



## First Steps

*Develop web  
database applications  
quickly and simply*



HK-Software





## What is required for using IBExpertWebForms?

Since IBExpert version 2008.01.28 all IBExpert fully licensed versions, i.e. single, multiple, Site, Junior VAR and full VAR licenses, include our fully integrated IBExpertWebForms module.

If you have a customer version of IBExpert, you are allowed to use IBExpertWebForms on your registered Computer. If you have a Site License, you can use IBExpertWebForms on any computer in your company. If you have a VAR or Junior VAR License, you are allowed to distribute IBExpertWebForms together with your applications to your customers.

For using IBExpert customer version or upgrading, please have a look at [www.ibexpert.com](http://www.ibexpert.com).

With IBExpertWebforms you can create database-based web applications. Just place your VCL components in the integrated form designer, connect them with your tables or queries as a data source using the integrated object inspector, and create your events as stored procedures inside your Firebird or InterBase database.

The result is handled by a PHP script, which is used by the Apache web server on Windows, Linux or any other operating system which supports Apache, PHP and Firebird or InterBase.

The main advantage: you do not need any know-how regarding Java script, HTML, Ajax, PHP, etc. to create your database web application. All operations are done inside your database and you just need to learn some very simple extensions and rules based on your existing Firebird and InterBase knowledge.

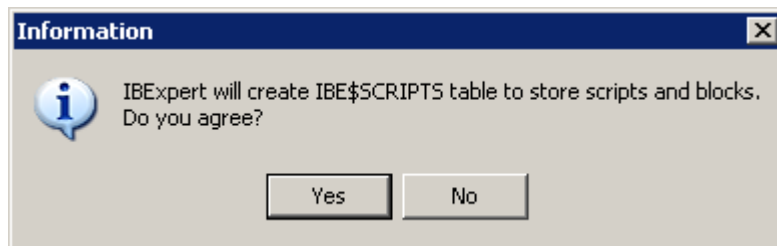
## ***How do I set up the database?***

You can use IBExpertWebForms with any Interbase (6.0-2007) or Firebird Database (1.0-2.1). Everything you need is automatically installed with IBExpert Trial or IBExpert Customer Version. This includes a fully functional Apache Webserver and PHP5.

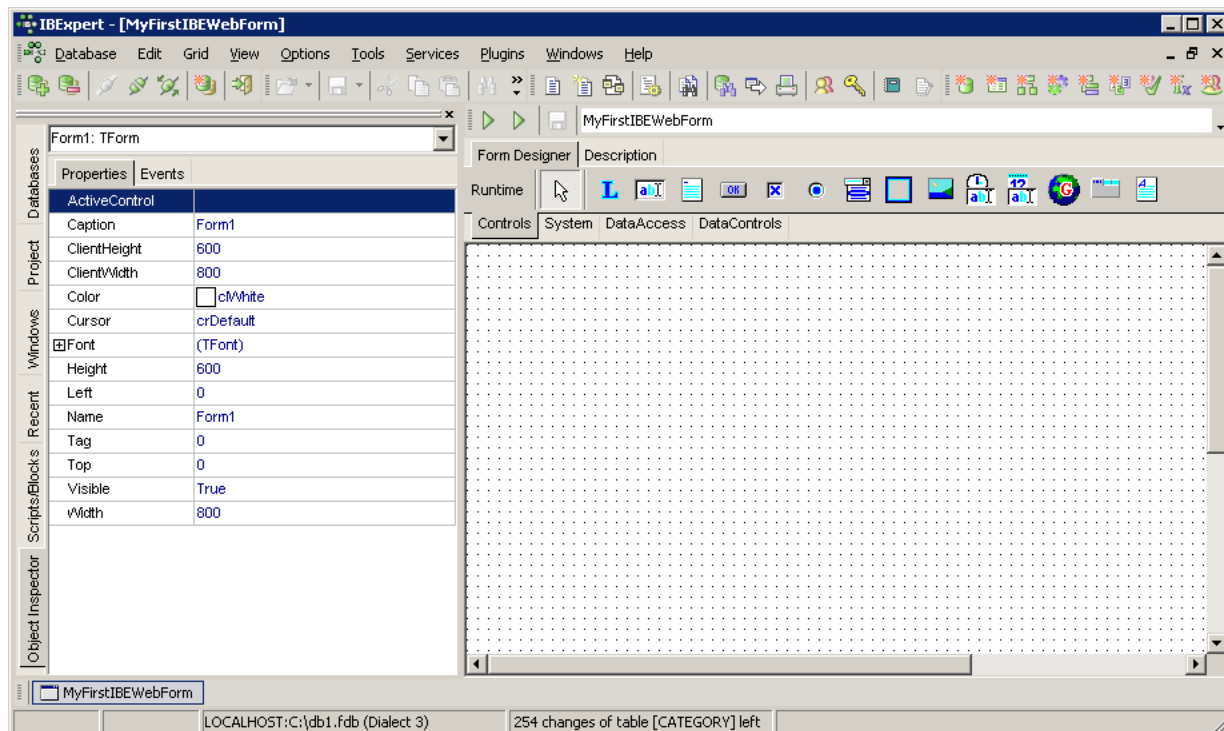
The following example is shown based on the IBExpertDemoDatabase, which can be found in "C:\Program Files\HK-Software\IBExpert Demo Databases\db1.sql".

If you want to create the same database, please copy rfunc.dll from this directory to your Firebird UDF directory before executing the db1.sql script in IBExpert-Tools-Script Executive. To create the demo data in the database, execute procedure inital with parameter 10000.

After registering and opening your database in IBExpert, click with the right mouse button on the database *Scripts* node and select *New WebForm*. Confirm the following dialog for creating the script table inside the database automatically.



This opens the FormDesigner. First of all you should allocate a new name (in the top right-hand corner of the dialog) for the IBExpertWebForm (e.g. *MyFirstIBWebForm*). Any alterations can be saved using the *Save* button.



You can see the form designer. This allows you to add several components to your IBExpertWebForm application. If you have already experience with an environment like Delphi or VB, you will see that it is very similar.

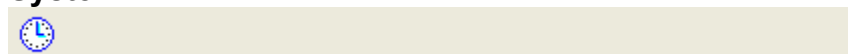
## Which control elements are available in IBExpertWebForms?

The FormDesigner for IBExpertWebForms has a component-oriented structure (similar to Delphi). Each component can be selected in the FormDesigner and positioned in the form itself. The components are grouped in four categories: Standard, System, DataAccess and DataControls.

