Website Pros Database Component

v1.00.02

Table Of Contents

| Before Getting Started | 2 |
|--|-----|
| Using the Database Component | 5 |
| How the Database Component Works | 5 |
| Adding the Toolbar | 6 |
| Adding Component Objects | 7 |
| Setting Object Attributes | 9 |
| Using Editors | .11 |
| What Are Editors? | .11 |
| Using the Schema Editor | .12 |
| Using the SQL Wizard | .15 |
| Using the Expression Wizard | .18 |
| Operator Definitions | |
| Component Object Definitions | .21 |
| Database Objects | .21 |
| Connector | .21 |
| Recordset | .22 |
| Insert | .23 |
| Delete | .23 |
| Update | .23 |
| Data Output Objects | .24 |
| Label | .24 |
| Image | .24 |
| Link | .25 |
| Textbox | .25 |
| TextArea | .26 |
| ComboBox | .26 |
| Hidden Field | .26 |
| Flow Control Objects | .28 |
| Conditional (If - Else - ElseIf) | .28 |
| Recordset Iterator | .28 |
| Record Set Navigator | .29 |
| Tutorial | .33 |
| Setting Up the Database | .34 |
| Lesson 1. Data Retrieval | |
| Building a Data Retrieval Application | .36 |
| Building a Query for the Home Page | |
| Looping through a Recordset | |
| Displaying Database Records on the Home Page | |
| Navigating through a Recordset | |
| Viewing the Contact List | |
| Lesson 2. Inserting Data | |
| Using a Form to Submit New Data | |
| Inserting New Records | |
| Viewing New Records | |

| Lesson 3. Updating Data | |
|-----------------------------------|--|
| Using a Form to Update Data | |
| Using Variables and Where Clauses | |
| Adding Conditional Expressions | |
| Updating Records | |
| Viewing Updated Records | |
| Getting Help | |
| Index | |



You can use the **Website Pros Database Component** to develop dynamic, full-featured applications on ColdFusion, ASP, and PHP platforms. Incorporate common dynamic elements in objects such as forms, lists, and tables, all from within the NetObjects Fusion user interface and build pages that will:

- List details of a particular record to display the name, price, and description of a particular product.
- List all records in a database table to display names or all available products.
- Link each record in a list either to details about that record, so that clicking a product name displays a price and description, or to a related list from another table, to display all stores where the product is available.

You can do all this by simply dragging and dropping components on the page, setting attributes in the object properties palette, and using wizards to add tables and construct queries. With the Database Component, you won't need to write the code - the component will generate it for you.

To get started, check out **How the Database Component Works** and **Adding the Component Toolbar**.

Use the **Tutorial** to build an application where employees at Mountain Jacques Sports Company can view contact information of employees at different locations online. The tutorial will guide you through:

- Adding objects and setting attributes.
- Retrieving and displaying records.
- Using Where clauses and conditional statements.
- Using forms to insert and update new records.

Before Getting Started

Please review the following information before working with the Database Component.

- 1. The Database Component requires v.7.5 Update #3 or higher. Visit **www.netobjects.com** to view the product downloads page.
- 2. The code generated by the Database Component is evaluated on the server you publish to. It is important that you verify your server supports the database language you will be using. For information on server requirements, check with your hosting provider and/or platform documentation.
- 3. Databases and data sources should be created before using the Database Component.

Note that while some database applications, such as Microsoft Access and SQL Server, allow spaces in table names, the Database Component will allow table names with no spaces. (Ex. Name your table FirstName rather than First Name.)

- 4. The ASP and ColdFusion components connect to any database using ODBC.
- 5. The PHP component connects directly to any MySQL database or to an MS Access database on a Windows platform using a datasource. Full support for MS Access and MySQL are provided and can be selected in the PHP Connector Properties palette.

In addition, Adodb v3.05 drivers are available in the PHP components directory. To use one of these additional drivers, locate the correct file at ..\Components\DBComponent\db\php\000.Connector, and then type the file name in the Custom Engine field in the PHP Connector Properties palette.

For databases that you don't see a driver you may get them from the Adodb v3.05 for PHP distribution and install to the following location: ...\Components\DBComponent\db\php\000.Connector

6. Verify your data source has been successfully established.

Website Pros offers a Tag Library Component that works with the Database Component to fully integrate dynamic elements into your Web site. To download the component, launch NetObjects Fusion and download the Tag Library Component from the Control Panel in your Online view.

How the Database Component Works

You build your ColdFusion, ASP, or PHP application by placing Database Component objects on one or more pages that display data from a database. Each page needs at least 2 objects - a **Connector** to identify the database the data will come from and an object to query the database. You can also add objects to display fields and allow site visitors to search for data, navigate forward and backward through results, and update, add, or delete records.

| Layottou-can-contact-any-Me | untain Jaques employee using the contai ormation listed below. | Image: Contract of the second seco | ?_: |
|-----------------------------|---|---|-------|
| | omator isted below. | Label: | • AX |
| Name: | | Recordset | |
| Email: | Department: | FontColor | #0000 |
| | | FontFace | Arial |
| Phone: | Location: | FontBold | no |
| | · | FontItalic | no |
| | | FontSize | -2 |
| Add Information | Edit Information | | |
| | | | |
| DUILT WITH | NOF DB Component for F | НР | |

Once a component object has been added to your page, you set the attributes in the object properties palette. If you are unfamiliar with SQL and relational databases, you can use the **Editors** to add your tables and fields and build your queries.

Adding the Toolbar

To add the Database Component toolbar:

1. In Page view, from the View menu, choose Toolbars>Component Tools.

| × Ne | tOb | jects F | usion - M | yData | base.r | nod | | | |
|-----------------|--------------|--|---|---------------|------------------|--------------------|-------------------------|------------|--|
| Eile | <u>E</u> dit | ⊻iew | <u>G</u> o <u>O</u> bject | Te <u>x</u> t | <u>T</u> ools | Help | | | |
| Ż | ş | Tool V Prop | oars erties Palett | e | F3 | • | ✓ Standard 1 ✓ Advanced | | Q. (j) |
| On | line F | | Navigation ct Tree | | F2 F4 | | Componen | | Show All Hide All |
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| کی ب اللہ | 1 , 190 | Snap |) to Guides) to Grid) to Object (| utlines | | ihift+U ihift+D | | | |
| | - | Page Zoor | View Option | าร | F12 | • | | Department | |
| | 200 | 200 | Ir none. | | 1 | | | Location: | |

2. Select the Database language you will be working with.

The Database Component Toolbar will appear.



- To dock the toolbar, double-click its title bar or drag it to the left side or top of the window. You can move the toolbar by positioning the pointer over the double line at its top and dragging it anywhere in the window.
- To hide and show toolbars, from the View menu choose Toolbars > Components Tools > DB Language Name. A check mark on the menu indicates a Database Component toolbar is displayed.

Adding Component Objects

You can easily add component objects to any page of your site.

To add a component object:

- 1. In Page view, select an object from the Database Component Toolbar.
- 2. Click on the page where you want to place the object.

| inform | ain Jaques employee using the contact ation listed below. |
|-----------------|--|
| | |
| Name: AA | <u></u> |
| | Department: |
| Phone: | Location: |
| 7 | |
| | |
| Add Information | Edit Information |

An object placeholder and the object Properties palette appear.

3. Specify the object attributes in the Properties Palette. See **Setting Object Attributes.**

When adding Database Component objects, remember that:

• A connector object must be placed on each page you will be using the component.

Only one connector can be added to a page.

• Objects must be added/placed in the correct order for the code to be generated correctly. For example, when using a Recordset Iterator object, make sure the "Start" iterator object is placed before the "end" iterator object. Otherwise, the site

will publish with errors and the database will not be functional.

It is a good idea to add objects in a table to make sure placement is correct and the records will be aligned correctly when displayed.

Setting Object Attributes

Object attributes are edited in the Properties palette. For specific attribute details, see the **Component Object Definitions**.

To set object attribute properties:

1. In Page view, add an object to the page. The object placeholder and the object Properties palette appear.

| Recordset Iterator Properties 📪 🛋 🗙 | Link Properties |
|--|--|
| Image: I | Image: Image: Ima |
| Recordset Iterator: | Link: |
| Type Start | Recordset |
| Name | DataField |
| RecordsPerPage 10 | Targetblank |
| Recordset | Protocol |
| StartRow 1 | Image no |
| | Caption |
| | FontColor #000 |
| | FontFace |
| | FontItalic no 🧔 |
| 1 | |

The attributes listed for each object will be different according to the object.

- 2. Set the object Type, if available. This attribute is used for objects needing a start/close tag or if there are different variations of the object, such as If-Else-ElseIf-EndIf. If the object does not need to be closed, the Type attribute will not appear.
- 3. Some attributes must be set before you can proceed.
 - If the object you are working with requires a name, type a unique name in the Name field.
 - If the object you are using requires that you add or define tables, fields and/or conditions, you can use an Editor. See **Using Editors**.
 - If the object you are working with requires that a recordset be defined, choose from the recordset field drop-down in the properties palette. After

the recordset is defined, you can select a data field from the data field field drop-down in the properties palette.

