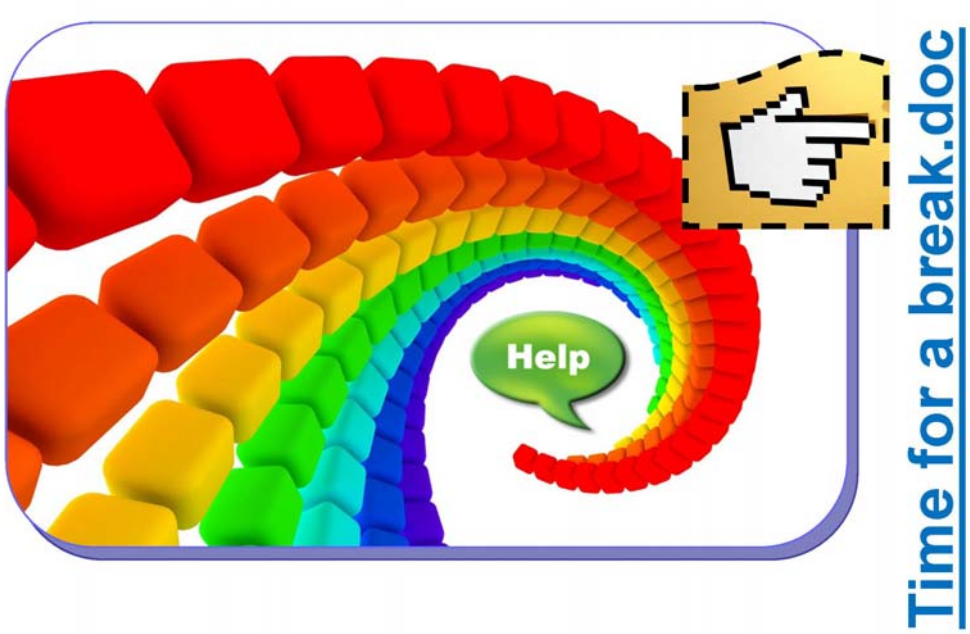
Chapter 11.

Buttons, Hyperlinks & Bubble Help



Buttons and hyperlinks are a pushover with Alpha Anywhere – and so is Bubble Help…

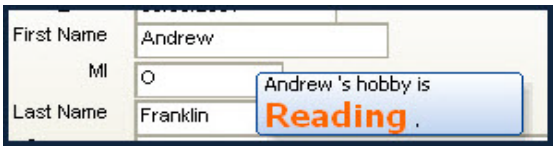
Just a few simple steps and you will be creating all types of buttons and hyperlinks. They can open forms and browses, print reports and letters and run complex operations. Alpha Anywhere lets you dress up buttons with built-in and custom graphics or keep them plain and simple. The choice is yours.

We'll start you on the road to some pretty exciting bubble help, too.

Overview

While the basic topics covered here are buttons and bubble help, the sub-topics are quite diverse. So we thought a chart of what to find where would be helpful when you design your own application. As always, exercises are created in "teaching order," so look around for what you need. Details are in the Table of Contents and Index.

Don't miss out!



Learn how to use the HTML editor to give your forms Bubble Help with a bang. Here's a peek at a lesson in *Enhance Your Desktop App!*

•Bubble help can keep your forms from becoming too crowded. Imagine using the customer's hobby to personalize a phone conversation.

a. *Control Panel* > *Forms* tab: Double click on **BubbleHelp** to open in View Mode.

b. Hover the cursor over the **First Name** field. We have set a delay, so it will take a moment to come up. (Not all records have hobbies entered, so page through the records.)

c. Put your cursor over the company, city and photo fields to get more ideas for **your** app!

Who needs this?

This chapter shows how to place buttons and hyperlinks on desktop forms and to use bubble help for the same.

These features are also available for web components. They are covered in *Alpha Five Web Applications Made Easy, The Basics and More* by Susan Hussey Bush. Available at www.libertymanuals.com.

Preparation for the Lesson.

Open Alpha Anywhere and navigate to the following file:

- c:\Alpha_MadeEasyDesktopBook\ABC_DesktopLessons\ 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.

