Chapter 8.

# *Introduction to the Web*

***Save time by creating forms that do double duty…***

*Even if you are not quite ready to put it on the web, you can "future proof" your application by starting out with web style forms so that rebuilding will not be necessary. And you can save on training time, too, because your end users will already know how to use them.*

Notes:

## Who needs this?

**This is more than just an *Introduction to the Web* because you can use what you learn here on the desktop, too!**

If the web is in your "now" or "near future," this is a form style that will handle data entry, modification and searching with aplomb. Start using it on the desktop today and you won't have to re-do your work tomorrow.

- Suitable for SQL and DBF file formats.


If these exercises look familiar it is because part has been excerpted from the *Alpha Anywhere Quick Start Guide*[*] by Susan Hussey Bush that came free with your copy of Alpha Anywhere. Perhaps you did not think they applied to you desktop developers. Surprise, surprise! We will take the instructions a bit further here by showing how this all works on the desktop.

We admit that this chapter is just a teaser. To even begin to understand what you can do with web components, you need to get our book, *Alpha Five Web Applications Made Easy*, available at www.libertymanuals.com.

## *Understanding Web Components (aka web forms)*

The style of these forms may be a bit different than you are used to seeing in desktop applications, but they work just as well for data entry, modification and searching as the standard desktop forms and browses we explored in Chapter 7.

Web Components come in all types and can be designed to take on just about any appearance you desire. They can have a spread sheet type format with columns and rows, like Browses. They can have single pages or tuck multiple pages into tabbed interfaces. The complete list is on page 297. Not all run on the desktop, but many do.

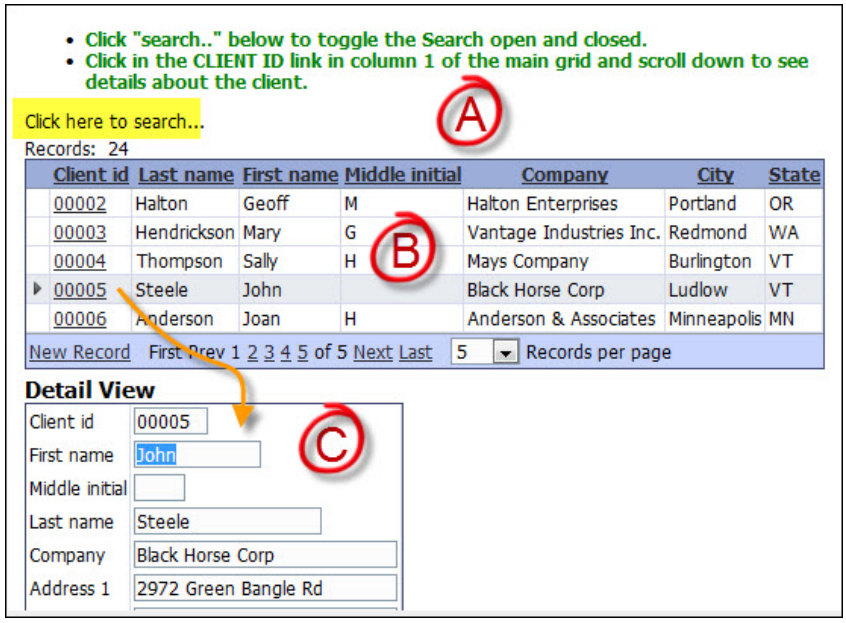
In this section, we will show you how to create a Grid Component. In this case, it will take the appearance of a browse, with rows and columns. They can also be designed with a form-like appearance.

There is another very special component that also runs on the desktop. It is called the UX (User Experience) Component. We are saving that for the next chapter because, even though it runs brilliantly in web applications, it is the STAR of mobile applications because it is lightweight and fast.

## Why can't I use my desktop forms on the web?

Often, new web application users are disappointed to learn that they are unable to use their existing desktop forms in a web application. As you may or may not be aware, the web is "browser dependent." Everything must pass through a browser — Internet Explorer, Firefox, Chrome, Safari, etc.—in order to be seen on the Internet. Browsers have specific requirements that standard desktop forms can't meet. This is true of all desktop software products.

