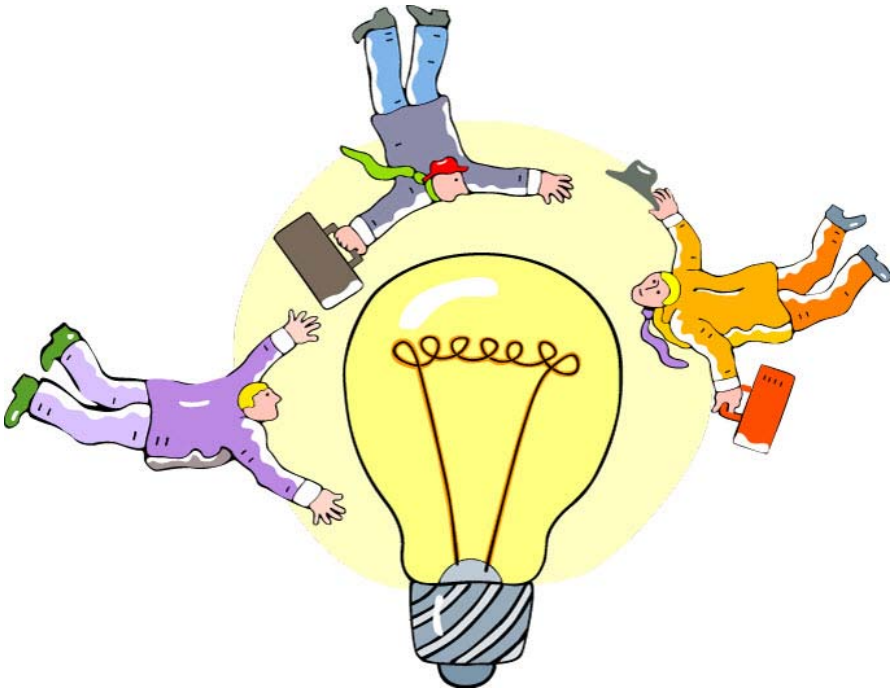
Chapter 8.

# *Dynamite Dialogs*



### *Connect around a great idea…*

Dialogs open communication with the end user.

- Want to have the end user fill in his/her name and address information? Use a Dialog.
- Want to have the end user fill in his/her User Name and Password? Use a Dialog.

Once the data is submitted, you can use it in an almost endless variety of ways. We'll show you how to enter it into tables – Oh, yes, and did we say we'll do it quickly and without writing code? Of course we will!

# *What you'll find here…*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## *Component Re-Views*

- For a pictorial review of components in this chapter see page 459.

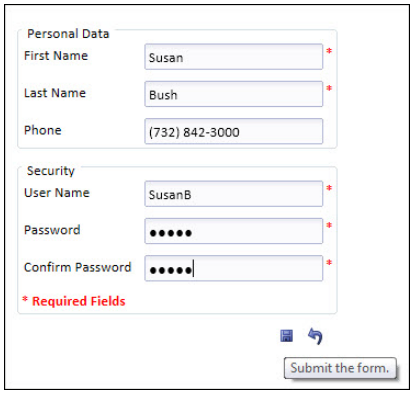
## *How the material is organized*

Remember way back in Chapter 1 we told you that Dialogs are really important to mobile? The reason is that they are very "lightweight" and therefore relate well to mobile applications. You will hear lots more about that in upcoming Alpha Five versions, but for now the important thing to know is that, if mobile is in your game plan, you need to understand dialogs.*

**And.** They are for web applications, too. That means everyone should become familiar with the material in this chapter.

**And.** You won't believe how simple they are to design and use.

**So.** Let's get busy and dig into yet another amazing Alpha Five tool.




## What is a dialog?

A dialog is a form that asks the end user for information. For example, when you buy something on the web and fill in the name/address form – or register your name and security information as at left – you are using a dialog. The information is then evaluated for correct input (validated). If you have filled in all the entries correctly, the data is sent to the server. At that time, it is entered into the database and/or used in some other way determined by the developer.

## What's the difference?

Understanding the difference between Grid Components and Dialogs is critical because you need to know which to use when.

**GRID COMPONENT**

**Always** bound to a table.

- Data submission is automatic.
- When the Submit button is clicked, data is entered into the table.