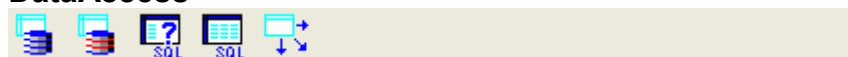
### Standard



### System



### DataAccess





## How do I insert control elements in my IBExpertWebForm?

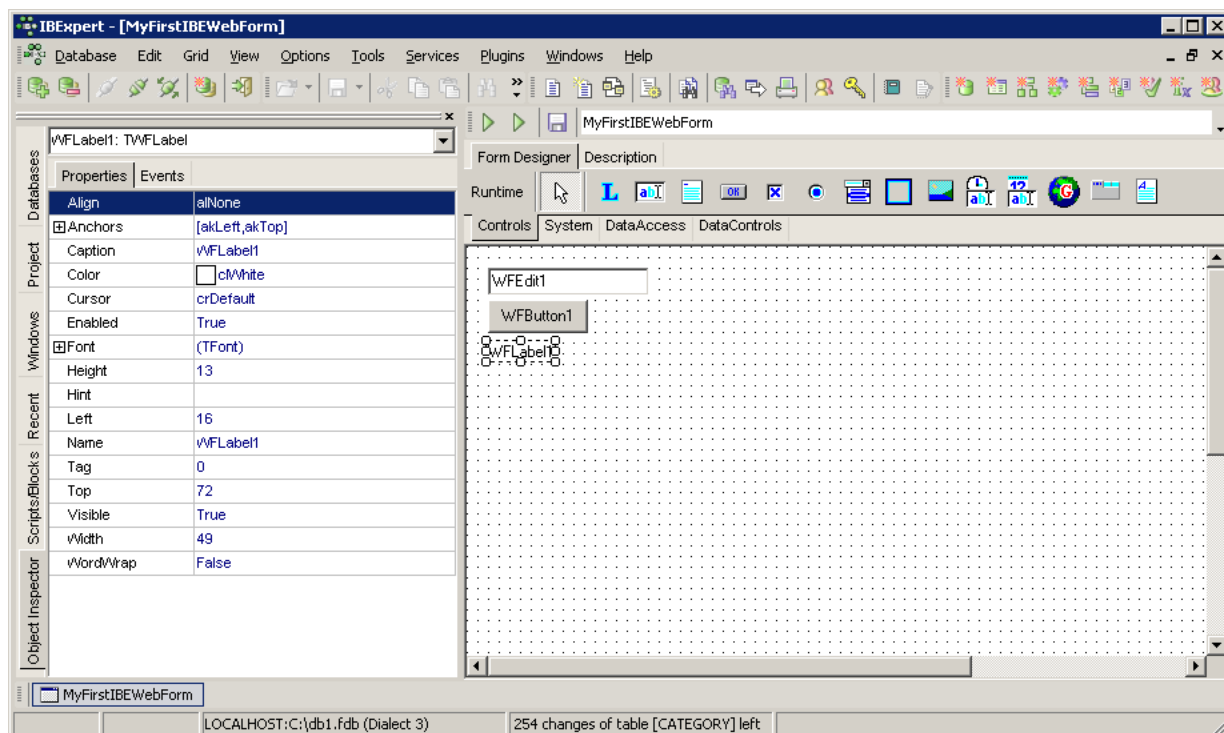
### Important tips for the use of the FormDesigner and the Object Inspector

As IBExpertWebForms is currently still in the development phase we would like to point out two problems:

1. When you click on a component in the FormDesigner, in order to, for example, edit a property, the cursor may occasionally get "caught" on the mouse cursor (recognizable by the thick black frame representation of the component, as is the case with drag 'n' drop operations). Should this occur simply click the mouse a second time.
2. When a property or event in the Object Inspector is altered or created, the value is not immediately saved. A previously edited value is only saved when you immediately briefly click on any other property directly after editing.

Click on the desired component, using the tabs *Standard*, *System*, *DataAccess* and *DataControls* in the FormDesigner. Then click with the mouse on the IBExpertWebForm where you wish this component to be positioned.

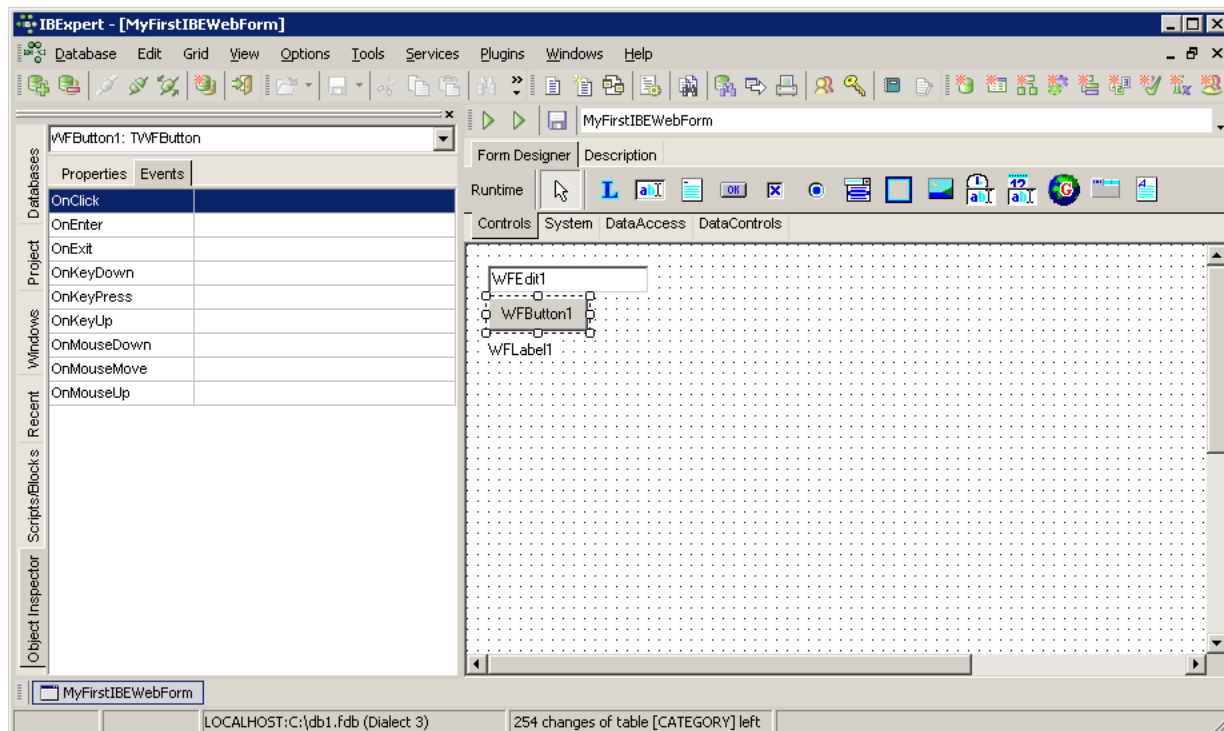
The first example show the typical "Hello, World" Application. So we need 3 components, a TWFEEdit, a TWFButton and a TWFLabel.