*. Not all the web components described in this introductory volume can be used on the desktop.




The folks at Alpha felt your pain and came up with an exciting solution: use their signature web components as forms for the desktop. Problem solved!

**You may not be able to use a "regular" desktop form on the web, but you can do the reverse and use web components on the desktop.**

Coming up, we will show you how to create a simple Grid Component. It will have three parts, **A** Search, **B** Grid and **C** Detail.

Each element can be customized. In this case, the Search part opens when you click on "Click here to search." The Detail View opens when you click on a Client_id.

And it is all done by picking from menu options – called Rapid Application Development (RAD). Best of all, you professional developers can modify the code at will. Or not. The choice is yours.

## *How the material is organized*

The purpose of this chapter and the next is two-fold. They will show how to create and use web components on the desktop and will serve as introductions to web and mobile applications.

In this chapter, we will describe the Web Projects Control Panel and connect to a SQL database for the exercise. At the end of the chapter, we will show a DBF connection.

The Application Server connects Alpha Anywhere to the Internet. While it is not required for desktop applications, we will show you how it works.

Web Projects keep applications sorted out. We will show how to create a new one.

Then, we will create and test a Grid Component. It will have a Search part and Detail View as shown above. We will also show how to revise an existing component.

There are three ways to preview components. This is similar to going from design to view mode on the desktop side.

VIDEO! SEE P. 274, 278, 286 291.

There are four videos that give a general idea of how a grid component works. You may want to watch them before beginning this chapter. The videos were done for V10, so, in some cases, they don't show all features now available but the concepts are still valid.

PLEASE NOTE

## Preparation for the lessons

For these exercises, we will use a sample Access database that ships with Alpha Anywhere. At the end of the chapter, we will show how to connect to Alpha Anywhere DBF tables.

## Understanding the Web Projects Control Panel


You have probably noticed the Application Server and Web Projects buttons on the toolbar when you are at the Alpha Anywhere Control Panel. The *Web Projects Control Panel* is where the grid components and other web elements are created and stored.

It is important to know that the end user does not need to know anything about either the desktop Control Panel or the Web Projects Control Panel. If you like, you can even hide them so they are not seen when the program is opened.*

This means you only need to instruct on the use of the particular form, browse, web component, etc.

1. *Control Panel:* Click **Web Projects** on the toolbar.
2. If the "Getting Started" notice comes up, read it and then click Close.

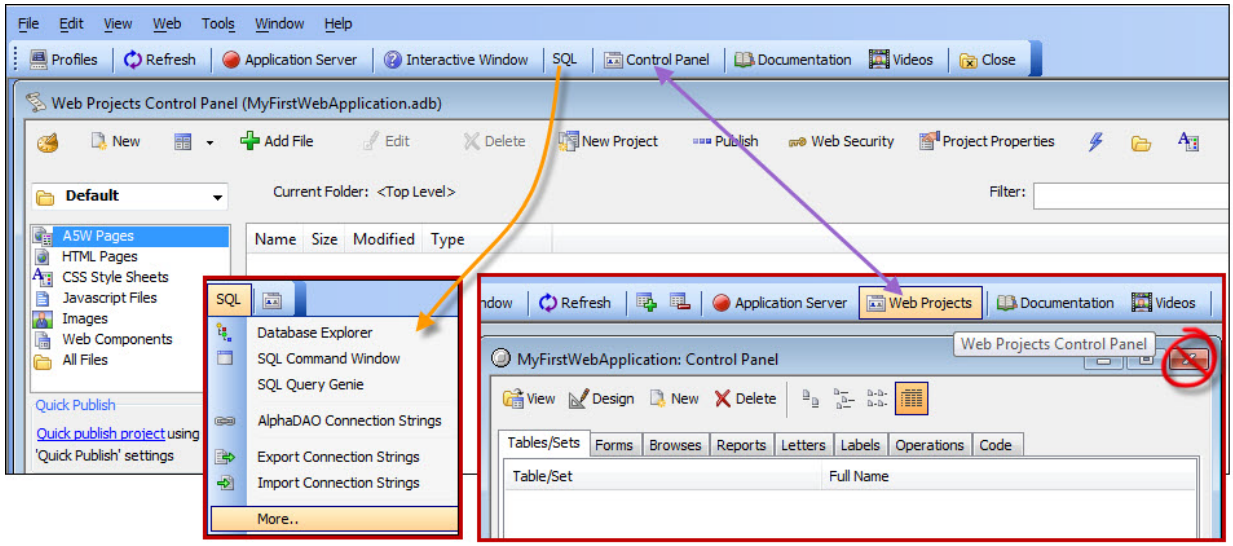
First, we will describe the *Web Projects Control Panel* features. Then we will use it to:

- Connect to a SQL database (page 263).
- Activate the *Application Server* that connects the Alpha Anywhere to the Internet (page 265). Optional.
- Create a new *Web Project* (page 265).

*. See "Hiding the Control Panel" on page 429.

**WPCP**

Here's a brief run through of the major elements in the *Web Projects Control Panel.*[*]




**TOP TOOLBAR**

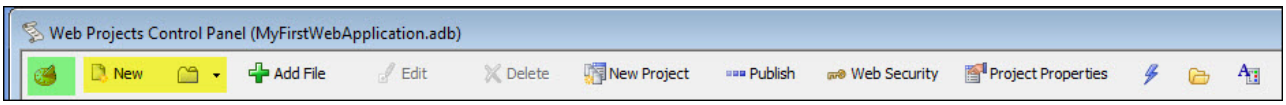
The top toolbar contains the most often used elements.

- **Profiles:** The developer can define certain elements of the web project. You can explore this at your leisure. We do not need to be concerned with it at this time because the defaults are acceptable.
- **Refresh:** Click when necessary to refresh pages, web components and other elements of the project.
- **Application Server:** Links the project to the Internet.
- **Interactive Window:** Testing area for Xbasic code.
- **SQL:** This menu offers options for working with SQL data and making connections to it. We will create an *AlphaDAO Connection String* shortly. It must be active in order to open the *Database Explorer, SQL Command Window* or *SQL Genie.*
- **Control Panel:** Opens the desktop workspace. When it is open, the button toggles to *Web Projects*. Click *Web Projects* to return to the *Web Project Control Panel*.
    - DO NOT click the red x (circled above) because you will exit the entire project. If that should happen, re-click *Web Projects*.
- **Documentation and Videos**: Opens help pages and videos (see Chapter 3).
- **Close**: Exits the *Web Projects Control Panel*.

*. **Want more?** The WPCP is fully detailed in the documentation that accompanies the software. It will be yours at no extra charge when you purchase Alpha Anywhere.

**WPCP BUTTONS**

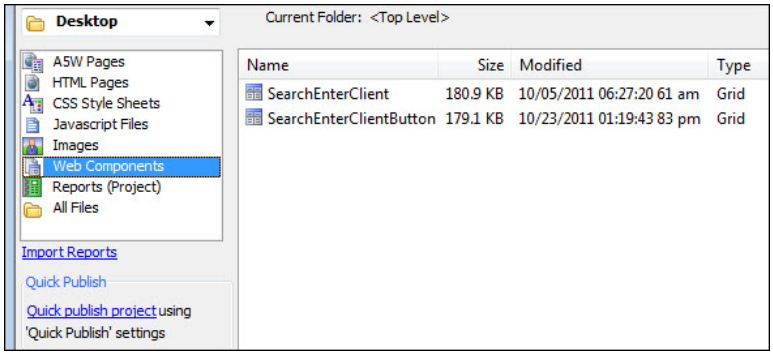
The Web Projects Control Panel has another set of buttons. You can:




- Show a list of recently created projects (green above).
- Create new pages and web components (yellow above)
- Add files.
- Edit or delete pages or components.
- Create new projects.
- Publish a project. Required for web and mobile applications. Not needed for desktop.
- Establish Security for the project. Web projects have extensive security options, as does the desktop side (page 424).
- Define the project properties in order to assure a consistent appearance for the elements in the project.