- For employees and other authorized users familiar with the company, its policies and procedures.
- May require training for end user.
  - Example: Company rep enters an order.

**DIALOG**

**May or not** be bound to a table.

- Creates variables.
- Data submission is manually determined by developer using Action Scripting and/or Xbasic.
- When the Submit button is clicked, the data in the variables may be entered into a table and/or used in another way.

- Gathers information from users inside or outside the company.

*. Dialogs have been totally redesigned for Version 11, so if you have used them in previous versions, you are in for a real treat and may want to consider rebuilding your existing ones. Of course, Alpha Five is committed to backwards capability, so that's not a requirement.

- No training necessary for end user.
    - Example: Customer places an order on-line.

## *Preparation for the lesson*

The question we faced with this chapter was which comes first – the videos or the exercises. In this case, you may want to start with the videos. If you've done your homework (the previous exercises in this book) like good boys and girls, they should be very easy to understand. We suggest you watch them in the order listed.


GO TO A5 VIDEO

At this writing, there are 120 topics on dialog development – and many of these have multiple videos. Enough for a book on just this one feature. Obviously, we can't cover them all here, but we will give you a solid foundation for dialog use and design. The exercises and text repeat much of what is in the videos so that you can return here during your development process without having to rerun each video.

**And – there's a bonus. The exercises also contain material not in the videos!**

**Bottom line.** It's a package. The videos and exercises work together to show outstanding ways to add Dialogs to your application.

## Videos for this chapter

Here are the videos we will cover in this chapter.* We have indicated where there are multiple videos. **Watch time:** Each video lasts about 5 minutes.

We have also listed the relevant videos at the beginning of each exercise.

NOTE

The title of each video begins with "Dialog Component." We have omitted those words to avoid redundancy. In other words, "Dialog Component - Overview" will read "Overview."

- Videos > Filter: Enter **Dialog**.

**D1**
- Overview.

**D2**
- Creating.
    - How to create a dialog.
    - Saving controls in a Control Library.

**D3**
- Editing in Tree and Wysiwyg Mode - Setting properties in multiple controls at once.
    - How to edit the dialog controls.
    - Setting properties in multiple controls at the same time.

**D4**
- Complex layout using Frames, Containers, Tabs and Accordions. (2 videos)
    - How to use Frames, Containers, Tabs and Accordions to enrich the layout.

*. Re: Validation. You will note that we have skipped the videos on validation. Not because they are unimportant - on the contrary, data validation is essential in dialogs since you are working with a wide range of untrained users. We recommend you explore it after completing this chapter. Validation is also discussed in "Validating field data" on page 287.

- Using Class and CSS in Static Text.

**D5**
- Copying Controls from one component to another.
  - How to use a Lookup with a control.
  - Copying controls from one component to another using the clipboard.

**D6**
- Repeating Sections. (2 videos)
  - How to create a Master/Detail relationship (as in invoices).

**D7**
- Submitting Data.
  - Understanding data submission.
  - Creating Submit button.

**D11**
- Data Binding - Binding to existing tables.
  - How to insert the data into an existing table.

**D10**
- Data Binding - Creating tables to match the dialog layout. (3 videos)
  - How to insert the data when you do not yet have a table.
  - Using dialog controls as basis for new table fields.

**D12**
- Creating multiple tables to match the structure of a dialog that has one or more Repeating Section.
  - Creating new tables based on controls in repeating sections. (2 videos)
  - Data entry. (2 videos)

The exercises in this chapter should be placed in the *MyGridComponentDemo* web project that was created in Chapter 5 (see “Important note” on page 132). Copies of the completed examples should be in this project.

The **GridComponentDemo** web project also has completed examples.

