windows applications, once the record is saved, previous Undo's and Redo's are lost. (The button will be greyed out when the option is not available.)

g. *Button 14:* **Properties**. All objects have properties that can be viewed and adjusted here. (Also has **Right Click Menu** and **Hot Key** options (F12) that we find more useful.)

h. *Button 15*: **Events** that have been designed for the form or object can be viewed here. Window launches the Script Editor. (Also has **Right Click Menu** and **Hot Key** options (F11) that we find more useful.)

IMPORTANT NOTE

These menu options are **Context Sensitive**. When the Form has focus, Form Properties are displayed. When a different object has focus, its properties come up. The same is true for Events.

- The following buttons toggle between **Show** and **No Show. (**Orange color means they are showing.)

i. *Button 16*: **Rulers.**

j. *Button 17*: **Toolbox.** Contains form design tools.

k. *Button 18*: **DragDrop List.** Contains available fields for easy placement on form.

We recommend working with Rulers, Toolbox and DragDrop List in the Show position. They may be toggled off when they are in the way.

The following can be turned on and off depending on the task at hand.

l. *Button 19*: **Text Toolbar.**

m. *Button 20*: **Border Toolbar.**

n. *Button 21:* **Arrange Toolbar.**

o. *Button 22*: **Copy Format Toolbar.**

p. *Button 23:* **Anchor Toolbar**†

q. *Buttons 24, 25:* **Group** and **Ungroup**. Also available on the *Arrange Toolbar.*

- These buttons open lists for editing purposes.

r. *Buttons 26, 27*: Display the **Calculated Fields** and **Variables** that have been designed for this form.

- Note these buttons only work when Calculated Fields and/or Variables have been designed for the form.

s. *Button 28:* **Alpha Five Control Panel:** This button functions the same as the Control Panel tab at the bottom left of the screen. It is always placed at the far right side of the current toolbar for easy access. It quickly brings the *Alpha Five Control Panel* to the front position.

*. Windows Undo keyboard shortcut, CTRL + Z is not enabled.

†. Also called Stretch Toolbar.