- If the object you are working with requires that a recordset iterator be defined, choose from the iteratorName field drop-down in the properties palette.
- 4. Complete the process by selecting the remaining attributes (ex, FontSize), enter the attribute's value in the Properties Palette and click the check mark.

NetObjects Fusion does not verify object attribute values, so be sure to use valid syntax. Many objects have attributes that require values for them to function correctly.

Using Editors

What Are Editors?

The Database Component also allows you to insert custom statements by typing directly in the object properties palette. However, if you are unfamiliar with SQL and relational databases, you can use editors to easily add tables, define variables, and filter queries.

| Insert Inspector | | X |
|------------------|-------------|----|
| Table Name | Employees 💌 | |
| Fields | | |
| Department | | |
| Email | | |
| FirstName | | |
| LastName | | |
| Location | | |
| Login | | |
| Phone | | |
| | | |
| | | |
| | | |
| | | |
| | OK Canc | el |

There are 3 editors available in the Database Component:

- Schema Editor to assist in setting up your tables, fields, and variables.
- **SQL Wizard** to assist in adding tables and specifying records from which to search from.
- **Expression Wizard** to assist in building conditional expressions to filter recordsets.

Using the Schema Editor

The Schema Editor is used with the Connector object.

The **Schema Editor** is used to configure your tables and variables. These values only need to be configured in the Schema Editor and will be stored so they can be selected in the SQL and Expression Wizards.

| Co | nnector Properties | ? _ X |] |
|----|--------------------|----------------|---|
| 1 | ⊘ ≣ ⊙ | | |
| | Connector: | | |
| | | | |
| | DataSource | | |
| | User | | |
| | Password | | |
| | SchemaEditor | Double click h | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | 1 | | |
| | | | |

The tables you add on the **DB Schema** tab will be used to build a recordset. After adding a table, you will need to determine which data fields from that table you want to pull records from to form your recordset. The order in which you add your tables and fields is not important in the Schema Editor - by default, the sorting will be done in alphabetical, ascending order unless otherwise specified in the Recordset Properties Palette. There is no limit to the number of tables and fields you can add in the Schema Editor.

On the Variables tab, you can define the following variable types:

| - | URL | Variables reflecting parameters appended to a URL. |
|---|---------------------|--|
| | Parameter: | |
| - | CGI | Variables reflecting the CGI environment variables of the context of the |
| | Environment: | requested template. |
| • | Form: | Variables reflecting the values of the fields in a form submitted to the current template. |
| • | Client: | Variables used to associate data with a specific client. |
| - | Session: | Variables used to associate data with a given client session. |
| - | Server: | Variables used to associate data with a given client session. |
| • | Application: | Variables used to associate data with a specific application. |
| | | |

• **Cookie:** Variables reflecting cookies passed by the requesting browser.

Note that you must first add a Data Source in the properties palette before you can configure the tables and variables.

Configuring Tables

To configure tables using the Schema Editor:

- 1. Click on the DB Schema tab.
- 2. In the Table Name field, enter the name of the table you will be using as it appears in your database.
- 3. In the Field Name field, enter the name of a field that will be queried as it appears in your table.
- 4. Click Add. The field name will appear in the Fields list and will be associated with the table selected in the Table Name drop-down list.

| Tables and Variables Configuration | |
|------------------------------------|-----------|
| DB Schema Variables | |
| Table Name Employees | • |
| Field Name | |
| Phone | Add |
| Fields | |
| FirstName | Remove |
| LastName Email | |
| Erriali | |
| | |
| | |
| | |
| | OK Cancel |

- 5. Repeat Steps 2 and 3 to add additional data fields that will be queried.
- 6. To add additional tables, type a new name in the Table Name field and add data fields.

Note You must add a field in order for the table to be stored

Website Pros Database Component

7. Click OK to close the Schema Editor.

Configuring Variables

To configure variables using the Schema Editor:

- 1. Click on the Variables tab.
- 2. Select a variable type from the drop-down list:

| Tables and Variables Configuration | |
|------------------------------------|-----------|
| DB Schema Variables | |
| Variable Type Form | - |
| Variable Name | |
| Password | Add |
| Defined Variables | |
| Form.Login | Remove |
| | |
| | |
| | |
| | |
| | OK Cancel |

- 3. In the Variable Name field, enter a name for the new variable.
- 4. Click Add. The variable will appear in the Defined Variables list.
- 5. Repeat Steps 2 and 3 to add additional variables used in queries.
- 6. Click OK to close the Schema Editor.

Using the SQL Wizard

The SQL Wizard is used with the Recordset, Insert, Delete and Update objects.

| Insert Properties |
|--|
| |
| Insert: |
| Double click here to edit SQLWizard Double click h |
| SQLCustom |
| |
| |
| |
| |

Use the **Fields** tab in the SQL Wizard to select specific datafields to query. If you added your tables and datafields in the Schema Editor, the datafields will appear after choosing a table. For instance, if you have a table named "Students" and you want to query the records by last name, major, and classification, you would highlight the "LastName", "Major", and "Classification" datafields listed.

You can also use the **Where Clause** tab to narrow your search results. You use this when you want to return records that match a particular set of criteria. So, rather than pull records for all students in your class, you can narrow your results by searching for "Biology" in the Major datafield, which in turn, will return only those records meeting that criteria.

The where clause is not required; however, using a where clause is recommended. If you have, for example, 10,000 rows of data, it is likely you won't want to return them all. You can use the Where clause to filter your results to a manageable number. In addition, you can use the where clause to view the impact of updating or deleting records before actually carrying out the action. For example, if you are going to delete records, first use the Where clause to display the records you will be deleting. If you see that the data you will be deleting is wrong, you can make adjustments before taking any actions that cannot be undone.

Adding Tables and Fields

To add tables and data fields using the Query Inspector:

- 1. Click on the Fields tab.
 - If using the **Insert** object, go directly to Step 2.
 - If using the **Delete** object, go directly to **Filtering Results**.
- 2. Select a table from the "Table Name" drop-down list.
- 3. Highlight the datafields you want to use in the Fields list.

To select more than one field, press CTRL and select multiple fields.

| Query Inspector | |
|----------------------|--------|
| Fields Where Clause | |
| Table Name Employees | ▼ |
| Fields | |
| | |
| Department Email | |
| FirstName | |
| LastName Location | |
| Login | |
| Password | |
| Phone | |
| | |
| | |
| | OK Can |

YOU MUST HIGHLIGHT DATA FIELDS BEFORE CLOSING THE EDITOR OR THEY WILL NOT APPEAR IN OBJECT PROPERTIES PALETTES.

4. Click OK to close the SQL Wizard.

Filtering Results

To narrow the query result set using the Query Inspector:

- 1. Click on the Where Clause tab.
 - If using the **Delete** object, go to Step 2

- If using the **Insert** object, go to "Add Tables and data fields"
- 2. Click in the check box to activate the clause.
- 3. In the Operand field, select the table
- 4. In the operator field, select an operator from the drop-down list.

| Query Inspector | | | |
|-----------------|---------------------|---------------|-------------------------------|
| Fields Where C | Clause | | |
| Logic | Operand | Operator | Value |
| × | Phone v | is equal to 🔹 | Form.Phone |
| ✓ OR ▼ | Email 💌 | is equal to 🔹 | Form.Email |
| ✓ OR ▼ | Department v | is equal to 🔹 | Form.Department 💌 |
| ✓ OR ▼ | Login v | is equal to 🔹 | Form.Login 💌 |
| ✓ OR ▼ | Password v | is equal to 💌 | Form.Password 💌 Form.Login |
| | | | Form.Email |
| | | | Form.Password |
| | | | Form.Department ancel |

- 5. In the Value field, either type in a value or choose a pre-defined value from the drop-down list.
- 6. To narrow the results further, click on the next checkbox and repeat Steps 3 through 5.
- 7. Click OK to close the SQL Wizard.

Using the Expression Wizard

The Expression Wizard is used with the If and ElseIf objects.

| Conditional Expression Propert ? 💶 🗙 |
|---|
| 0 |
| Conditional Expression: |
| Type |
| ExpressionCustom ExpressionWizard Double click h |
| |
| |
| |
| |

The **Expressions Wizard** is used to build conditional statements to further narrow your query results. The Where clause filters records at the database level; the conditional statement queries your recordset results. For example, you have queried your "Students" table and returned 20 records of students majoring in Biology. Now, you would like to display these records on your Web site - however, you want to display senior records using a red font to set them apart. In this case, you can build a conditional expression by searching the Classification datafield for "seniors". The resulting expression would be:

If Classification = "senior" font = red Else font = black EndIf

You can add multiple conditions to one expression by including an ElseIf object. If you wanted to display freshman records in blue font, the resulting expression would be:

```
If Classification = "senior"
font = red
ElseIf Classification = "freshman"
font = blue
Else
font = black
EndIf
```

Notice that each expression has a beginning object (If) and a closing object (EndIf).