- Open a component in Working Preview (yellow at left). See page 281.
- Open a project in Windows Explorer (green at left).

- Open the *Style Builder* that is used to edit the appearance of all components in a web application – Grid, Dialog, Tabbed UI, etc. There are a series of videos that explain it thoroughly.




**LEFT MENU**

The menu on the left side of the WPCP contains:

- **Project name:** The top item (red oval) is the name of the current project. Since you can have more than one folder in a project, the level is identified at its right.
- **Project elements**: The list of pages, components and other elements comes next. As you create and save or import the various files, each will be listed in the appropriate section.
- **Quick Publish** (orange oval): Executes saved Publish settings.

## Connecting to a SQL database

As we saw in Chapter 3, a Connection String is necessary in order to connect to databases outside Alpha Anywhere.*

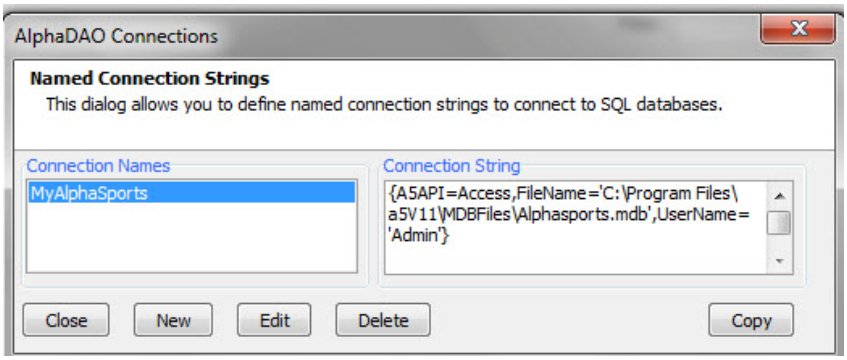
- This time will use an *Ms Access* database that ships with Alpha Anywhere, called *Alphasports*.

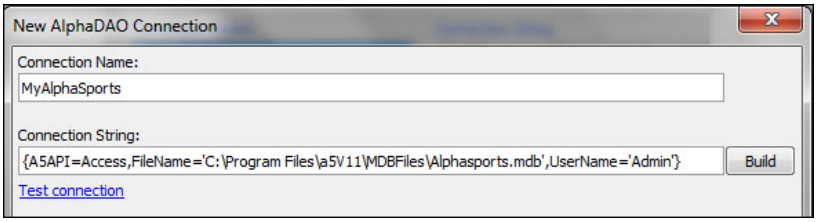
*. The instructions for connecting to an Alpha Anywhere workspace are on page 298.

IMPORTANT NOTE

Because this file is located at c:\ Program Files\, Windows 7 and Vista users will not be able to save new or changed records. If you prefer, you can copy the file, place it elsewhere on your computer and reference that one instead.

3. Click **SQL** on the top toolbar.




**CREATE CONNECTION STRING**

4. Choose **AlphaDAO Connection Strings**.

• *AlphaDAO* is Alpha Anywhere's custom version of ADO**.** It uses AJAX. ADO does not.