What's ahead in this chapter


PLEASE TAKE A MOMENT TO READ THIS

Buttons are like the icing on the cake. After all the hard work we've done so far, you'll have fun with this chapter. We'll create buttons that print a report we created earlier, run the series of operations we made in Chapter 10, add A-Z directory buttons to a form, and, coolest of all, open a web component without even putting it on a form.

In addition, we'll show you how to make a hyperlink without writing code, how to customize fly-over effects and learn button help basics.

This chapter also introduces another Alpha Anywhere wonder, *Action Scripting*. While you follow a series of prompts, Action Scripting writes the Xbasic code in the background.

Sweet!

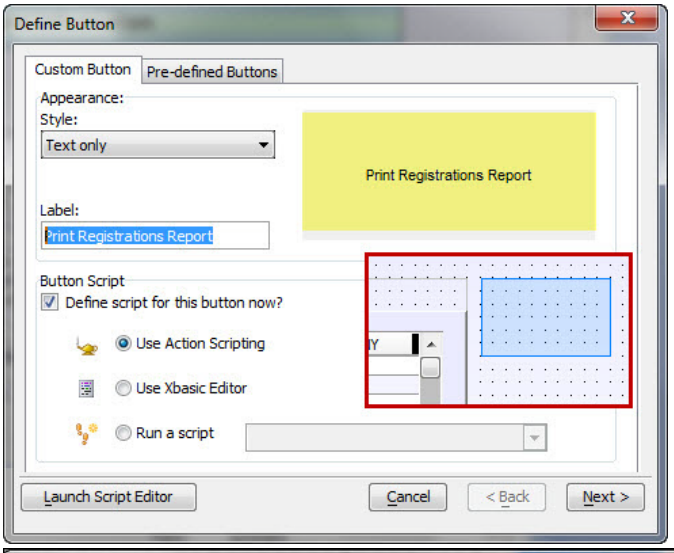
Creating a Button that Prints a Report

It certainly would be awkward for the end user to have to go to the control panel to search for the proper report in order to print it. Action Scripting makes it easy to run it with a button.

- This exercise will use the demo report, *ClientRegistrationsFF.*

1. Control Panel > Forms tab: Open **ClientInfo_Buttons** in Design Mode. (If you did the exercises in Chapter 7, open the *MyClientInfo* form.)
2. *Toolbox:* Click the Button control.

*. Depending on how Alpha Anywhere is opened, the file extension **.adb** may not appear. (For instructions on opening an existing workspace, see "Opening an Existing Workspace" on page 23.)



3. Draw a box on the blank area to the right of the Tabbed object (inset at left).

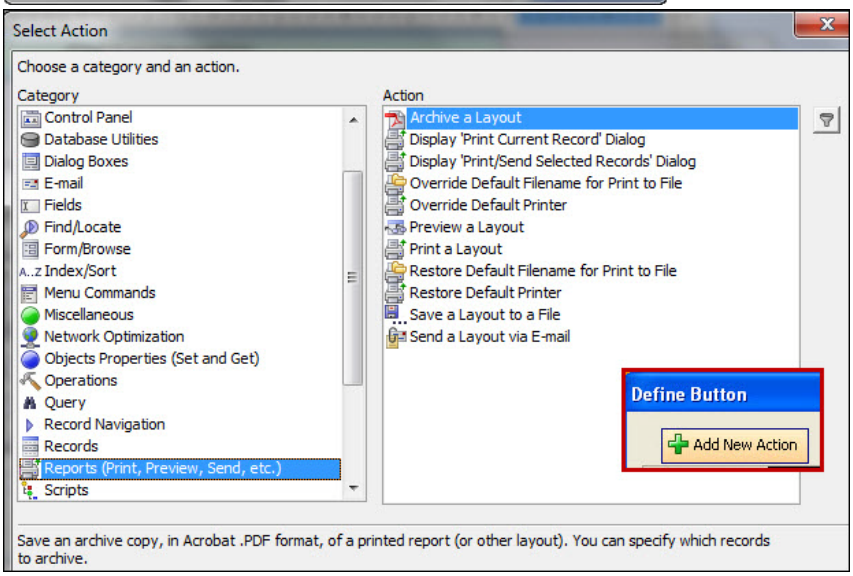
Dialog: Define Button

4. *Label:* Overwrite Script with **Print Registrations Report**.

• The preview window (yellow) shows how the button will look initially. Once the button is created, we will refine its appearance.