Adding Conditions

To construct conditional statements using the Conditional Expressions Editor:

- 1. Click in the check box to activate the expression.
- 2. In the Operand field, select the variable.

| Cond | itional Expr | ession Editor | | | | | × |
|------|--------------|------------------|---|-------------|---|---|---|
| | Logic | Operand | | Operator | | Value | |
| | | updates.Login | ▼ | is equal to | • | Form.Login 💌 | |
| Ľ | AND 🔻 | updates.Password | • | is equal to | • | Form.Password | |
| | AND 💌 | Form.Login | - | is empty | Ŧ | Form.Login updates.Phone updates.Department | |
| | AND 💌 | Form.Login | - | is empty | * | updates.Login updates.Email | |
| | AND 💌 | Form.Login | - | is empty | ~ | Form.Password updates.Password | |
| | | | | | | OK Cance | I |

- 3. In the operator field, select an operator from the drop-down list.
- 4. In the value field, you can:
 - Select a variable from the drop-down list.
 - Type in a new value.
- 5. To narrow the results further, click in checkbox on the next line and repeat Steps 3 through 5.
- 6. Click OK to close the Conditional Expressions Editor.

Operator Definitions

| Operator | Description |
|---------------------|--|
| and | All conditions must be met or no results are returned. |
| or | At least one condition must be met or no results are returned. |
| is empty | Tests that the value on the left side is empty. |
| is not empty | Tests that the value on the left side contains data. |
| is equal to | Tests that values match completely or no results are returned. |
| is not equal to | Tests that values are different. |
| is lower than | Tests that the value on the left side of the operator is less than the value on the right side. |
| is lower or equal | Tests that the value on the left side of the operator is less than or equal to the value on the right side. |
| is greater than | Tests that the value on the left side of the operator is greater than the value on the right side. |
| is greater or equal | Tests that the value on the left side of the operator is greater than or equal to the value on the right side. |
| contains | Tests that the value on the left side of the operator includes the value on the right side. |
| starts with | Tests that the value on the left side of the operator starts with the value on the right side. |
| ends with | Tests that the value on the left side of the operator ends with the value on the right side. |
| does not contain | Tests that the value on the left side of the operator does not includes the value on the right side. |

Component Object Definitions

Database Objects

Connector

The CONNECTOR object must be used on each page in which a component object is used. The connector "points" to the physical database you created, allowing you to access the data and query specific tables and fields. Note that the Connector attributes differ according to the platform being used.

| If usin | g ASP | and | ColdF | Fusion |
|---------|-------|-----|-------|--------|
|---------|-------|-----|-------|--------|

| Attribute | Description | Required ? |
|------------------|--|-------------------|
| DATASOURCE | The data source name (DSN) created to connect to the database containing your table(s). The data source must be created before connecting to the physical database. | Required |
| USER | Username required to access your database. | Optional |
| PASSWORD | Password corresponding with the username required to connect to your database. | Optional |
| SCHEMA EDITOR | Use an SQL Editor to configure tables and variables. See Using the Schema Editor. | Optional |

If using PHP...

| Attribute | Description | Required ? |
|------------|--|-------------------|
| DATASOURCE | The data source name (DSN) created to connect to the database containing your table(s). The data source must be created before connecting to the physical database. | Required |
| | If using a direct connection, the datasource will be used to associate table and field data with this profile. | |
| DB ENGINE | The engine used to create your database. Options are: MS Access MySQL | Required |

| CUSTOM ENGINE | Custom engine, such as Oracle or Sybase, used to create your database. See Before Getting Started. | Optional |
|--------------------|--|----------|
| DATABASE | The name of the Database being queried. | Required |
| HOST | The name of the computer on which your program is running. | Required |
| USER | Username required to access your database. | Optional |
| PASSWORD | Password corresponding with the username required to connect to your database. | Optional |
| CONNECTION TYPE | The type of connection used to connect to your database. Options are: Direct By DataSource | Required |
| SCHEMA EDITOR | Use an SQL Editor to configure tables and variables. See Using the Schema Editor. | Optional |

Recordset

The RECORDSET object is used to define the set of results a query will return. The recordset is used by Data Output objects to access and display data.

| Attribute | Description | Required ? |
|---------------|--|-------------------|
| NAME | Name for the query result recordset. | Required |
| SQL WIZARD | Use an SQL Editor to add tables and data fields, and filter the query result set. See Using the SQL Wizard. | |
| ORDER BY | Orders query results by the first specified data field. | Optional |
| SORT | Sorts query column data. Default is Ascending. | Optional |
| SQL CUSTOM | Add SQL statements to define tables, data fields and filter the query result set. | Optional |
| MAXROWS | The maximum number of rows returned in the recordset. If no number is specified, all rows will be returned. Default is -1. | Optional |

Insert

The INSERT object is used to insert new records in a table.

| Attribute | Description | Required ? |
|---------------|---|-------------------|
| SQL CUSTOM | Add SQL statements to define tables and data fields. | Optional |
| SQL WIZARD | Use an SQL Editor to add tables. See Using the SQL Wizard | |

Delete

The DELETE object is used to delete records from a table.

| Attribute | Description | Required ? |
|---------------|---|-------------------|
| SQL CUSTOM | Add SQL statements to define the table and filter the query result set. | Optional |
| SQL WIZARD | Use an SQL Editor to define the table and filter the query result set. See Using the SQL Wizard | |

Update

The UPDATE object is used to update existing records in tables after modifications have been made.

| Attribute | Description | Required ? |
|---------------|---|-------------------|
| SQL CUSTOM | Add SQL statements to define tables, data fields, and filter the query result set. | Optional |
| SQL WIZARD | Use an SQL Editor to add tables and filter the query result set. See Using the SQL Wizard | |

Data Output Objects

Label

A The LABEL object is used to display results of a query.

| Attribute | Description | Required ? |
|-------------|--|-------------------|
| DATA FIELD | The database field in which the query will search. | Required |
| FONT BOLD | Displays the query results in bold. | Optional |
| FONT COLOR | Displays the query results in the designated text color. | Optional |
| FONT FACE | Displays the query results in the designated style. | Optional |
| FONT ITALIC | Displays the query results in italics. | Optional |
| FONT SIZE | The font size, in pixels. | Optional |
| RECORDSET | The recordset being queried. | Required |

Image

The IMAGE object displays images datafields.

| Attribute | Description | Required ? |
|------------|--|-------------------|
| ALT | The alt tag for the image. | Optional |
| BORDER | The image border in pixels. | Optional |
| DATA FIELD | The database field in which the query will search. | Required |
| HEIGHT | The image height in pixels. | Optional |
| WIDTH | The image width in pixels. | Optional |
| RECORDSET | The recordset being queried. | Required |

Link

📾 The LINK object displays hyperlink data fields.

| Attribute | Description | Required ? |
|-------------|--|-------------------|
| DATA FIELD | The database field in which the query will search. | Required |
| RECORDSET | The recordset being queried. | Required |
| IMAGE | The link to the image. | Optional |
| IMAGE SRC | Path to the image link. | Optional |
| CAPTION | The caption linking to the text. | Optional |
| FONT COLOR | Displays the caption in the designated color. | Optional |
| FONT FACE | Displays the caption in the selected style. | Optional |
| FONT ITALIC | Displays the caption in italics. | Optional |
| FONT BOLD | Displays the caption in bold. | Optional |
| FONT SIZE | Displays the caption in the selected size. | Optional |

Textbox

The TEXTBOX object is a form element providing a textbox field based on a query.

| Attribute | Description | Required? |
|------------|--|------------------|
| DATA FIELD | The database field in which the query will search. | Required |
| | | |
| MAX CHARS | The maximum number of characters displayed. | Optional |
| | | |
| NAME | The name of the text box. | Required |
| | | |
| RECORDSET | The recordset being queried. | Required |

TextArea

E The TEXTAREA object is a form element providing a text area based on a query.

| Attribute | Description | Required ? |
|------------|--|-------------------|
| DATA FIELD | The database field in which the query will search. | Required |
| NAME | The name of the Combo box. | Required |
| RECORDSET | The recordset being queried. | Required |

ComboBox

The COMBOBOX object is a form element that displays a recordset in a drop-down or list box.

| Attribute | Description | Required? |
|------------------|---|------------------|
| NAME | The name of the ComboBox element. | Required |
| RECORDSET | The recordset being queried. | Required |
| DATA FIELD | The database field in which the query will search. | Required |
| LINES | The number of records displayed at one time in a ListBox. Default is 1. | Optional |
| CONTROL STYLE | Displays the recordset as a drop-down list or list box. | Optional |

Hidden Field

The HIDDENFIELD object is a hidden object placed on the page which the site visitor cannot see.

| Attribute | Description | Required? |
|-----------|-------------|-----------|
| | | |

-

| DATA FIELD | The database field in which the query will search. | Required |
|------------|--|----------|
| NAME | The name of the Hidden Field element. | Required |
| RECORDSET | The recordset being queried. | Required |