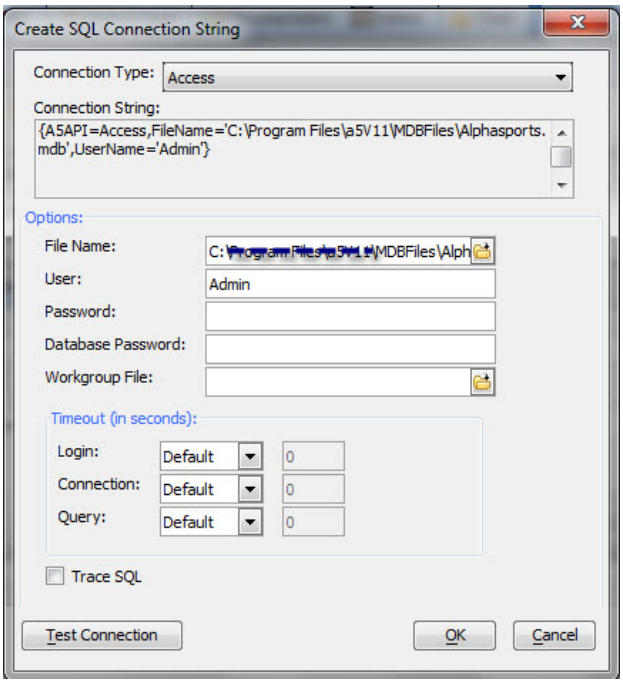
Dialog: AlphaDAO Connections

**a.** Click **New**.

Dialog: New AlphaDAO Connection

**b.** *Connection Name:* **MyAlphaSports**.

**c.** *Connection String:* Click **Build**.




Dialog: Create SQL Connections String

**d.** *Connection type:* **Access**.

**e.** *File Name:* Navigate to:
**c:\ Program Files \ a5V12 (or current version) \ MDB-Files \ Alphasports**.

•Depending on your computer, the folder may in a different location than *Program Files*. We found it at *Program Files (x86)* on two of ours.

**f.** Click **Open**.

Dialog: Create SQL Connections String

**g.** Click OK (twice).

Dialog: AlphaDAO Connections

•The new connection is shown (see above).

•You can create new strings and/or edit existing ones at this dialog.

**h.** Click **Close**.

REMINDER

•To re-open the AlphaDAO Connections dialog at any time, click *SQL > AlphaDAO Connection Strings*.

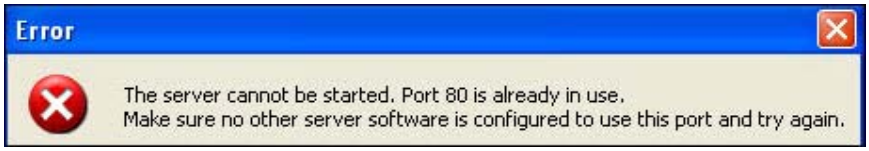
• Next, we will connect to the Internet with the *Application Server.*

## Starting the Application Server

The *Application Server* connects you to the Internet so you can use your browser to view certain elements of the Alpha Anywhere web system. You **do not have to be on-line to use web components on the desktop**, so you can skip this, if you prefer.



5. Click the **Application Server** button on the top menu (the red icon indicates it is off) and then confirm.
   - The button changes color and now has a green icon.




**PORT 80 CONFLICT**
If you are running *Skype* or another such program, it may conflict with the *Application Server* because they both default to the same port.

There are two ways to solve the problem:

- Close the conflicting program OR change the Alpha Anywhere port as follows:
  a. *Web Projects Control Panel > Top Menu > Web; Choose* **Application Server**.

Dialog: Application Server Settings

  b. *General* tab: Server Port.* Change to Port 85 (or another of your choosing).
  c. Click **Save**.
  d. Click the **Start Server** button. (Click **Yes** to confirm.)
  e. Click **Close**.

Everyone should now have the server running (unless, of course, you have decided not to run it at this time).

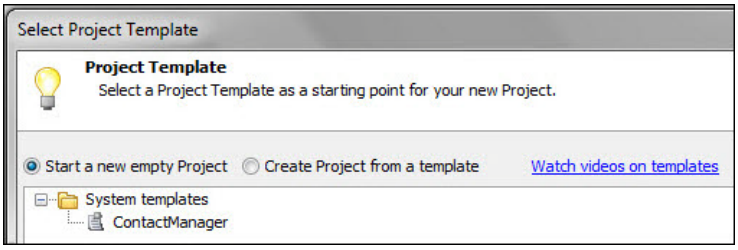
## Creating a new Web Project

Web Projects are the means by which you keep multiple applications organized.