• *Style:* Buttons can have text and/or bitmaps (graphics). We will add them later at the Properties Pane instead.*

5. *Button Script:* Choose **Use Action Scripting**. (Click Next)



Using Action Scripting

Action Scripting writes the Xbasic code in the background, so all you have to do to is pick from the menus.

Dialog: Define Button (page 2)

6. Click **Add New Action** (inset) and use the following settings:

Dialog: Select Action

a. *Category*: Choose **Reports (Print, Preview, Send, etc.)**

b. *Action*: Choose **Preview a Layout**. (Click OK)

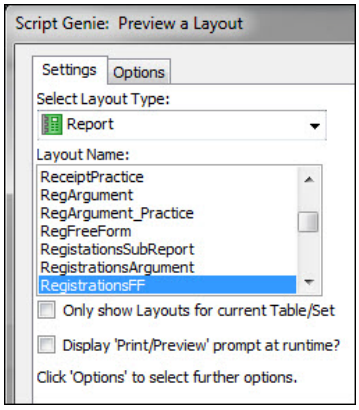
PRINT VS PREVIEW

• **Print:** If there is no record, Alpha Anywhere sends a message to the printer and a page is printed that says there is no record.

• **Preview:** If there is no record, the users is notified on screen.

We almost always use Preview because we like to know right away if there is an error. Admittedly, it is an extra step and there are times when going straight to the printer saves time. Also, there is another way to add the options (step 8 below).

*. If you want to use this window, choose the Style, click Define Picture, choose Internal and click the up arrow. Then follow from step a on page 369.



Dialog: Script Genie: Preview a Layout

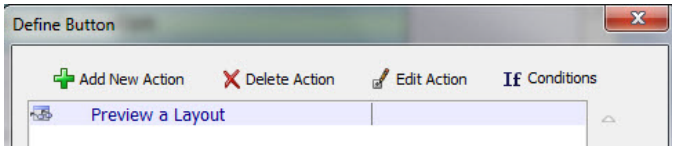
7. *Layout Name:* Choose **RegistrationsFF**.

8. *Display 'Print/Preview' at runtime?* **Yes.**

- This actually means: Display the *Print Method* dialog that has both Print and Preview radio buttons (screen shot at "Print Method dialog" on page 368).
  - If you choose Yes, the dialog at will appear.
  - Selecting No here will send the report straight to Preview or to the Windows Printer dialog.

9. Click NEXT.

10. *Select Records to Print*: No additional selection criteria. (Click Finish)



- The Action Script appears in the Define Button dialog.
- There is one thing missing. If we came back later to see what report was printed, we would have to click Edit Action to look inside. From experience, we have learned its best to make a notation first.

Using the Script Editor

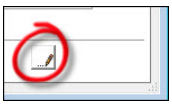
The Define Button dialog above has only an abbreviated editor, so we prefer to use the full Script Editor. The problem is that you can't activate it for use with Action Scripting until you have entered the first one.

The main reason we like it better is because the action can be identified as you go along. Trust me, you *will* need to return six months from now to review a script. If you have entered the name of the report or form, etc., your job will be much easier.

Dialog: Define Button

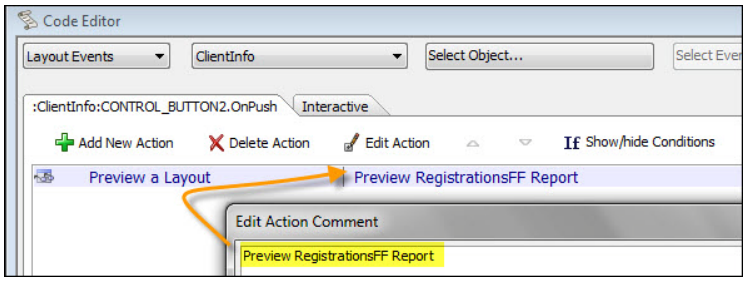
11. Click the **Launch Script Editor** button at the bottom of the screen.

CODE EDITOR



Dialog: Code Editor

12. Click on the teeny tiny pencil at the bottom right of the screen to open Edit Action Comment (yellow below).



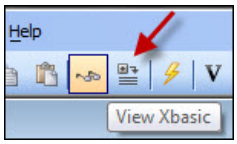
Dialog: Edit Action Comment

a. Type: **Preview RegistrationsFF report.**

b. Click OK to put the comment in the Code Editor.