Flow Control Objects

Conditional (If - Else - Elself)

The CONDITIONAL object is used to construct simple and compound conditional statements. IF conditions are used with ELSE and ELSEIF conditions. Note that an If statement must be closed with an EndIf tag or an error will be generated after publishing.

| Attribute | Description | Required ? |
|----------------------|---|-------------------|
| TYPE | Select tag type: If, Else, or ElseIf to start the conditional statement. EndIf to close the conditional statement | Required |
| EXPRESSION CUSTOM | Add SQL statements to construct conditional statements. | Optional |
| EXPRESSION WIZARD | Use an SQL Editor to construct conditional statements. See Using the Expression Wizard. | |

Recordset Iterator

The RECORDSET ITERATOR object is used to loop through a query record set. During each iteration, the columns of the current row are available for output. The iterations will continue until one or more conditions are met.

| Attribute | Description | Required? |
|---------------------|--|------------------|
| TYPE | Select:Start to begin the iterator tag.End to close the iterator tag. | Required |
| NAME | Name for the iterator. | Required |
| RECORDS PER PAGE | The number of records displayed after the iteration(s) is complete. If no number is specified, all records will be displayed. Default is 10. | Optional. |
| RECORDSET | The recordset being queried. | Required |
| START ROW | The first row of the query that is included in the loop. | Optional |

Record Set Navigator

The RECORDSET NAVIGATOR object is used to place smart links on pages displaying query results. The smart links allow site visitors to navigate forwards and backwards through the query results.

| Attribute | Description | Required ? |
|-------------------|---|-------------------|
| Iterator Name | The iterator being used. | Required |
| Alignment | Aligns the smart links on the page | Optional |
| Spacing | Space, in pixels, displayed between the smart links | Optional |
| FirstVisible | Places a smart link on the page taking the user to the first record of the query set result. | Optional |
| FirstImage | Displays the smart link to the first record if the query set result as an image. | Optional |
| FirstImageSrc* | Location of the image or file displayed as the FirstImage smart link. | Optional |
| FirstCaption | Caption used for the FirstImage smart link | Optional |
| FirstFontColor | Font color used for the FirstCaption text. | Optional |
| FirstFontFace | Font type used for the FirstCaption text. | Optional |
| FirstFontItalic | Italicizes the FirstCaption text. | Optional |
| FirstFontBold | Bolds the FirstCaption text. | Optional |
| FirstFontSize | Font size of the FirstCaption text. | Optional |
| PreviousVisible | Places a smart link on the page taking the user to the previous record of the query set result. | Optional |
| PreviousImage | Displays the smart link to the previous record if the query set result as an image. | Optional |
| PreviousCaption | Caption used for the PreviousImage smart link | Optional |
| PreviousFontColor | Font color used for the PreviousCaption text. | Optional |

Website Pros Database Component

| PreviousFontFace | Font type used for the PreviousCaption text. | Optional |
|---|--|--|
| PreviousFontItalic | Italicizes the PreviousCaption text. | Optional |
| PreviousFontBold | Bolds the PreviousCaption text. | Optional |
| PreviousFontSize | Font size of the PreviousCaption text. | Optional |
| PreviousImageSrc* | Location of the image or file displayed as the PreviousImage smart link. | Optional |
| NextVisible | Places a smart link on the page taking the user to the next record of the query set result. | Optional |
| NextImage | Displays the smart link to the next record if the query set result as an image. | Optional |
| NextCaption | Caption used for the NextImage smart link | Optional |
| NextFontColor | Font color used for the NextCaption text. | Optional |
| NextFontFace | Font type used for the NextCaption text. | Optional |
| NextFontItalic | Italicizes the NextCaption text. | Optional |
| | | |
| NextFontBold | Bolds the NextCaption text. | Optional |
| NextFontBold NextFontSize | Bolds the NextCaption text. Font size of the NextCaption text. | Optional Optional |
| | Font size of the NextCaption text. Location of the image or file displayed as the | |
| NextFontSize | Font size of the NextCaption text. Location of the image or file displayed as the NextImage smart link. Places a smart link on the page taking the user to | Optional |
| NextFontSize NextImageSrc* | Font size of the NextCaption text. Location of the image or file displayed as the NextImage smart link. Places a smart link on the page taking the user to the last record of the query set result. Displays the smart link to the last record if the | Optional Optional |
| NextFontSize NextImageSrc* LastVisible | Font size of the NextCaption text. Location of the image or file displayed as the NextImage smart link. Places a smart link on the page taking the user to the last record of the query set result. | Optional Optional Optional |
| NextFontSize NextImageSrc* LastVisible LastImage | Font size of the NextCaption text. Location of the image or file displayed as the NextImage smart link. Places a smart link on the page taking the user to the last record of the query set result. Displays the smart link to the last record if the query set result as an image. | Optional Optional Optional Optional |
| NextFontSize NextImageSrc* LastVisible LastImage LastCaption | Font size of the NextCaption text. Location of the image or file displayed as the NextImage smart link. Places a smart link on the page taking the user to the last record of the query set result. Displays the smart link to the last record if the query set result as an image. Caption used for the LastImage smart link | Optional Optional Optional Optional Optional |
| NextFontSize NextImageSrc* LastVisible LastImage LastCaption LastFontColor | Font size of the NextCaption text. Location of the image or file displayed as the NextImage smart link. Places a smart link on the page taking the user to the last record of the query set result. Displays the smart link to the last record if the query set result as an image. Caption used for the LastImage smart link Font color used for the LastCaption text. | Optional Optional Optional Optional Optional Optional |
| NextFontSize NextImageSrc* LastVisible LastImage LastCaption LastFontColor LastFontFace | Font size of the NextCaption text. Location of the image or file displayed as the NextImage smart link. Places a smart link on the page taking the user to the last record of the query set result. Displays the smart link to the last record if the query set result as an image. Caption used for the LastImage smart link Font color used for the LastCaption text. Font type used for the LastCaption text. | Optional Optional Optional Optional Optional Optional Optional |

| LastImageSrc* | Location of the image or file displayed as the | Optional |
|---------------|--|----------|
| | LastImage smart link. | |

*Displayed as an attribute only if an image is being used for the smart link.

Tutorial

Your employer has requested that you create a Web site displaying contact information for employees at all of the company locations. So, you are going to create an application consisting of pages that display data directly from the database where site visitors can see employees contact information, as well as add and modify employee records.

| Em | oloyee Contac | t Informa | tion |
|-----------------|-------------------------------------|--|------------------|
| Υοι | ı can contact any Mounta informa | nin Jaques emplo ation listed below | 5 5 |
| Name: | Jane Bennett | | |
| Email: | jbennett@mjsports.com | Department: | Human Resources |
| Phone: | 407-555-5678 | Location: | Orlando |
| | | | |
| Name: | Ted Davis | | |
| Name: Email: | Ted Davis ted@@mjsports.com | Department: | Customer Service |

To complete the lesson, you should already be familiar with the basic NetObjects Fusion concepts including creating sites from templates.

Setting Up the Database

Before building your database application, you will need to first create your database and then create a data source.

- 1. Create the database and name it *Tutorial*.
- 2. You will create a table that stores employee contact information.

| Location | FirstName | LastName | Department | Email | Phone | Login | Password |
|--------------|-----------|----------|---------------------|------------------------|----------------------|-----------|-----------|
| Jacksonville | John | Smith | IT | jsmith@mjsports.com | 904- 444- 1234 | jsmith | jsmith |
| Orlando | Bill | Jones | Marketing | bjones@mjsports.com | 407- 555- 1234 | bjones | bjones |
| Miami | Mary | White | IT | IT mary@mjsports.com | | mwhite | mwhite |
| Jacksonville | Paula | Moore | Customer Service | pmoore@mjsports.com | 904- 444- 5678 | pmoore | pmoore |
| Tampa | Carl | Williams | Finance | cwilliams@mjsports.com | 831- 999- 1234 | cwilliams | cwilliams |
| Tampa | Lisa | Jackson | Marketing | ljackson@mjsports.com | 831- 999- 5678 | ljackson | ljackson |
| Orlando | Jane | Bennett | Human Resources | jbennett@mjsports.com | 407- 555- 5678 | jbennett | jbennett |
| Miami | Ted | Davis | Customer Service | ted@@mjsports.com | 305- 777- 5678 | tdavis | tdavis |

Name the table *Employees* and use the following data.

Note: MS Access users can download the Employees table <u>here</u>. If using a printed manual, please go to the Online help in your NetObjects Fusion Control Panel and download from the Tutorial section.

- 4. Create a Data Source and name it *tutorial*.
- 5. Click **Download** to save the tutorial template.

Note: If using a printed manual, please go to the Online help in your NetObjects Fusion Control Panel and download from the Tutorial section.

6. Add the database component toolbar that corresponds with the platform you will be publishing to.

You are ready to start building your Web site application!

Lesson 1. Data Retrieval

Building a Data Retrieval Application

In this lesson, you'll use an editor to add your tables and fields, and connect them to the *Tutorial* database created in the introduction.