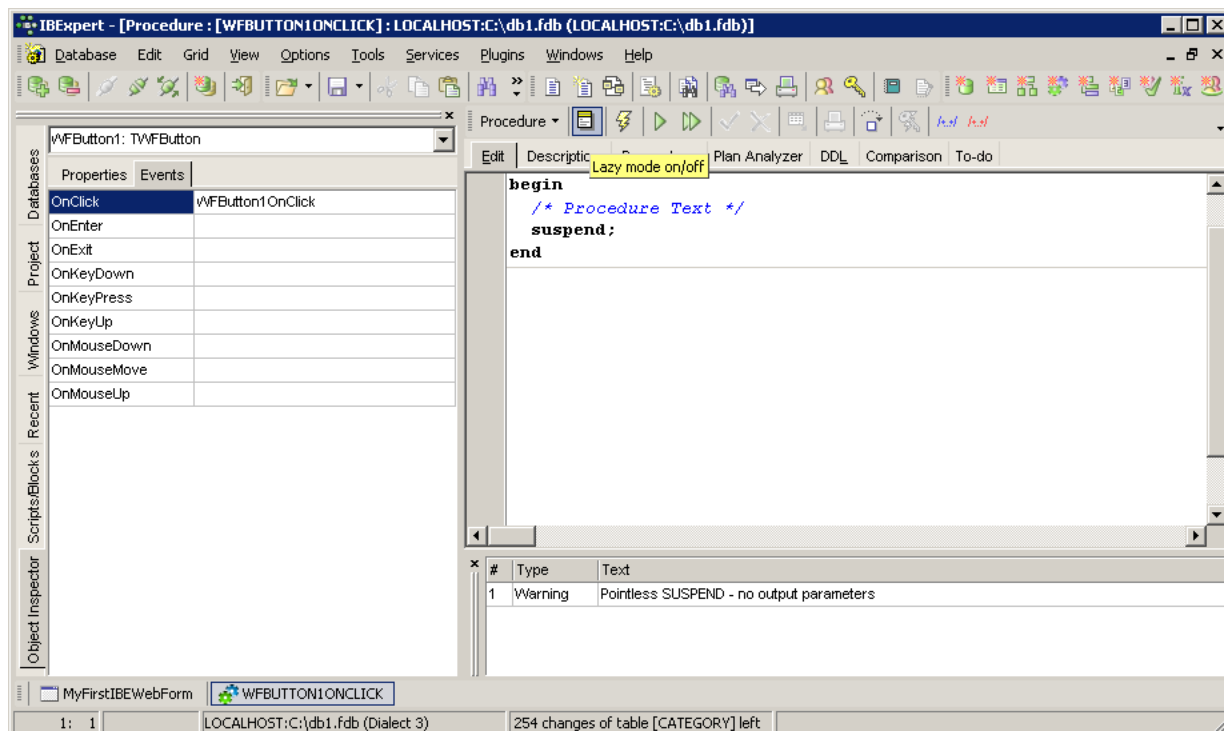
On the left – in the Object Inspector, you can create and modify all properties and events of a selected component. For example, the text of a *TWVFLabel* component can be modified using the property *Caption*, or the font modified using the *TFont* Properties ditor (select the property *Font* and then click on ...). The Object Inspector can be used to modify a whole range of properties and events.

## How do I create an event?

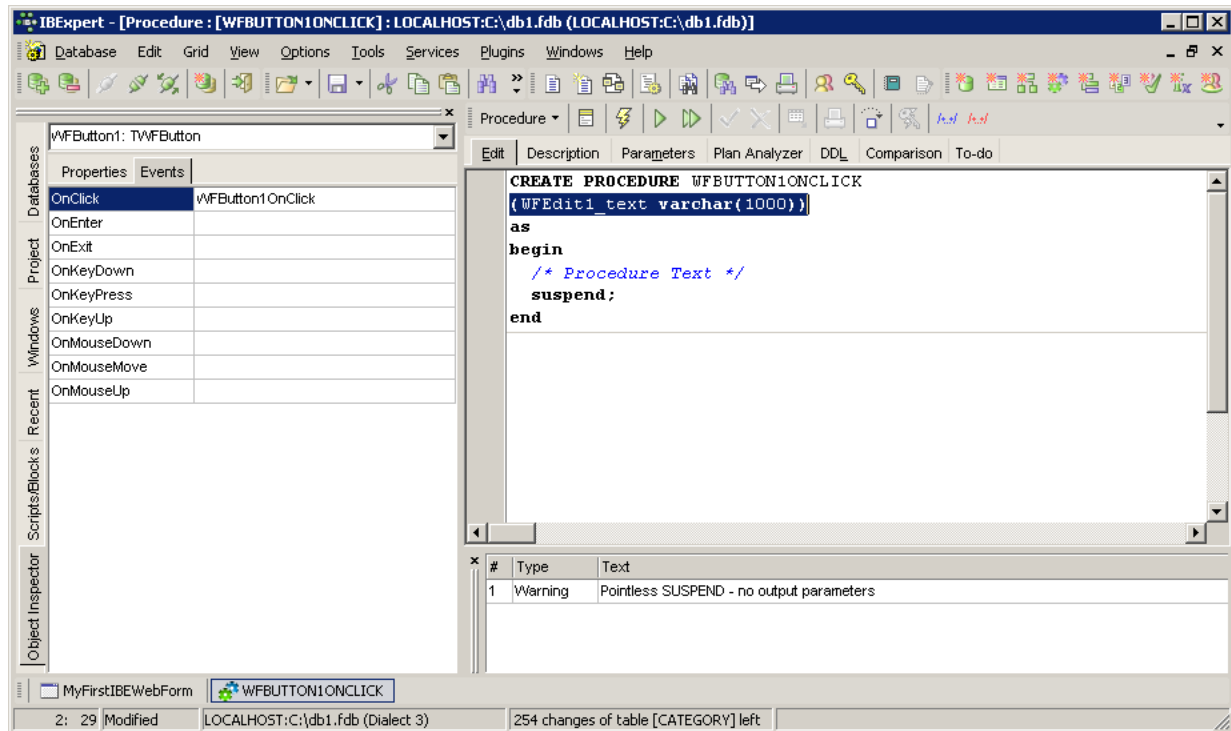
Events are incidents that occur during runtime, which are, for example, triggered by clicking on a button. A stored procedure in the database can be assigned to each event. For example in order to create an *OnClick* event for a *TWVButton*, go to the Events page in the Object Inspector, and simply double-click *OnClick*. The Stored Procedure Editor is opened, and you can specify the event using *PSQL*.