Since we're here, let's look at the code – this is the Code Editor, after all.

VIEW / CONVERT TO XBASIC



There are two buttons on the toolbar that (1) View the Xbasic created in the background by the Action Scripting genie (orange at left) and (2) Convert the script to Xbasic (arrow).

In the former, you can copy all or part of the code as usual. In the second, the code is actually converted (can't be undone).

13. Click **View Xbasic**. Take a look and then click Close.

FUTURE XBASIC USERS

Are you beginning to see how the code is developed?*

NON-PROGRAMMERS

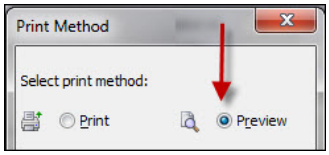
Now see, that wasn't so scary after all!

14. CTRL + S to save the Action Script; close the Code Editor.
    - The button appears.
15. CTRL + S to save the form changes; go to Form View.

- We saved the code, but the form must also be saved in order for the changes to hold. It is not necessary to do it each time you go to Form View, but it is a good practice.

16. Click the button to test it out.

PRINT METHOD DIALOG



- In step 8 we told Alpha Anywhere to display the *Print Method* dialog. The radio button is set at Preview because we selected **Preview a Layout** in step b on page 366. Had we chosen to **Print a Layout** at that time, the *Print* radio button would be set as the default.

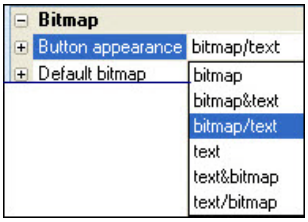
17. Click OK to preview the report.

18. Look it over and then click **Exit Preview** to close the report.
19. At the form, return to Design Mode.

Enhancing the appearance of a button

Next we will add a graphic (aka bitmap) and change the background and font color of the button. Then we'll add bubble help to give the user additional information.

20. Click on the button to select it.



BITMAP / TEXT OPTIONS

You can choose to show only a bitmap (graphic) or only text or a combination of the two. There are several appearance choices. (If necessary, stretch the right side of the pane to make it wider so you can see them.)

- Bitmap & text puts them side-by-side.
- Bitmap/Text puts the graphic above of the text.

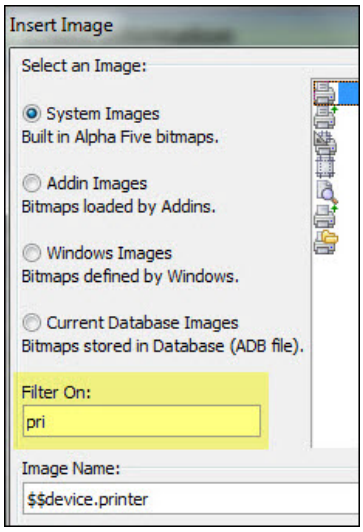
PROPERTIES PANE: CONTROL_BUTTON1

*. A good time for a plug for Dr. Peter Wayne's *Xbasic for Everyone* book. Available at www.libertymanuals.com.

BITMAP

- *Button appearance:* **Bitmap/Text**.
- *Default bitmap:* (see below)

a. Default bitmap: Click the button.



Dialog: Insert Image

Alpha Anywhere has a built-in library of images that you can use on buttons.

b. *System Images*, *Addin Images* and *Windows Images*. Click each to see their images.

- *Current workspace images:* You can develop your own gallery of bitmaps (see "Adding Custom Graphics for your Buttons" on page 380).

QUICK PICK

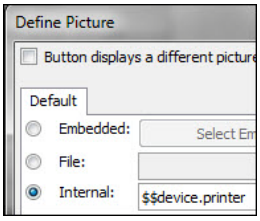
Since the library list is so long, it could take a while to find the right symbol. We can shortcut the process by entering a filter that will reduce the selection.

c. Click *System Images* (default).

d. *Filter On:* To find graphics suitable for printing, type **pri** as at left.

e. Choose the top icon or any other to enter the image name in the bottom box.

f. Click INSERT.



The name will no longer be available at the Properties Pane, but you can see it at Object Properties.