- If you are a professional developer, you can have a separate project for each client.
- If you are a business owner with more than one company, you can separate them out here.
- If you think you will only have one project, you can use the *default* provided.

6. *WPCP:* Click **New Project**.

*. **Want more?** You'll find details on the *Application Server* settings in the documentation that you get free when you purchase Alpha Anywhere.




Dialog: Select Project Template

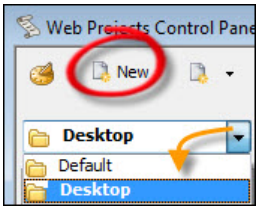
You can select a pre-defined template or create your own.

7. Choose **Start a new empty Project**. (Click OK)

8. Name the project **MyDesktop** (Click OK).

CAUTION

Web stuff REALLY doesn't like file names with spaces, so be sure to link the words together as above or use underscores as in AlphaSoftware or Alpha_Software.




- The name appears as the current project. You can switch back and forth between projects by clicking the down arrow.
- Now it's time to create the web component.

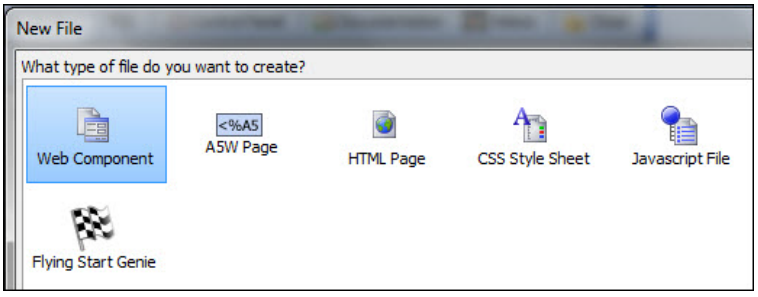
## *Creating a Grid Component*

VIDEO! SEE P. 274

There are several types of web components, but there are two that are used most often, Grid Components and UX Components. We will use a Grid in this chapter and a UX in the next.

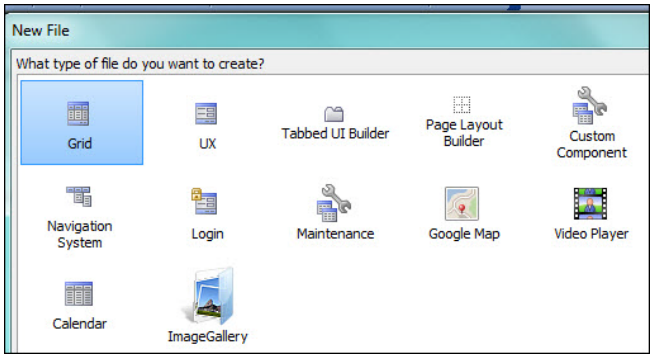
Both are extremely versatile. We only begin our study here because they have many, many, MANY more features than we can cover here.

1. At the *Web Projects Control Panel*, select **Web Components** in the left panel and click the **New** button (red circle above).




- When the New File > File type dialog opens, *Web Component* is the default because we started at *Web Components*. There are six file types. We will be using *Web Component* now. The others are:
- **A5W Page:** A special type of page for Xbasic as well as regular HTML. Also holds web components.
- **HTML Page**: A web page created in an outside HTML design program, such as *Dreamweaver.*
- **CSS Style Sheet:** See "About the In-line Style Editor" on page 296..
- **Javascript File** is for advanced users. Alpha Anywhere also has *Action Javascript.*
- **Flying Start Genie.** See page 297.

2. *Web Component:* Double click or click Next.




Dialog: New File

- Shows the component types.
- *Not in screen shot:* Legacy Components as they are for backwards compatibility only.