## *Creating a Dialog*


GO TO A5 VIDEO D1, D2, D5

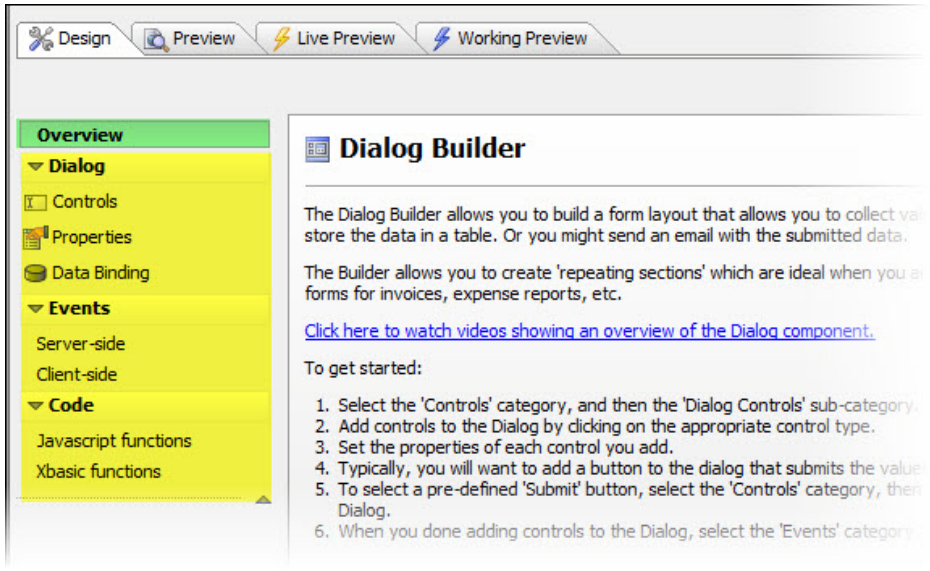
Recommended watching for this section. **Watch time:** Approx 15 minutes.

- Videos > Filter: Enter **Dialog**. Choose:
  - D1 Dialog Component – Overview. (1 video)
  - D2 Dialog Component – Creating. (1 video)
  - D5 Dialog Component – Copying Controls from one Component to Another. (1 video)

### Overview of the Dialog Builder

To begin, we will take a look at the design process for Dialogs.

1. Web Projects Control Panel > New > Web Component > Dialog > Start with a blank Dialog Component. (Click OK)

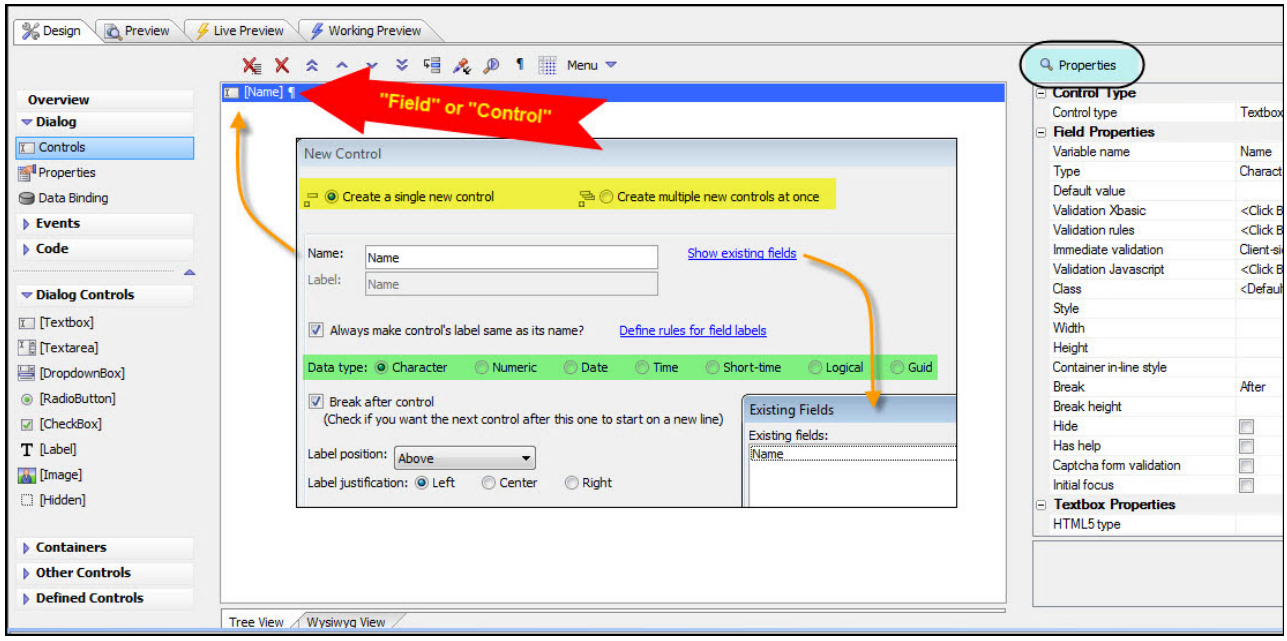



- The Dialog Builder appears with getting started instructions and a link to the "D1 Overview." video You can return to this page at any time by clicking Overview in the left menu (green).
- The left menu also navigates to the other elements of the builder in the usual manner (yellow).