OBJECT PROPERTIES (F12): SETUP TAB:

a. Click Define button bitmaps.

b. Cancel out of Object Properties.

PROPERTIES PANE: CONTROL_BUTTON1 (CONT.)

FILL

- *Accent color:* **Pale blue.**
- *Color:* **Turquoise.**
- *Style:* **Gradient Horizontal**.
  - Notice that even though we used the same colors as the header, the effect is slightly different because we used a different gradient style.

FONT

- *Bold:* **Yes.**

HELP

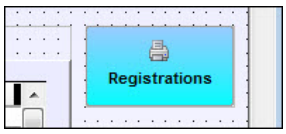
- *Bubble Help:* **Preview/Print Registrations Report.**
  - Bubble help is discussed in detail on page 396.

MISC

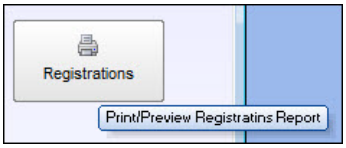
- *Text:* **Registrations.**
  - Since we now have a printer icon and bubble help, we can shorten the button name from *Print Registrations Report* to *Registrations*.

Adjusting button placement on the form

The process for moving, sizing and aligning buttons is the same as for other objects on a form: You can also evenly space a series of buttons by using the *Arrange Toolbar* and copy formatting from one to another with the *Copy Appearance* toolbar



21. Resize the button so it is just large enough for both graphic and label.
22. Align it with the top of the Tabbed Object.
23. Save the form and go to Form View.
    - The button takes on the appearance of the settings we applied.
24. Move the cursor over the button (hover) to see the Bubble Help.
    - Notice that hovering turns the button white, We will customize that effect next.



25. Return to Design Mode.

Customizing a fly-over effect

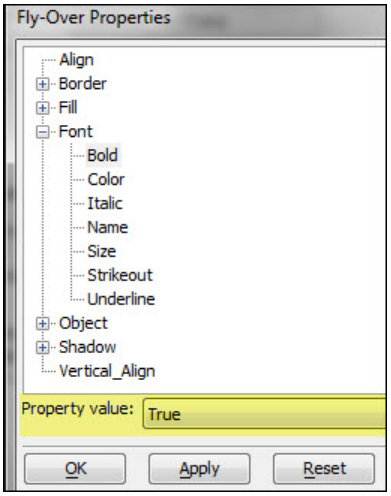
The effect that occurs when you hover (move your cursor) over the button, is known as *Fly-Over*. By default, new buttons have it set to white with black text as above. That can easily be changed – or it can be turned off completely.

There won't be any changes to see at design mode, you have to go to Form View to see the effect.

OBJECT PROPERTIES (F12): CONTROL_BUTTON1

SETUP

- *Fly-over Effects:* **Yes**.
- *Set Fly-over Appearance:* Click the button.



The settings can be made in a batch or you can click Apply after each one. Changes are made in the *Property value* box at the bottom.

- **Apply button:** Saves current edits.
- **Reset button:** Reverts an edit back to the default. In other words, if you set Bold = True, click Apply and then click Reset, it will return to False.
- **OK button:** Saves all edits and closes the dialog.

c. Choose the following settings:

- Border: *Color*: Red.
- Fill: *Color:* Yellow; *Style*: Solid.
- Font: *Bold* = True

d. Click OK (twice).

26. Save the form and go to Form View.
27. Hover over the button to see the new formatting.
28. Return to Design Mode.

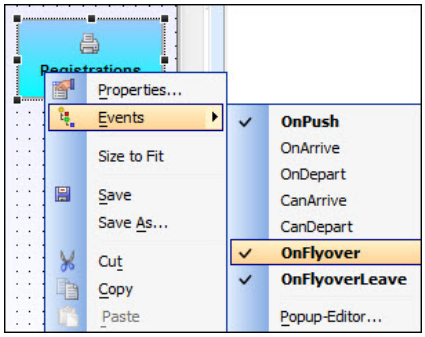
Understanding button events

All objects, including the form itself, have events as well as properties. As expected, events are milestones in the life of an object. On your birthday, you

might expect to mark the event with a cake. When you create a button, you want something to happen when it is pushed. This event is called **OnPush**.

The list of events for a button are *OnPush*, *OnArrive*, *OnDepart*, *CanArrive*, *CanDepart*, *OnFlyover* and *OnFlyoverLeave*. Actions may be set for each.