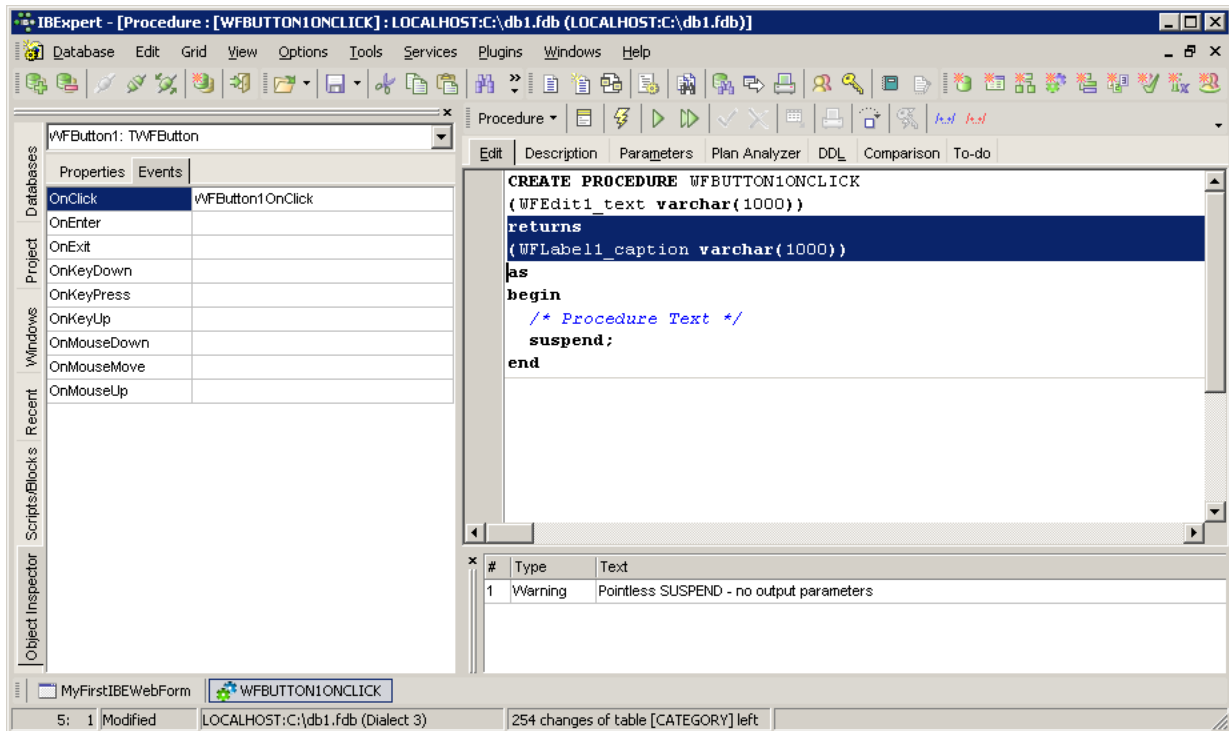
Double-click *OnClick* in the Object Inspector (*Events* page). The Stored Procedure Editor is opened, and you can formulate the event using PSQL. If necessary, deactivate the Lazy Mode in order to view the complete stored procedure.



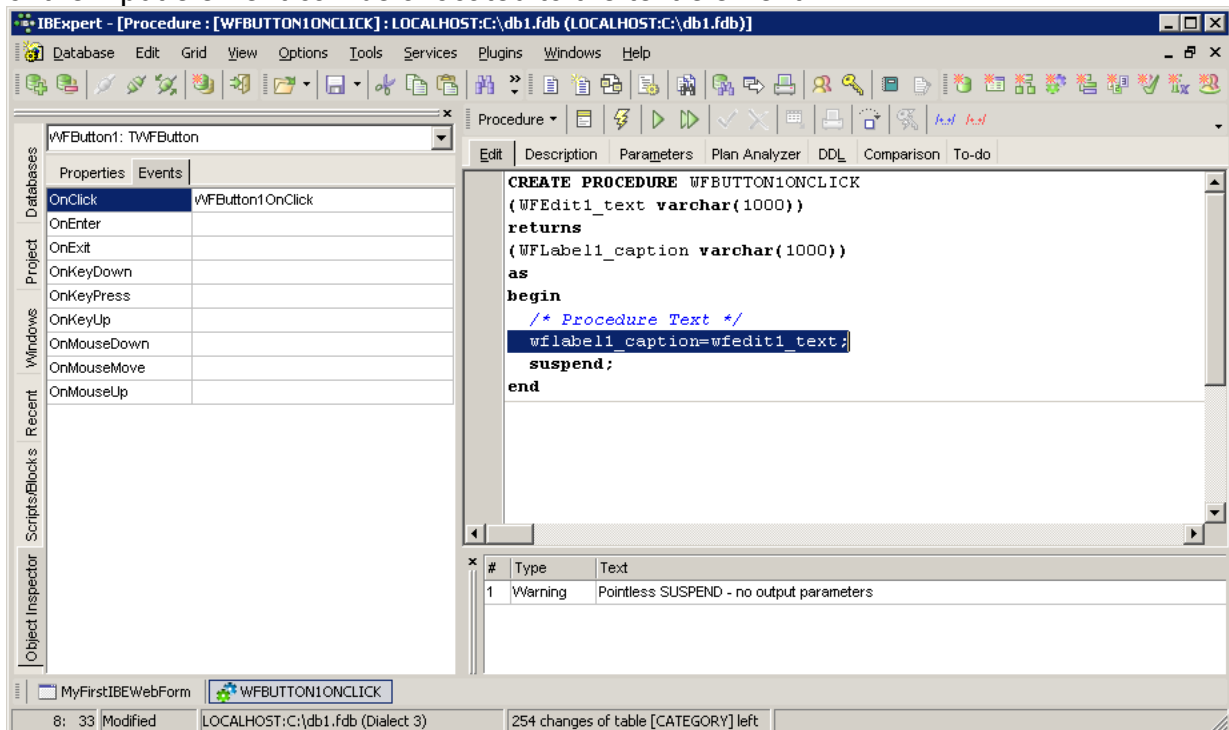
As an example we will now display the contents of the input field, when the button is clicked on. For this we first need an input parameter for the stored procedure, which we shall phrase as follows:



Now we need a return parameter for the text element, which can be defined as follows:



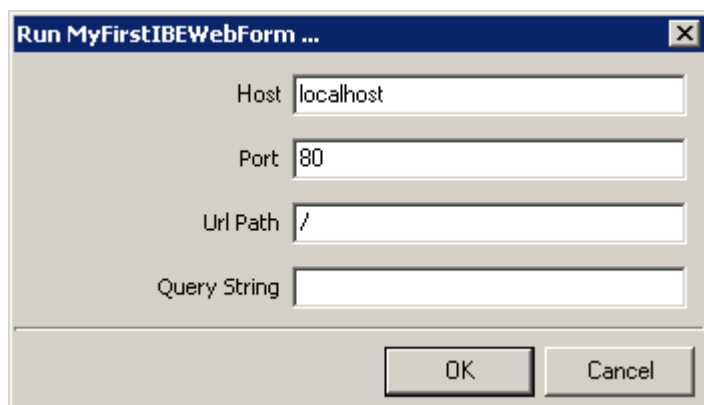
We now have to make a statement in the stored procedure body, so that the contents of the input element can be allocated to the text element.



Finally the stored procedure needs to be compiled, by clicking on the following icon:



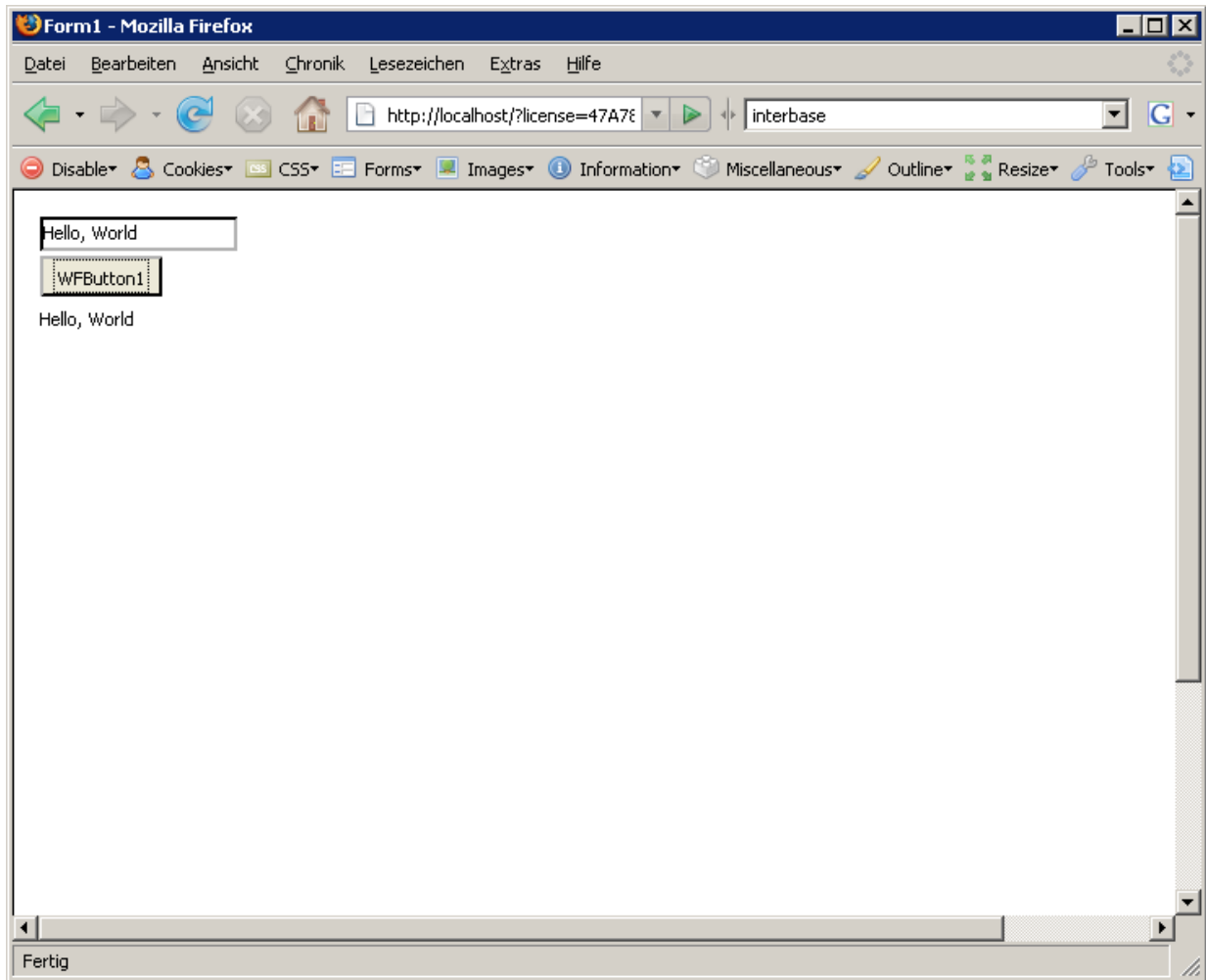
For the first test, close the procedure Editor after compiling and save the webform. Now you can test the form in the browser by pressing Ctrl+F9. This will show you the config dialog:

A screenshot of a dialog box titled 'Run MyFirstIBWebForm ...'. It contains four text input fields: 'Host' with 'localhost', 'Port' with '80', 'Url Path' with '/', and 'Query String' which is empty. At the bottom, there are 'OK' and 'Cancel' buttons.

The default value for the Port is 3080. If you want to use this application with typical http port, just change it to the standard port 80 before pressing OK. This will change the configuration of your integrated Apache server to use this port. Attention: If this port is already in use by another application, change it to a free port, for example 3080.