2. Click **Dialog**.

- If the Dialog menu (yellow at left) doesn't open, click Dialog again.

Dialog Title: Dialog Builder




- This is where **Controls** and their **Properties** are defined and where, if you like, data can be bound to a table (**Data Binding**).*
- The **Containers** menu includes our old friends *Frames*, *Tabs* and *Containers.* There is also a new control: F*ree-form Layout.*
- The **Other Controls** menu creates more items with which we are already familiar and a couple of new ones: *Static Text*, *Image*, *Button*, *Hyperlink*, *IFrame*† are linked to a URL to show a web page*)*, *Spacer*, *Embedded Object* and *Placeholder.*

*. Data Binding is used to assign the variables created by the dialog to fields in one or more specific tables (optional).

- **Defined Controls** include *Submit/Reset* and *New Record Buttons*.You can also assign *Record Row Numbers*, open a *JavaScript Command Window* and *Update Source Grid* (hover to see recommendation on use).
- **Properties:** Control Properties are at the right. The Properties button (aqua above) opens the *Properties Search* to quick find settings.

**DESIGN PROCESS**

Dialog design is much the same as grid design except as follows:

- Since a **Grid** is bound to a table, it already has fields to which we can assign control types, such as Textbox, Radio Button, etc.
- A **Dialog** begins without fields, so we reverse the process, selecting the control type and then defining the **Controls** (aka fields).

**TERMINOLOGY**

**Controls** receive input from the end user. There as several types, most of which should be familiar to you: *Textbox*, *TextArea*, *DropdownBox*, *Radio Button*, *Checkbox*, *Label*, *Image* and *Hidden*.*

- Once created, they are listed in the Dialog Builder and are referred to as **Controls or Fields** (red arrow above).
- Like fields, their **Data Type** (aka **Field Type**) must be identified: *Character*, *Numeric*, *Date*, *Time*, *Short-Time*, *Logical*, *GUID*.

It is important to remember that even though the terms **Control** and **Field** are used interchangeably in Dialog design, the controls actually create **Variables**, not fields.

The contents of the variables can, however, be placed in table fields with a process called **Data Binding**.

Variables can also be used in other ways. In either case, Action Scripting and/or Xbasic are used to execute the **Server Side Event**.

- There are six ways to add controls: We will take them in turn.
  - Single control: See “Adding a single control” on page 297.
  - Multiple control: See “Adding multiple controls at the same time” on page 298.
  - Pre-defined list: See “Pre-defined lists” on page 299.
  - Controls from a table: See “Adding controls from a table” on page 300.
  - Control Library: See “Using the Control Library” on page 302.
  - Clipboard: See “Adding controls from the clipboard” on page 304.

## Adding a single control

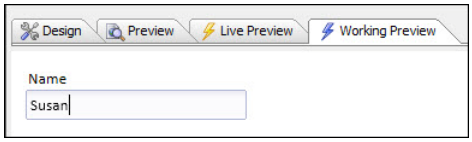
3. *Dialog Controls:* Click **Textbox** to open the **New Control** dialog† (inset above).
4. Choose **Create a single new control**.
5. *Name:* Enter **Name**.
6. *Always make control’s label same as its name:* **Yes**.

†. An IFrame control can be linked to a URL to show a web page.

*. For more information on these controls, see “Creating Checkbox, Radio Button and Drop Down Box controls” on page 247.

†. Yes, this is a dialog, too. In this case, Alpha Five is asking YOU for input.

7. *Data type:* **Character**.
8. Click OK.
9. Go to Working Preview.
10. Enter your first name.