1. From the toolbar, place a Connector object on the Home page. This will establish a connection to *Tutorial*.

| | informa | in Jaques employe tion listed below. | is using the set | maat |
|--------|---------------------------------------|---|---------------------------------------|------|
| | | | | |
| | | | | |
| | · · · · · · · · · · · · · · · · · · · | | iiii | ;; |
| | | | | I I |
| Name: | | | 1 1 1 1 | y |
| | | | · · · · · · · · · · · · · · · · · · · | |
| Email: | | Department: | | |
| Phone: | | | | |

The Connector Properties palette will appear.

| ⊇ 0 | | |
|----------------|----------------|--|
| Connector: | | |
| DataSource | | |
| DBEngine | MySql | |
| CustomEngine | | |
| Database | | |
| Host | localhost | |
| User | | |
| Password | | |
| ConnectionType | Direct | |
| SchemaEditor | Double click h | |

| C | onnector Properties | ? _ X |
|---|--------------------------|----------------|
| | 0 | |
| | Connector: | |
| | DataSource User | |
| | Password SchemaEditor | Double click h |
| | | |
| | | |
| | | |
| | <u>,</u> | |

2. In the Connector Properties palette, type *Tutorial* the Data Source Name as named in the Introduction.

Complete the additional fields in the Connector Properties palette, if necessary (ex. User and Password, if required).

Next, you will need to set up the tables and fields.

- 3. Double-click to open the **Schema Editor**. On the DB Schema tab:
 - a. Type *Employees* in the Table Name field and press Enter.
 - b. Type *FirstName* in the Field Name field, then click Add.

| Tables and Va | riables Configuration | |
|-------------------|-----------------------|-----------|
| DB Schema | Variables | |
| Table Name | Employees | • |
| Field Name | | |
| Phone | | Add |
| Fields | | |
| FirstName | | Remove |
| LastName Email | | |
| CITICII | | |
| | | |
| | | |
| | | |
| | | OK Cancel |

- c. To add the remaining datafields, repeat Step 3b for *LastName*, *Email*, *Phone*, *Department*, and *Location*.
- 4. Click **OK** to close the Schema Editor.

Now that you have added your table and datafields, you are ready to query the database for the employee records.

Building a Query for the Home Page

In this lesson, you will build a query that retrieves information from the Employees database to display on your Home page.

1. From the toolbar, place a **Recordset** object on the Home page. This will define the set of results the query will return.

Employee Contac Recordset Iterator Properties 😤 🗕 🗙 ٠ 🖬 🚺 🖸 Layottou can contact any Mounta informa Recordset Iterator: Туре Name: Name RecordsPerPage Email: Recordset Phone: StartRow Add Information

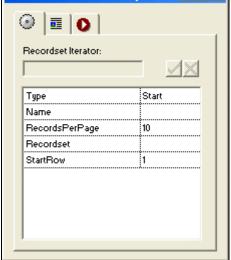
The Recordset Object Properties Palette will appear.

2. Type *EmployeeList* in the Name field. This will be the name of your Recordset.

Next, you will define your Recordset by selecting the table and fields that will be queried.

- 3. Double-click to open the SQL Wizard.
- 4. Select the *Employees* table from the "Table Name" drop-down list.

You will see the *Employees* datafields listed in the Fields section.



| Query Inspector | |
|------------------------|-----------|
| Fields Where Clause | |
| Table Name Employees 💌 | |
| Fields | |
| Department Email | |
| FirstName | |
| LastName | |
| Location | |
| Phone | |
| | |
| | |
| | |
| | OK Cancel |

- 5. Highlight all datafields listed. If a datafield(s) is not highlighted, the field will not be queried and no data will be returned.
- 6. Click OK to close the SQL Wizard.

Now, you can determine how your Recordset results will be returned.

- 7. Type *LastName* in the **OrderBy** field. This will use the LastName datafield to order the records when displayed.
- 8. Choose *Ascending* in the **Sort** field to display the employee information, after ordered by LastName, in ascending (A-->Z) order.

Next, you will add objects that will iterate through your recordset and display the query results.

Looping through a Recordset

In this lesson, you will add Iterator objects to loop through your Recordset and return data. Note that when you use Recordset Iterator objects, you need to add at least 2 on a page - the first to begin the loop and the second to terminate it. If you do not add a terminating iterator, you will receive errors when publishing.

1. Place a **Recordset Iterator** object on the Home page. This will establish the recordset parameters.

| Layout ou- | can contact any Mour inforr |
|------------|--------------------------------|
| e 🔁 | |
| 74 tz | |
| Name: | |
| Email: | |
| Phone: | |
| | |
| | |
| | |



- 2. In the Recordset Iterator Properties Editor:
 - a. Select *Start* as the object **Type**.
 - b. Type *ListIterator* in the **Name** field. This will be the name of your Iterator.
 - c. Type 5 in the **RecordsPerPage** field. Your contact list will display 5 records at a time.
 - d. In the **Recordset** field drop-down, select *contacts* as the recordset you will be working with.
- 3. Place an additional Recordset Iterator object below the table and select *End* as the object **Type**.



Displaying Database Records on the Home Page

Now that you have built your query, you are ready to display the results. For this tutorial, you will use Label objects to display the recordset.

1. In the table cell next to Name, add a Label object.

| mpioyee | Contact | Label Properties | ? _ |
|-------------------------------|-----------------------------|------------------|--------------|
| <mark>ut</mark> ou can contac | t-any Mountair informati | 🕑 📰 💽 | |
| | | FirstName | • 🗵 |
| e: A | | Recordset | EmployeeList |
| A | | DataField | FirstName |
| | + | FontColor | #0000 |
| | | FontFace | Arial |
| | | FontBold | yes |
| | | FontItalic | no |
| | | FontSize | -2 |

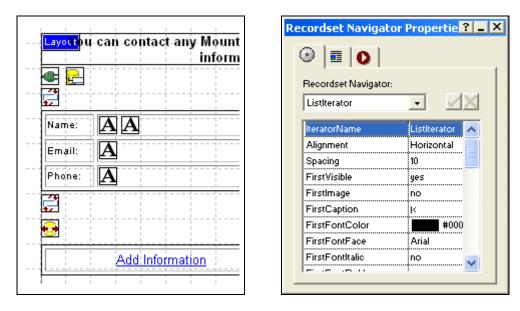
- 2. In the Label Properties Editor:
 - a. Select *EmployeeList* from the **Recordset** field drop-down.
 - b. Select *FirstName* from the **DataField** field drop-down. This will be the field displayed.
- 3. Add a second Label Properties Editor next to the first, with a space between the two labels.
 - a. Select *Employees* from the **Recordset** field drop-down.
 - b. Select *LastName* from the **DataField** field drop-down. This will be the field displayed next to FirstName.
- 4. Add the remaining Label objects to the table cells on the page, repeating the above steps to display the appropriate fields.

| ** | | | | | - + | | | | · + | |
|-----------|----|--|------|------|----------------|------------|---|---------------------|-----|----------|
| Name: | AA | | | | - - | 1 1 | | | |] |
| Email: | Α | | | Depa | Intment | | A | | + | |
| Phone: | Α | | | Loca | tion: | | Α | | · | |
| , | | | | | | | | | | |

Next, you will add navigation so that site visitors can navigate through the recordset.

Navigating through a Recordset

When we built the query, we set the RecordsPerPage as 5; now, we must provide your site visitors a way to navigate backwards and forwards through a recordset that contains more than 5 records. In this lesson, we will add a recordset navigator object to give visitors that functionality.



1. Place a Recordset Navigator object under the second iterator on the Home page .

2. In the Recordset Navigator Properties Editor, select *ListIterator* from the **IteratorName** field drop-down.

If you have completed all the previous steps in Lesson 1, your page will look like this:

| inform | ain Jaques employee using the contact ation listed below. |
|-----------------------|--|
| | |
| Name: 🗚 🗛 | |
| Email: 🛕 | Department: |
| Phone: 🛕 | Location: |
| 74 9 | |
| | |
| Add Information | Edit Information |

You are now ready to publish your site and view the results!

Viewing the Contact List

After you have published your site, your Home page should display the Recordset results.

| 100 | ı can contact any Mounta informa | ntion listed below | yee using the contact |
|--------|-------------------------------------|--------------------|-----------------------|
| Name: | Jane Bennett | | |
| Email: | jbennett@mjsports.com | Department: | Human Resources |
| Phone: | 407-555-5678 | Location: | Orlando |
| | 407-555-5078 | 2008/1011 | Chando |
| Name: | Ted Davis | | |
| Email: | ted@@mjsports.com | Department: | Customer Service |
| Phone: | 305-777-5678 | Location: | Miami |
| | | | |
| Name: | Lisa Jackson | | |
| Email: | ljadeson@mjsports.com | Department: | Marketing |
| Phone: | 831-999-5678 | Location: | Tampa |
| | | | |
| Name: | Bill Jones | | |
| Email: | bjones@mjsports.com | Department: | Marketing |
| Phone: | 407-555-1234 | Location: | Orlando |
| | | | |
| Name: | Paula Moore | | |
| Email: | pmoore@mjsports.com | Department: | Customer Service |
| Phone: | 904-444-5678 | Location: | Jacksonville |
| | | | |

In the next lesson, you will learn how to insert records into your database using a form.