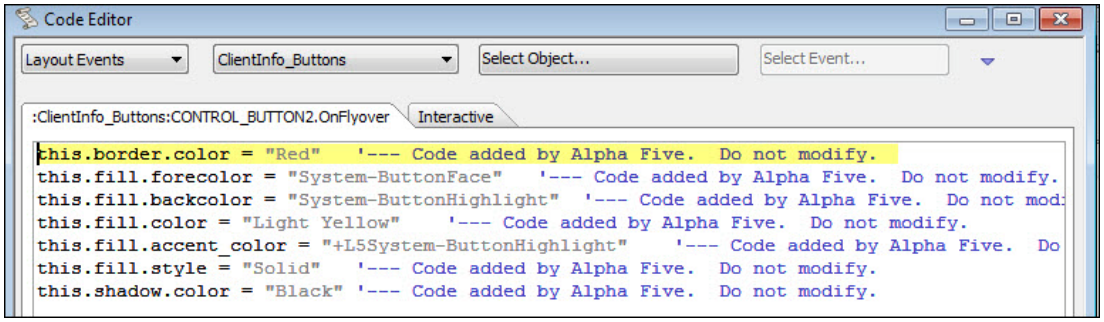
- Alpha Anywhere writes the Xbasic in the background as you make menu choices. Next, we'll take a look at the event for the OnFlyover effect that we just created.



29. Right click on the button you just made. Choose Events and inspect its submenu.
    - *OnPush* is checked and bolded because the Button Genie placed our actions in that category when we created the button.
    - *OnFlyover* is checked and bolded because we set Flyover in the Properties dialog box.

• *OnFlyoverLeave* is checked and bolded. The action to return to the original state is automatically created when *OnFlyover* is selected.

• Xbasic is constantly being written in the background as you make menu choices.

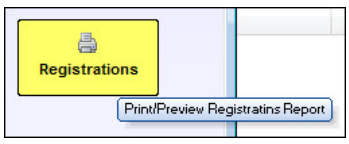


30. Choose **OnFlyover**.
    - The Code Editor shows the Xbasic syntax.
    - The properties are black.
    - The settings are gray with quotes.
    - The annotations — comments — are in blue.

Notice that the annotations begin with an apostrophe ['] telling Alpha Anywhere to ignore the text.

MODIFY XBASIC

At the end of each line is the warning, "Code added by Alpha Anywhere. Do not modify." This notation simply means that things may not work properly if you modify the script. You can ignore the warning as we will do now – just be careful of the changes you make.



a. Change the border color (1st line) from red to black.

• Remember to keep the quotes!

• You may also copy any part of the code and put it in another script.

b. Save and close the Code Editor.

31. Press F11 to see the events for the following objects (double click works for some, but not all).

- The background of the form, the tabbed object, the browse, a field.

32. Save the form and test the fly-over effects at Form View.
33. Close the form.

Setting Multiple Actions for a Button

PLEASE TAKE A MOMENT TO READ THIS

This is one of my favorite sections. It takes all those operations we created in Chapter 10 and ties them into a tidy package for the end user.

There will be two buttons. The first will chain several actions together. In addition to running the operations, we will open and close a report and finish with a browse that shows the state of the tables before deletion of the duplicate records.

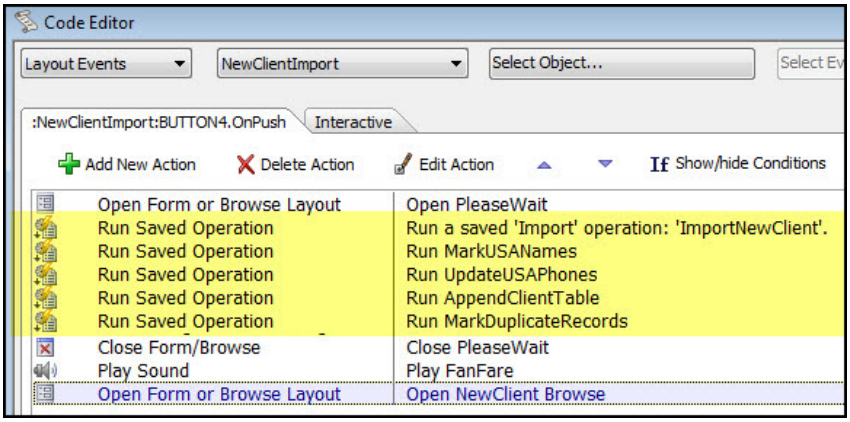
At that point, the end user can review the marked records and, if necessary, manually unmark any that should not be deleted. For example, we used First Name, Last Name and Company as the criteria for marking the records. We did not include Middle Initial. It is possible that John J. Jones and John K. Jones both work for XYZ Company. One of these records would need to be unmarked manually to exclude it from the delete operation.