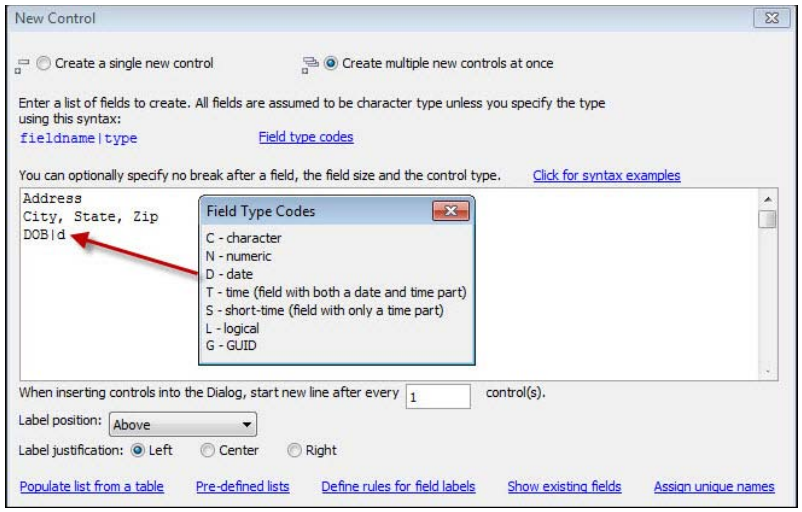



At this point, the dialog won't do anything for several reasons. There is no way for the end user to submit the data. And even if there were a submit button, Alpha Five wouldn't know what to do with the variable. Before we get into these things, let's add a few more controls (aka fields).

11. Return to Design mode.

## Adding multiple controls at the same time

You can add several controls at once and assign their field (data) types at the same time.




12. *Dialog Controls*: Click **Textbox**.
13. Choose **Create multiple controls at once**.
14. Enter **Address, City, State, Zip** as at left.
    - Press ENTER to create a new line.
    - Be sure to place commas between **city, state, zip**. We'll explain more about this later.

### CHANGING THE FIELD (DATA) TYPE

The default field (data) type is character. You can change it for non-character fields.

**a.** Click the Field Type Codes hyperlink to see the code list (inset above).

**b.** Note that the code for date fields is "D."

**c.** Press ESC to close the dialog.

15. Start a new line.
16. Enter the following for "Date of Birth": **DOB | d**
    - This uses the "pipe" key as a separator. It is above the backslash key on most computers.

IMPORTANT NOTE

In most cases, you would not use an abbreviation such as DOB in a dialog because the end user might have difficulty understanding what you mean. Spelling out *Date of Birth* would be preferable. Remember that, in most cases, the end user will be not be trained in dialog completion.

We'll keep it now to prove a point, however.

**LABEL POSITIONING & JUSTIFICATION**

You can specify the location of the label and its justification. Defaults are **Above**, **Left**. This can be changed after the control is created.*

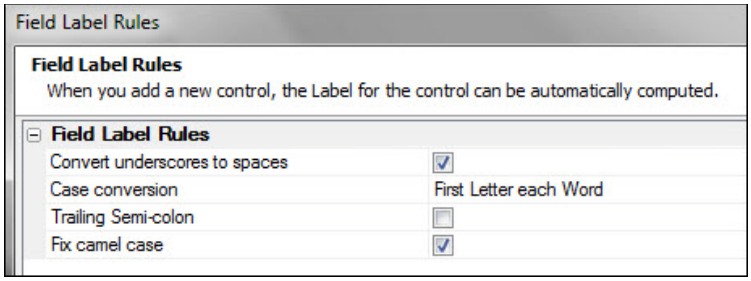
SYNTAX EXAMPLES

There is an extensive help dialog that explains how to:

- Add controls.
- Use line breaks.
- Enter the field (data) type.
- Enter the field size (width of textbox).
- Combine field size and type.
- Combine field size, data type and control type.
  a. Click the Click for syntax examples hyperlink.
  b. Look over the options and press ESC to close the dialog when finished.

**LABEL RULES**

Alpha Five makes it easy to assure that your labels have a consistent appearance. The following settings are for the *label only*. Definition for the contents of each Control is set at its Properties, the same as for Grids.