Lesson 2. Inserting Data

Using a Form to Submit New Data

The Database Component Tutorial template has pre-built forms you can use to insert and update records into your database. To complete the following lessons, you should already be familiar with the basic NetObjects Fusion concepts including creating forms.

First, we will take a look at how to use a form to submit new data. From the Site Navigation Palette, go to the **addInfo** Page. You will notice the following:

- The page layout has been changed to a Form.
- The Forms Edit Fields and Combo Boxes are named for the associated Employees database fields.

| | | Forms Edit Field Properties |
|--------------------------|--------------------------------|---------------------------------|
| | | |
| Form First Name: | | Name: FirstName |
| Last Name: | | <u>T</u> ext: |
| Phone Number: | | |
| Department: Location: | Customer Service Jacksonville | Pass <u>w</u> ord field |
| | | Visible length: 34 📩 characters |
| UserID: | | Max length: 34 - characters |
| Password: | Submit | <u>H</u> TML |

To complete the Form setup, you will need to specify the action taken after your site visitor clicks "Submit".

1. On the Add Information Page, click on "Layout Form".

The Layout Properties Palette will appear.

2. Click on the Settings... button to open the Form Settings dialog.

| Form Settings |
|----------------------------------|
| Form name: ADD_INFORMATION |
| Settings |
| Action: addsubmission.php Browse |
| <u>M</u> ethod: |
| Encoding type: |
| Hidden fields |
| Name Value |
| |
| +- ++ |
| OK Cancel |

- 3. Under Settings, add one of the following:
 - If using ASP, type in addsubmission.asp
 - If using ColdFusion, type in addsubmission.cfm
 - If using PHP, type in addsubmission.php
- 4. Click OK to close the Form Settings dialog.

Your form is complete! Next, you will build the page the new data will be submitted to.

Inserting New Records

In this lesson, you will build the page that accepts the new data and tells it what table and fields to place the data in.

1. From the toolbar, place a Connector object on the addsubmission page and complete the required fields. This will establish a connection to the *Employees* database so that new records can be inserted.

| Add Contact Information | | | | |
|--|---|--|--|--|
| | | | | |
| | | | | |
| Thank You for Your Submission. 🛙 | | | | |
| | _ | | | |
| Your contact information has been added to the Employee Contact Information database. | | | | |

Next, you will need to add the Login and Password datafields from the Employees database to the DB Schema.

- 2. In the Connector Object Properties Palette, double-click to open the **Schema Editor**.
- 3. On the DB Schema tab, select *Employees* from the Table Name drop-down list.

Add the datafields *Login* and *Password*.

| Tables and Va | riables Configuration | | | × |
|--|-----------------------|------|-------|----|
| DB Schema | Variables | | | |
| Table Name | Employees | | • |] |
| Field Name | | | | |
| Password | | þ | \dd | |
| Fields Department Email FirstName LastName Location Phone Login | | Rei | move |] |
| | | ок | Cance | el |

4. Click **OK** to close the Schema Editor.

Now, you can define the table and datafields the form will submit the new information to.

5. Add an Insert object besides the Connector object on the addsubmission page.

| Add Contact Inform | Insert Properties ? = X |
|---|---|
| Thank You for | Insert: Double click here to edit SQL Vizard Double click h SQLCustom |
| Your contact information h Contact Infor | |
| | |

6. In the Insert Properties palette, double-click to open the SQL Wizard.

7. Select the *Employees* table from the "Table Name" drop-down list.

| Insert Inspector | | × |
|------------------|-------------|-------|
| Table Name | Employees 💌 | |
| Fields | | |
| Department | | |
| Email | | |
| FirstName | | |
| LastName | | |
| Location | | |
| Login | | |
| Phone | | |
| | | |
| | | |
| | | |
| | | |
| | ок | ancel |

- 8. Highlight all datafields listed. If a datafield(s) is not highlighted, the field will not be recognized and no data will be submitted to it.
- 9. Click OK to close the SQL Wizard.

Now, you are ready to publish and add new records!

Viewing New Records

Once you have published your site, you can add new records. To see how this works, you can add a new record on the Add Contact page.

After you click Submit....

| Add Contact | Information |
|--|--|
| First Name: Last Name: Email Address: Phone Number: Department: Location: | New Person name@mjsports.com 904-555-9874 Customer Service V Jacksonville V |
| UserID: Password: | new 123456 Submit |

...go to the Home page and view the newly inserted record!

| Employee Contact Information | | | | | | |
|------------------------------|-------------------------------------|--|------------------|--|--|--|
| Υοι | ı can contact any Mounta informa | ain Jaques emplo ation listed below | | | | |
| Name: | Paula Moore | | | | | |
| Email: | pmoore@mjsports.com | Department: | Customer Service | | | |
| Phone: | 904-444-5678 Location: Jacksonville | | | | | |
| | | | | | | |
| Name: | New Person | | | | | |
| Email: | name@mjsports.com | Department: | Customer Service | | | |
| Phone: | 904-555-9874 | Location: | Jacksonville | | | |
| | | | | | | |
| Name: | John Smith | | | | | |
| Email: | ismith@misports.com | Department: | ІТ | | | |

Lesson 3. Updating Data

Using a Form to Update Data

You have decided to create pages where users login, and then modify their contact information. In the following lessons, you will edit the form where the users login, then use conditional statements to determine the correct fields to display.

| | | | | | | - |
|--------------|------------------|--------------|---------|-------------|------------|-------|
| Contact List | ayout FormPlease | lógin to upd | atė γοψ | r-contact-i | nformation | |
| | | | | | | |
| Add Contact | Login: |] | | | | |
| Edit Contact | Password: | | | | | |
| | | Login | | | | |
| | | | | | | |
| | | I I I | | | | |

As with the previous lesson in which you learned to insert new records, you will need to complete the form setup by the action taken after your site visitor clicks "Login".

1. On the Login Page, click on "Layout Form".

The Layout Properties palette will appear.

2. Click on the **Settings...** button to open the Form Settings dialog.

| Form Settings | | | ? 🛛 |
|-----------------|----------------|---------------|------------|
| Form name: LOG | IN_INFORM/ | ATION | |
| Settings | | | |
| <u>A</u> ction: | edit.php | | Browse |
| <u>M</u> ethod: | ⊙ <u>P</u> ost | C <u>G</u> et | |
| Encoding type: | | | |
| _ Hidden fields | | | |
| Name | | Value | |
| | | | |
| +- | | | <u>+</u> ↓ |
| | | OK | Cancel |

- 3. Under Settings, add one of the following:
 - If using ASP, type in edit.asp
 - If using ColdFusion, type in edit.cfm
 - If using PHP, type in edit.php
- 4. Click OK to close the Form Settings dialog.

Next, you will build the page the data to be modified is displayed on.

Using Variables and Where Clauses

In the next 2 lessons, you will build the page that displays fields to be updated if the login information is correct. You will also add a label to display a message if the login information is incorrect.

1. From the toolbar, place a Connector object on the edit page and complete the required fields. This will establish a connection to the *Employees* database.

| Edit Contact Information | | | | | | | |
|--------------------------|--|---|--|--|--|--|--|
| Layout Form | | | | | | | |
| | | | | | | | |
| Welcome ! | | : | | | | | |

- 2. In the Connector Object Properties Palette, double-click to open the Schema Editor.
- 3. On the Variables tab, select *Form* from the Variable Type drop-down list.

Add the form variables Login and Password.

| Tables and Variables Configuration | | | | | |
|------------------------------------|-----------|--|--|--|--|
| DB Schema Variables | | | | | |
| Variable Type Form | | | | | |
| Variable Name | | | | | |
| Password | Add | | | | |
| Defined Variables | | | | | |
| Form.Login | Remove | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | OK Cancel | | | | |

4. Click **OK** to close the Schema Editor.

Now, you can define the table and datafields the form will retrieve information from.

5. Add a recordset object next to the Connector object on the edit page.

| Layout | Form | | | | | | | | | | | | | | | | | | |
|--------|------|-----|------|-----|------|-----|------|------|------|------|-----|------|------|-----|-----|------|------|--|----------------|
| Welco | | ase | edit | you | r co | nta | ct i | nfor | mati | on a | and | clic | :k " | Sub | mit | Chai | nges | | المسارا المسار |

In the Recordset Properties palette, name your recordset updates.