The second button, already created for you, completes the script by deleting the duplicate records.

Action Scripting makes the process simple. Here's the plan.

a. When the button is clicked, a *PleaseWait* form will open. It asks the user to wait for the data processing to be completed.

b. Then, five operations will run without interruption by confirmation dialogs.*



- Import records: **NewClientImport**.
- Mark records: **MarkUSANames**.
- Update records: **UpdateUSAPhones**.
- Append records: **AppendClientsTable**.
- Mark duplicate records: **MarkDuplicateRecords.**

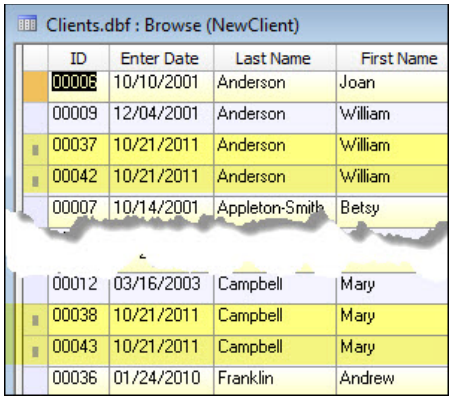
c. The action continues by:

- Closing the *PleaseWait* form.

*. If you completed the exercises in the previous chapter, you will be familiar with the confirmation dialog boxes that appeared as each operation was run. When running a series of operations, the dialog boxes would each need to be confirmed by the user in order to continue to the next operation. Since they are unnecessary for the first button, we will have the operations *Run Silently*. In other words, we will suppress the dialog boxes.

In the second button, we kept the dialog box that asks for confirmation of record deletion, in case the button was pressed accidentally.

- Playing a sound to alert the user that the data processing is completed.



•Finally, a browse will open so the user may view the records to this point.

NOTE
We have included the above series of operations and will use them for the instructions. If you did the exercises in the previous chapter, you may use the ones you created.

Save, save, save as you go along.

1. Open the **NewClientImport_practice** form in design mode.
2. Create a new button under the Import List label.
3. *Label*: **Import Client List**. (Click Next)

ACTIONS #1-5

4. Click **Add New Action** and select the following choices.
   a. Category: **Operations**; Action: **Run Saved Operation**. (Click OK)
   b. *Tab: Operation: Type:* **Import records**; *Name*: **NewClientImport**.

SUPPRESS CONFIRMATION DIALOG

The next step suppresses the confirmation dialogs. If you forget it – and we do all the time, it can be added later.

   c. *Tab: Options:* **Run silently**. (Click Next and Finish)

As we discussed earlier, the Define Button genie does not have a way to enter comments nor does it have a Save button. So, we're off to the Script Editor.

5. Click **Launch Script Editor**.
   - The Code Editor opens and looky there – it created the comment for us. Comments for some actions are built in, but as we learned earlier, not for all.

- Next, we will add four more actions to the script. Begin each by clicking Add new action, click Next as necessary and end by clicking Finish.

#	Category	Action	Tab: Operation	Tab: Options	Name	Comment
2	Operations	Run Saved Operation	Delete, Mark/ Unmark records	Run silently =Yes	**MarkUSANames**	Run MarkUSANames
3	Operations	Run Saved Operation	Update records	Run silently =Yes	**UpdateUSAPhones**	Run Update USAPhones
4	Operations	Run Saved Operation	Append records	Run silently =Yes	**AppendClientsTable**	Run Append ClientsTable
5	Operations	Run Saved Operation	Delete/Mark/ Unmark record	Run silently =Yes	**MarkDuplicate Records**	Run Mark DuplicateRecords

- At this point, the list looks like the yellow section on page 372.