- Let's say that you use an underscore in the control name (last_name), but do not want it to appear in the label.
- Or you prefer to use Camel case† (LastName) and would like to individual words for labels.
- And, you want to be sure the case is always the same. Choices are: *First Letter each Word*, *First Letter* or *None*.
- By using the above Field Label Rules settings (default), the following would occur:
  - last_name and LastName would both be changed to Last Name.

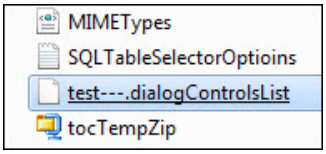
**PRE-DEFINED LISTS**

NOTE

You can save a list of controls for future use.

Alpha Five saves these lists in a different location than those in the Control Library.‡

- To save a list:
  a. Click Pre-defined lists.
  b. Choose **Save list** and give it a name and a description.
- To load a saved list:
  c. Choose **Load list**. Select the desired list.
- To delete a list:
  d. Choose **Manage list**.
  e. Click the link to open a folder containing user defined lists.

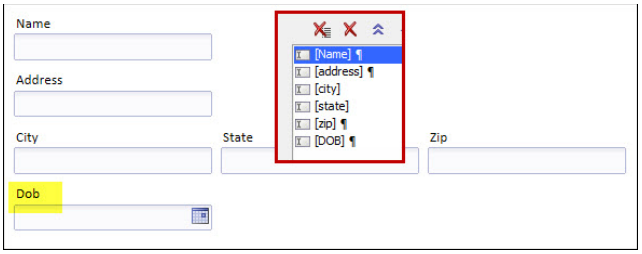



*. To change the position or justification of a control after it has been created. At the Dialog Builder, right click on the control.

†. This term may be unfamiliar to some. It was to me, although I use the style all the time. It's when you enter field and file names as MyCamelCase.

‡. See "Using the Control Library" on page 302.

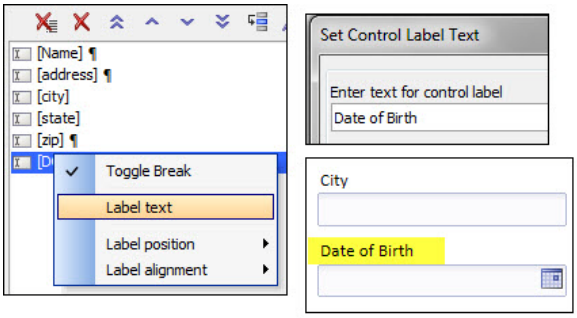
**f.** Find the list and delete.




17. Click OK to accept the list.
    - The entries are added to the fields list (inset).
18. Go to Working Preview to view the results.

Looks pretty good, but notice the DOB label. Since we have the label rules set to capitalize the first letter of the word, this abbreviation has become even more confusing. The good news is that labels are easy to change.

19. Go to Design Mode.




#### CHANGING THE CONTROL LABEL

This will change the name of the *label* in Working Preview, but not the name of the control itself. To rename the control, delete and rebuild.

**a.** Right click on the **DOB** field.

**b.** Choose **Label text**.

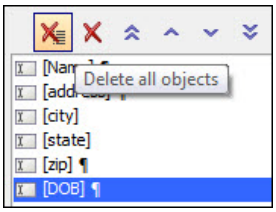
**c.** Enter text for control label: **Date of Birth**.
- Field Label Rules are not honored here, so you will need to enter desired capitalization.

**d.** Click OK.

**e.** Go to Working Preview to see the change.
- Much clearer, don't you agree?

20. Return to design mode.

- Next we will use the table method for adding controls to the dialog, but first we will delete the existing controls so we can start with a fresh slate.




#### DELETING CONTROLS

You can delete one control or the entire list. The buttons are on the toolbar above the list of controls.

**a.** Click **Delete all objects**.

**b.** Click **Yes** at the warning.

## Adding controls from a table

When you have a table that contains some or all of the fields that you would like to use as controls, you can import the fields into the Dialog. This saves the time of creating them manually.

This method can be set to automatically bind the data to the table.*

**But.** That's not a requirement. You could import a list from any table in order to save development time and then use it for an entirely different purpose.

21. Click Textbox.

*. See "Submitting the dialog data to an existing table" on page 312.