- 6. Double-click to open the **SQL Wizard**.
 - a. In the Table Name drop-down, select the Employee table.
 - b. Highlight the data fields listed.
 - c. On the Where Clause tab, set the following: Login is equal to Form.Login AND Password is equal to Form.Password.

| Query | / Inspector | | | | |
|-------|-------------|----------|---|--|-----------------|
| Field | s Where | Clause | | | |
| | Logic | Operand | | Operator | Value |
| Ľ | | Login | • | is equal to | Form.Login 🔍 |
| Ľ | AND 🔻 | Password | • | is equal to | Form.Password 💌 |
| | AND 🔻 | Location | T | is equal to is not equal is lower then | |
| | AND 💌 | Location | T | is lower or equal is greater then | |
| | AND 🔻 | Location | | is greater or equal . contains | |
| | | | | does not contain | _ |
| | | | | | OK Cancel |

7. Click **OK** to close the SQL Wizard.

Now that you have set up verification and will return the correct record associated with a login and password, you are ready to add conditions to the query.

Adding Conditional Expressions

In this lesson, you will add conditions that will determine which fields to display. If the login and password match a record in the database, the site visitor will have the ability to modify his contact information. If not, a message asking the user to try again will be displayed.

1. Add an If (Conditional) object above the table on the edit page.

| | Conditional Expression Propert? - X |
|------------------------------|---|
| Welcome ! | H H |
| Please edit your contact inf | Type |
| Email: | ExpressionCustom ExpressionWizard Double click h |
| Phone : | |
| Department: | |
| Login: | |
| Password: | |
| | |

2. In the If (Conditional) Properties palette, double-click to open the Expression Wizard and set the following:

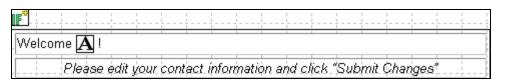
Login is equal to Form.Login AND Password is equal to Form.Password.

| Cond | itional Exp | ession Editor | | | | X |
|------|-------------|------------------|---|-------------|---|---|
| | Logic | Operand | | Operator | | Value |
| | | updates.Login | • | is equal to | • | Form.Login 🗨 |
| Ľ | AND 🔻 | updates.Password | • | is equal to | ▼ | Form.Password |
| | AND 🔻 | Form.Login | • | is empty | - | Form.Login updates.Phone updates.Department |
| | AND 🔻 | Form.Login | • | is empty | - | updates.Login updates.Email |
| | AND 🔻 | Form.Login | - | is empty | | Form.Password updates.Password |
| | | | | | | OK Cancel |

3. Click **OK** to close the Expression Editor.

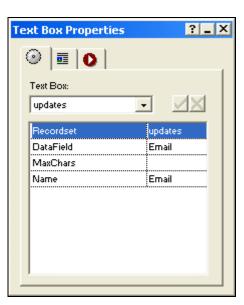
Next, you will add a label to identify the user and text fields to display data that can be edited.

4. In the first table cell, add a Label object between "Welcome" and "!".



5. In the table cell next to "Email", add a Textbox object.

| Layout Form 健 🔁 |
|--------------------------------|
| Welcome 🛕 ! |
| Please edit your contact-infor |
| Email: |
| Phone : |
| Department |
| Login: |
| Password: |
| |
| |



6. In the Text Box Properties palette:

Website Pros Database Component

- a. Select *updates* from the Recordset drop-down list.
- b. Select *Email* as the datafield you will be displaying.
- c. Type Email in the Name field.
- 7. Add Textbox objects in the cells next to "Phone", "Department", "Login", and "Password".

| Email: | | | | | | |] | |
|------------|---|------|---|------|------|------|-----|--|
| Phone : | | | | | 1 | |] | |
| Department | - | | | 1 | 1 | |]-└ | |
| Login: | | | | | | |] | |
| Password: | | | - | | | | | |

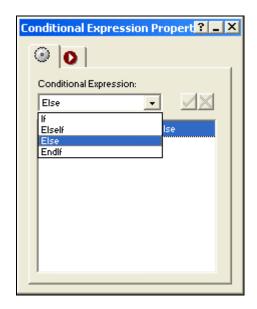
Repeat step 3 for each, selecting the appropriate datafield and typing in the matching name.

Now, you will add text to display if the first condition is not met.

8. Add an additional If (Conditional) object to the page under the "Submit Changes" button.

In the If (Conditional) Properties palette, select Else as the type.

| | · · · · · · · · · · · · · · · · · · · |
|------------------|---------------------------------------|
| | Please edit your contact |
| - - - | Email: |
| - - - - | Phone |
| | Department |
| | Login: |
| | Password: |
| | Submit Changes |
| | |
| | Your login |



Now, if the first condition is not met, a message will display asking the user to "Try Again".

9. Add a final If (conditional) object to the page to terminate the loop.

In the If (Conditional) Properties palette, select EndIf as the type.

If you have completed all the previous steps in Lesson 3, your page will look like this:

| Edit Cor | itact In | forma | ation | | | |
|-----------------|----------------|--------------------------|----------|-------------|-------------|----------|
| Layout Form 🐠 🛓 | a | | · | | | |
| Welcome 🗛 ! | | | | | | |
| Please e | ədit your cont | act informa | tion and | click "Subi | mit Changes | b |
| Email: | | | | | | |
| Phone : | | <u> </u> | 1 1 | | | |
| Department: | | | | | | |
| Login: | | | | | | |
| Password: | | | | | | |
| Submit Char | nges | | | | | |
| F | | | | | | |
| | Your lo | gin informa Please tr | | carrect. 🛥 | | |
| F | | | | | | |

Updating Records

In this lesson, you will add an object to the page that specifies what table and fields to update.

1. From the toolbar, place a Connector object on the editsubmission page. This will establish a connection to the *employees* database so that updated records can be submitted.

| Edi | t Conta | act In | for | matic | on | | | | |
|--------|---------|----------|-------|----------|--------|------|-------|-----|--|
| Layout | • | | | | | | | | |
| | Than | k yoı | ı for | your | sub | mis | sion | • ¶ | |
| | Your co | ontact i | nforn | nation I | nas be | en u | odate | d! | |

Next, you will need to add additional form variables to the DB Schema. These will be used to specify the form fields that will update the datafields.

2. In the Connector Object Properties Palette, double-click to open the Schema Editor.

Now, you can define the table and datafields that will be updated using a Where Clause.

5. Add an Update object besides the Connector object on the editsubmission page.

| Edit Contact Inforr | Update Properties ? _ X |
|---------------------|--|
| Layout 🕢 🔂 | Update: Double click here to edit SQL Vizard Double click h SQLCustom |
| Your contact inform | |
| | |

- 6. In the Update Properties palette, double-click to open the SQL Wizard.
 - a. Click on the Fields tab and highlight the Department, Email, Login, Password, and Phone fields.

| Query Inspector | |
|-----------------------------------|-----------|
| Fields Where Clause | |
| Table Name Employees 🔻 | |
| Fields | |
| Department Email | |
| FirstName LastName Location | |
| Login Password | |
| Phone | |
| | OK Cancel |

b. Click on the Where Clause tab and set the following:

| | Login | is equal to | Form.Login |
|-----|----------|-------------|---------------|
| And | Password | is equal to | Form.Password |

Website Pros Database Component

7. Click **OK** to close the Schema Editor.

Now, you are ready to publish and update records!

Viewing Updated Records

Once you have published your site, you can modify records. To see how this works, you can Login...

| | Edit Contact Information |
|------------------------------------|--|
| Contact List | Please login to update your contact information: |
| Add Contact | Login: jbennett |
| Edit Contact | Password: |
| | Login |
| E UILT WIT NetObjects FUSION | 5 |

...edit existing data....

| Edit Contact Information | | | | | |
|--------------------------|---|---------------------------|--|--|--|
| Contact List | | | | | |
| Add Contact | Welcome Jane ! | | | | |
| Edit Contact | Please edit your contact information and click "Submit Changes" | | | | |
| | Email: | jane.bennett@mjsports.com | | | |
| | Phone : | 407-555-5678 | | | |
| | Department: | Human Resources | | | |
| | Login: | jbennett | | | |
| | Password: | jbennett | | | |
| | Login: | jbennett | | | |

...and go to the Home page to view the updated record!

| Employee Contact Information You can contact any Mountain Jaques employee using the contact information listed below. | | | | | |
|---|---------------------------|-------------|------------------|--|--|
| | | | | | |
| Email: | jane.bennett@mjsports.com | Department: | Human Resources | | |
| Phone: | 407-555-5678 | Location: | Orlando | | |
| | 407-555-5678 | | | | |
| Name: Email: | Ted Davis | Department | | | |
| email: | ted@@mjsports.com | Department: | Customer Service | | |
| | | | | | |

Getting Help

Connecting to a database or table.

- 1. Test your connection to see that it is working.
- 2. Verify your server is configured correctly.
- 3. Use the Schema Editor in the Connector Properties palette to add tables and fields.
- 4. The connector does not automatically connect to your database and populate this information; tables and fields must be added manually.
- 5. If using a custom engine (PHP only), verify the correct driver has been installed in the Components>Connector folder. See Before Getting Started.
- 6. If case sensitive (Unix), verify your tables and fields are entered correctly.

Displaying records.