After changing the apache configuration, IBEExpert will automatically start your Webbrowser and show you this application.

After changing the Text, just press the button WFButton1 and the text will be shown in the WFLabel1.

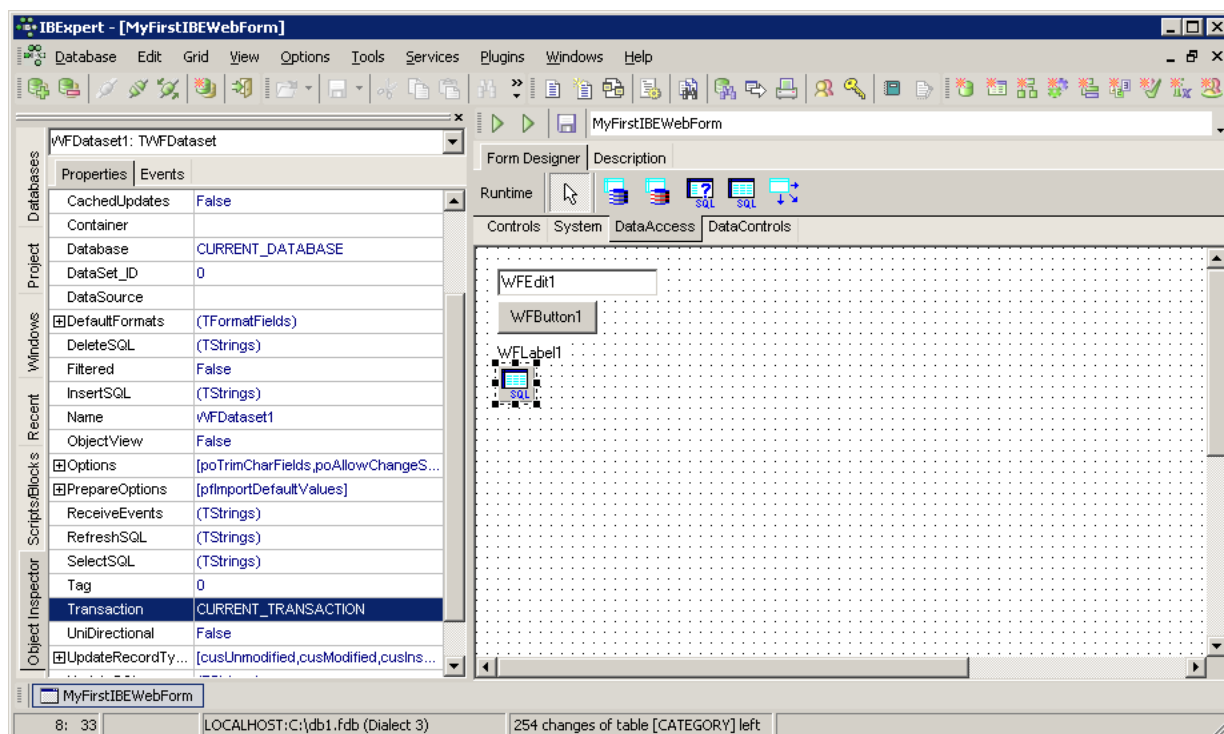


## How do I handle the database components?

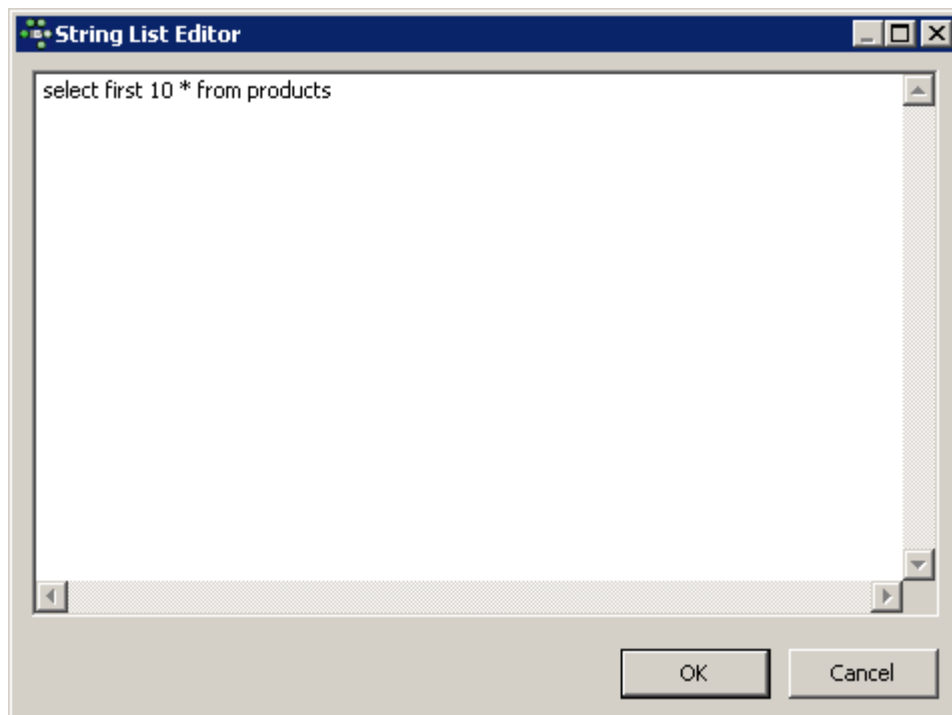
In IBExpertWebForms there is a component bar, DataAccess, with a range of components with which you can create a database connection and start database queries. These components are not visual, i.e. they cannot later be seen in the web browser. Another component bar, DataControls, can be later used to edit data in the web browser.

If you just want to work with table data in current database, you do not have to create the TWFDatabase and the TWFTransaction component, since there is automatically an instance created called CURRENT\_DATABASE and CURRENT\_TRANSACTION, which will be used in our example.

To send a database query to the database or to specify a SELECT-SQL for the display of data, create a TWFDataset component and connect this with Database and Transaction property to the available instances.