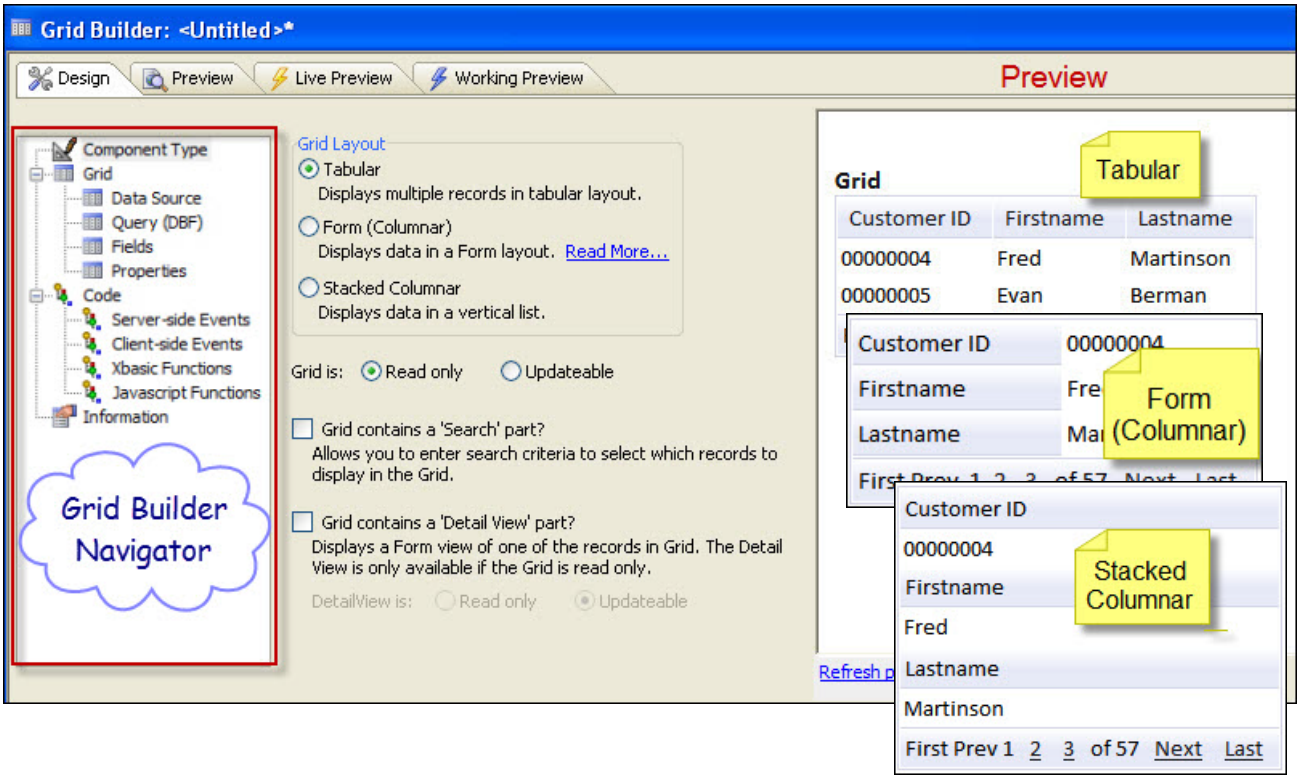
3. *Grid:* **Double click** or click **Next**.

Dialog: Select Grid Component template

4. Click *Start with a blank Grid Component* radio button. (Click OK)

Dialog: Grid Builder

- The Grid Builder is where all the elements of the grid are defined.




## Defining the Component Type

Time to take a rest after all that excitement and read about the Grid Builder.

**NAVIGATOR**

The left panel (red box above) shows what we will be calling the ***Grid Builder Navigator***. The various pages (aka panes) come up when you click on them, Component Type, Data Source, Query, Fields, etc. We will take them each in turn.

- *Component Type:* The first option on the Navigator defines the look of the grid. There are three basic sections, Grid, Search Part and Detail View. We beg