- 1. If using conditional objects (If-Else-ElseIf), verify that you have added a closing (Type = EndIf) tag to the page.
- 2. If using a recordset iterator object, verify that you have added a closing (Type= Close) tag to the page.
- 3. If using a where clause, verify that your variables and settings are correct.
- 4. If using recordset iterator and/or conditional objects, verify the object placement is correct. For example, verify that your beginning navigator object is placed above the closing object so the code is generated correctly.

Modifying and deleting records.

- 1. Use a where clause to filter records so that the correct table/fields are updated and/or deleted.
- 2. If using a where clause, verify that your variables and settings are correct.

Navigating through recordsets.

- 1. If using a recordset iterator object, verify that you have added a closing (Type= Close) tag to the page.
- 2. If using a form variable, verify the method type (in the Form Settings Properties) is set to "Get".
- 3. Verify the MaxRows and StartRow attributes are correct.

Using Forms.

- 1. If using a form variable, verify the method type (in the Form Settings Properties) is set to "Get".
- 2. Verify the form field names are identical to the field names of the table you are using.
- 3. Verify the Form Settings properties contains the correct path to and extension of the submission page.

Website Pros Database Component

For issues with the Database Component, please contact NetObjects Technical Support.

• <u>support@netobjects.com</u>

For server side issues, please check with your hosting provider. You can also visit the following links for additional information:

- ColdFusion: http://www.macromedia.com/software/coldfusion/productinfo/systemreqs/
- ASP: <u>http://msdn.microsoft.com/library/default.asp?url=/library/en-us/dnasp/html/msdn_aspfaq.asp</u>
- PHP: <u>http://www.php.net/</u>
- MySQL: <u>http://www.mysql.com/</u>

Index

A Add

Component Objects 4 Conditions 15 Data Source 8 Database Component toolbar 3 Tables 12 Toolbar 3 Add 3, 4, 8, 9, 10, 12, 15 Add SQL 18, 19, 23 Add Table 13 Added/placed 4 **ALT 20** And/or 1, 5 Ascending 18 ASP 1, 3, 59 Attribute's enter 5 Attribute's 5 В Before Getting Started 1 Biology 11, 14 Bolds FirstCaption 24 LastCaption 24 NextCaption 24 PreviousCaption 24 Bolds 24 BORDER 20 Build recordset 8 Build 8 С **CACHE DURATION 18** CAPTION 21 CGI reflecting 8 CGI 8 CGI Environment 8 Checkbox 13, 15 Classification 11.14 Classification datafield searching 14

Classification datafield 14 ColdFusion 1, 3, 59 Combo name 22 Combo 22 ComboBox name 22 ComboBox 22 **Component Object Definitions** see 5 **Component Object Definitions 5 Component Objects** Adding 4 **Component Objects 4** Component Toolbar 3 **Components Tools 3** Conditional Expressions Editor 15 Conditions Adding 15 Conditions 15 Configuring Tables 9 Variables 10 Configuring 9, 10 Connector 8, 17 Connector Object 3 Control Panel 1 **CONTROL STYLE 22** CTRL 12 D DATA FIELD 20, 21, 22, 23 Data Output 18 Data Source add 8 Data Source 8 Database Select 3 Database 3 Database Component 1, 7 Database Component Toolbar add 3 indicates 3 Database Component Toolbar 3, 4

Database Component Works 3 Datafield select 5 Datafield 5 Datafields 11. 12 **DATASOURCE 17** DB Language Name 3 DB Schema 8, 9 Defined 16 Defined Variables list 10 Delete 11, 12, 13, 19 Displaying recordSet 22 **Displaying 22** DSN 17, 59 Ε Editor use 5 Editor 5, 7 Else 23 ElseIf including 14 ElseIf 14. 23 **ElseIf Classification 14** EndIf 14, 23 Enter attribute's 5 Enter 5 **EXECUTION TIMEOUT 18 EXPRESSION CUSTOM 23** Expression Wizard 8, 14, 23 **ExpressionWizard** 14 F Field Name 9 Fields 11, 12 Fields list 9, 12 Filtering Results 13 Filtering 13 First Name 1 FirstCaption Bolds 24 FirstCaption 24 FirstFontBold 24 FirstFontColor 24 FirstFontFace 24

FirstFontItalic 24 FirstFontSize 24 FirstImage 24 FirstImageSrc 24 FirstName 1 FirstVisible 24 FONT BOLD 20, 21 FONT COLOR 20, 21 FONT FACE 20, 21 FONT ITALIC 20, 21 FONT SIZE 20, 21 FontSize 5 н **HEIGHT 20** Hidden Field name 23 Hidden Field 23 HiddenField 23 Hightlighted 59 Hyperlink 21 L IF 23 If-Else-ElseIf-EndIf 5 IMAGE 20, 21 **IMAGE SRC 21** Including ElseIf 14 Including 14 Indicates Database Component toolbar 3 Indicates 3 Insert 11, 12, 13, 19 Iterator Name 24 Iterator 4, 24, 59 Iterator Name 24 IteratorName 5 L Label 20 LastCaption Bolds 24 LastCaption 24 LastFontBold 24 LastFontColor 24 LastFontFace 24 LastFontItalic 24

LastFontSize 24 LastImage 24 LastImageSrc 24 LastName 11 LastVisible 24 LINES 22 Link 21 ListBox 22 Μ Major 11 Major datafield 11 MAX CHARS 21 MAXROWS 18 Microsoft Access 1 Ν NAME Combo 22 ComboBox 22 Hidden Field 23 iterator 24 NAME 5, 18, 21, 22, 23, 24 Needing start/close 5 Needing 5 NetObjects Fusion 1, 5 **NextCaption** Bolds 24 NextCaption 24 NextFontBold 24 NextFontColor 24 NextFontFace 24 NextFontItalic 24 NextFontSize 24 NextImage 24 NextImageSrc 24 NextVisible 24 Not Defined 16 0 **Object** Attributes Setting 5 **Object Attributes 5** OK 9, 10, 12, 13, 15 Online 1 Operand 13, 15 **Operator Definitions 16** ORDER BY 18

Ρ

Page 3, 4, 5 Password 17 PHP 1, 59 PHP application 3 PreviousCaption Bolds 24 PreviousCaption 24 PreviousFontBold 24 PreviousFontColor 24 PreviousFontFace 24 PreviousFontItalic 24 PreviousFontSize 24 PreviousImage 24 PreviousImageSrc 24 PreviousVisible 24 Properties 4, 5 Properties Palette 3, 4, 5 Providing textbox fiold 21 Providing 21 Q Query Inspector 12, 13 R RECORD SET 18, 20, 21, 22, 23, 24 Record Set Iterator 24 **Record Set Navigator 24 RECORDS PER PAGE 24 Records Won't Display 59** Recordset build 8 **Displays 22** requires 5 Recordset 5, 8, 11, 14, 22 **Recordset Iterator** requires 5 Recordset Iterator 4, 5 **Recordset Navigator 59 Recordset Properties Palette 8** Reflecting CGI8 **Reflecting 8** Repeat Steps 9, 10 Requires recordset 5 recordset iterator 5

Requires 5 Results Filtering 13 Results 13 S S 17, 24 SCHEMA EDITOR Using 8 SCHEMA EDITOR 8, 9, 10, 17 SchemaEditor 8, 10, 11 Searching Classification datafield 14 Searching 14 See **Component Object Definitions 5** See 5 Select Database 3 datafield 5 Select 3, 5 Setting **Object Attributes 5** Setting 5 **SORT 18** SQL 3, 7, 8 **SQL CUSTOM 18, 19** SQL Editor Use 17, 18, 19, 23 SQL Editor 17, 18, 19, 23 SQL Server 1 SOL Wizard Using 11 SQL Wizard 11, 12, 13, 18, 19, 59 Start 4 **START ROW 24** Start/close needing 5 Start/close 5 Statment 23 Step 12, 13 Students 11, 14 т Table Name 9, 12 Tables Adding 12 **Configuring 9**

Tables 9, 12 Tag Library Component 1 TextArea 22 Textbox 21 Textbox field providing 21 Textbox field 21 Toolbar Adding 3 Toolbars 3 Toolbars>Component Tools 3 TYPE 5, 23, 24 U Update 11, 19 URL 8 **URL** Parameter 8 Use Editor 5 SQL Editor 17, 18, 19, 23 Website Pros Database Component 1 Where 11 Where Clause 11 Use 1, 5, 11, 17, 18, 19, 23 USER 17 Username 17 Using Schema Editor 8 SQL Wizard 11 Using 8, 11 V V.7.5 Update 1 Value 13 Variable Name 10 Variables Configuring 10 Variables 8, 10 View menu 3 W Web site 1 Website Pros 1 Website Pros Database Component use 1 Website Pros Database Component 1 Where use 11 Where Clause

use 11 Where Clause 11, 13 WIDTH 20 **Y** YOU MUST HIGHLIGHT DATA

FIELDS BEFORE CLOSING THE

EDITOR OR THEY WILL NOT APPEAR IN OBJECT PROPERTIES PALETTES 12