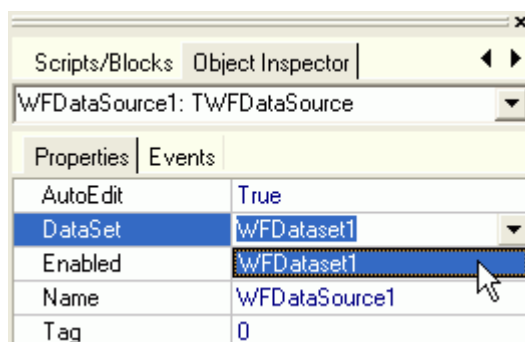


To put a SELECT statement to the database, use the *SelectSQL* property. This opens the Property Editor, where you specify any SELECT statement. You can also use the IBExpert Query Builder (IBExpert Tools menu), to create SELECT SQLs. We will now use the following SELECT statement “select first 10 \* from products” and confirm with OK.



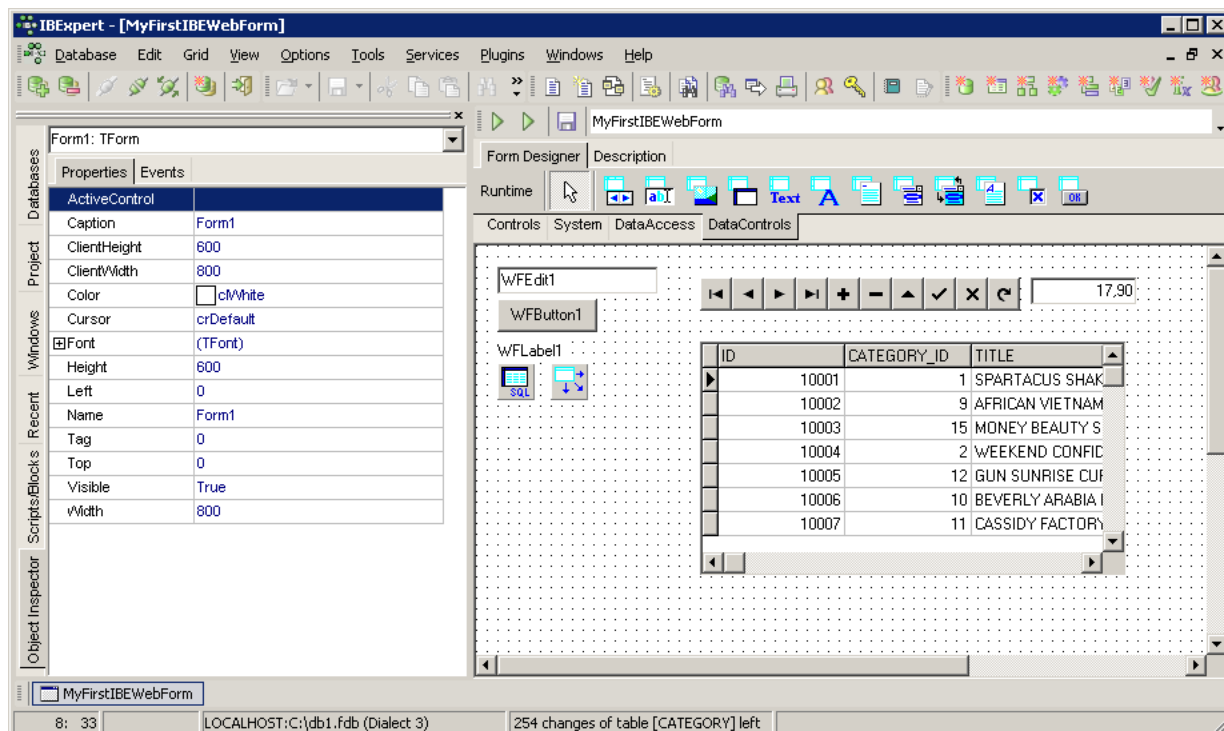
To test the SQL double-click on the *Active* property. If the status changes from *Active* to *True*, the SQL is error-free and the properties *Database* and *Transaction* have been set correctly; otherwise you will receive a corresponding error message.

Now we need a TWFDDataSource component, to obtain a data source for our visual database component in the component bar *DataControls*. Set the property *DataSet* to *WFDataset1*.



After changing the dataset property, you should click on the Name property, so that the properties are stored. Finally we can place components from the *DataControls* onto the form.

In the following example a TWFDNavigator, TWFDBEdit and a TWFDBGrid have been created:



The following lists the properties and their values, as defined to achieve the above result:

**DBNavigator1:**

DataSource=WFDataSource1

**DBEdit1:**

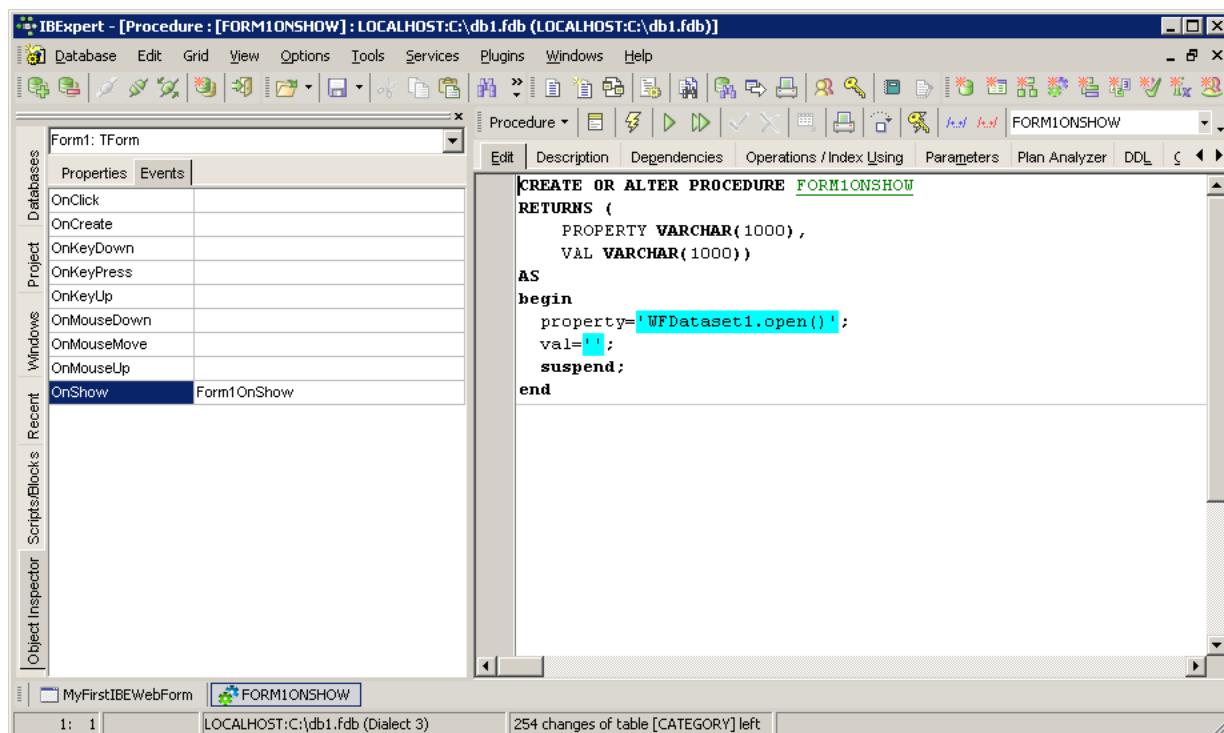
DataField=PRICE

DataSource=WFDataSource1

**DBGrid1:**

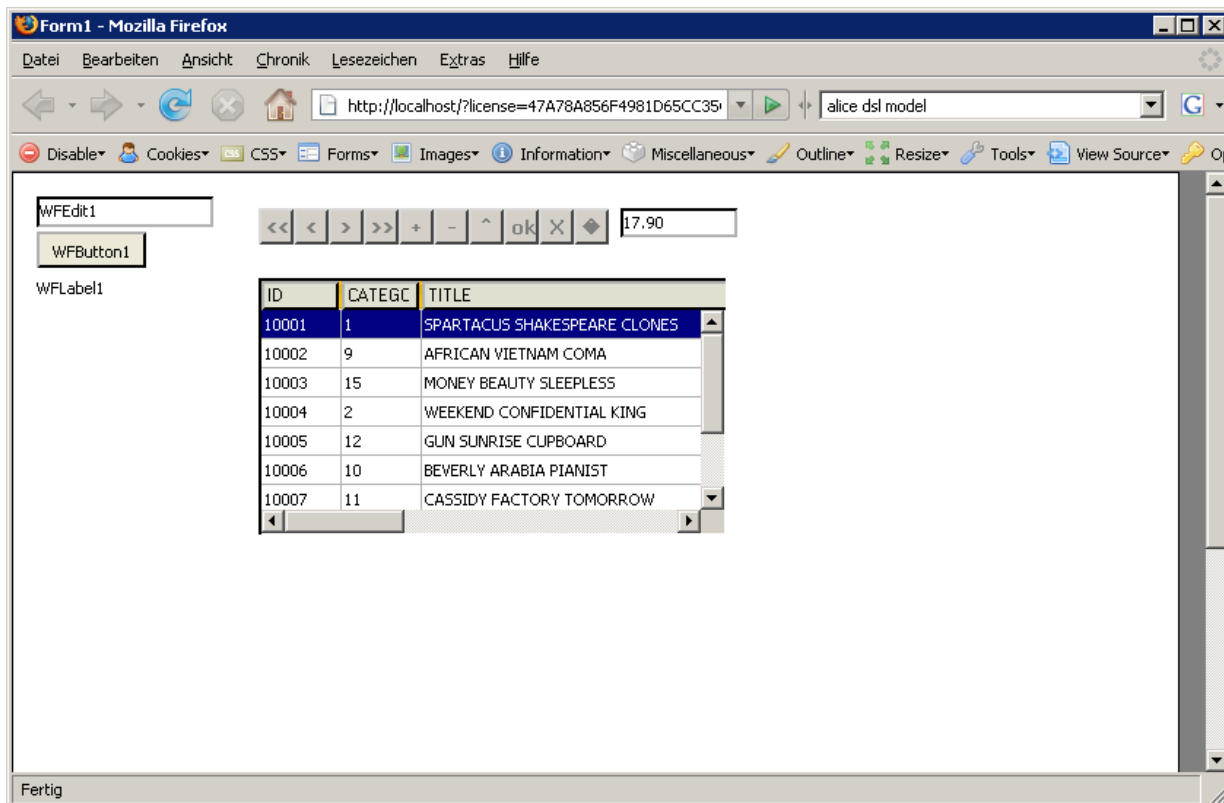
DataSource=WFDataSource1

We still need a stored procedure, which ensures that *WFDataSet1* is opened, the moment the form is displayed in the web browser. For this we will select the Form Form1 and create an OnShow Event procedure. Just Double click on the OnShow Event and add the procedure source code as shown. This procedure only has return parameters and no input parameters.



The return parameter *property* may contain any of the supported properties and methods of the available components. In the example the `open` method of the `WFDataset1` component is invoked. The return parameter, `val`, allows values for properties to be deposited. However in our example, `val` was not used, as we want to invoke a method.

Now start the Webform again with F9. This button hides the config dialog and starts the new webform in your browser.



## You want more examples?

Download the Pizzashop Demo from

[www.ibexpert.com/download/IBExpertWebForms/pizza.zip](http://www.ibexpert.com/download/IBExpertWebForms/pizza.zip)

After downloading pizza.zip, unpack it and do a restore with firebird 2.0. We recommend to put the database on your local machine in directory as c:\pizza\pizza.fdb (this path is hard coded in database component, if you want to change it).

Register the database in IBExpert and open the Pizzashop form for a simple demo of the pizza webshop example or the hxx form for a more complex example. We will add a documentation asap.

If you want to analyze the forms, just have a look at the table ibe\$scripts.

The IBExpert Team

## How to make my Webform visible from the internet?

If you have no static IP Address or a real domain registered for the computer where IBExpertWebForms runs on, you could use a dynamic DNS service. A lot of them offer free accounts, for example [www.no-ip.com](http://www.no-ip.com)

Just register there with your email and add a host. Typical host addresses are like MyName.no-ip.com, where MyName can be any name that you want to use in your registration.

When the host is added on no-ip.com, follow the instructions to download the client software, which will send your current IP address to the no-ip DNS server. From the Internet, the server is now available with the url MyName.no-ip.com.

If IBExpert uses this address for accessing your webform

`http://localhost/?license=47A78A856F4981D65CC35C632B1396F0&id=MyFirstIBWebForm`

you can replace localhost with the name registered on no-ip.com

`http://MyName.no-ip.com/?license=47A78A856F4981D65CC35C632B1396F0&id=MyFirstIBWebForm`

With this url, everybody can visit your Webform worldwide.

If you want to try this with also with the integrated phprojekt groupware, just use

`http://MyName.no-ip.com/phprojekt`

More Details about phprojekt can be found on [www.ibexpert.com/download/phprojekt](http://www.ibexpert.com/download/phprojekt)