

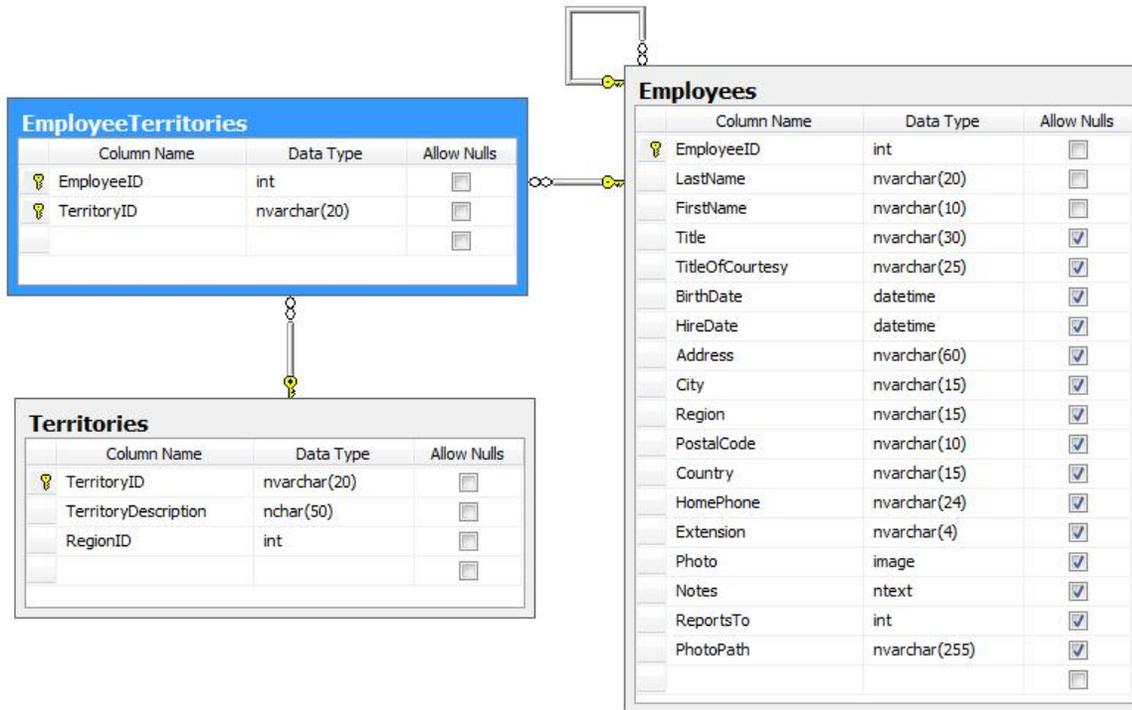
2011



# **COOKBOOK**

Many-To-Many Fields

Let's set up a many-to-many field to the *Employees* page in a *Web Site Factory* application. As you can see below, the *EmployeeTerritories* junction table links together *Employees* and *Territories*.



Below, you can see how the *Employees* page is presented in a non-customized *Web Site Factory* application. There is a long list of fields going down the page, and several tabs below for the child record lists. One of these lists contain all the relevant territories to the selected employee.

**Employees**  
These are the fields of the employees record that can be edited.

Last Name: Fuller  
 First Name: Andrew  
 Title: Vice President, Sales  
 Title Of Courtesy: Dr.  
 Birth Date: 2/19/1952  
 Hire Date: 8/14/1992  
 Address: 908 W. Capital Way  
 City: Tacoma  
 Region: WA  
 Postal Code: 98401  
 Country: USA  
 Home Phone: (206) 555-9482  
 Extension: 3457  
 Photo: 

Notes: Andrew received his BTS commercial in 1974 and a Ph.D. in international marketing from the University of Dallas in 1981. He is fluent in French and Italian and reads German. He joined the company as a sales representative, was promoted to sales manager in January 1992 and to vice president of sales in March 1993. Andrew is a member of the Sales Management Roundtable, the Seattle Chamber of Commerce, and the Pacific Rim Importers Association.

Reports To Last Name: N/A  
 Photo Path: http://accweb/ememployees/fuller.bmp

Buttons: Edit, Delete, Close

Tabs: Employees (selected), Orders, Employee Territories

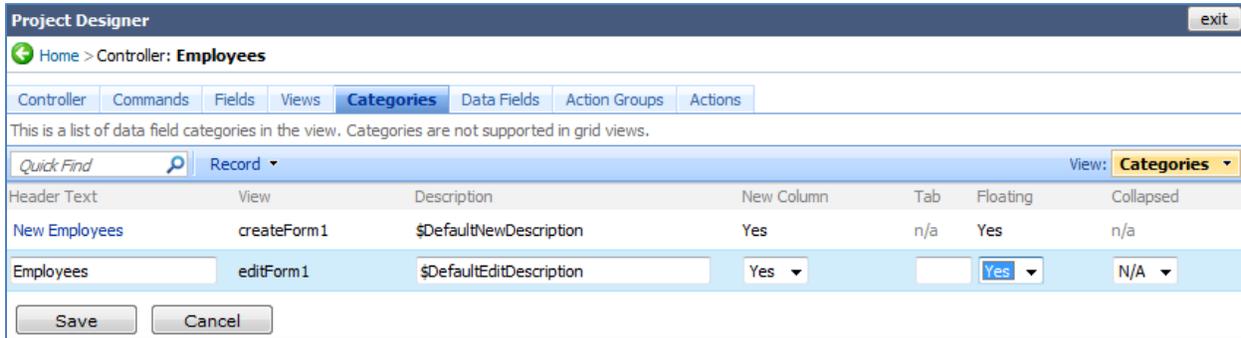
This is a list of employees.

Quick Find:  New Employees Actions Report View: Employees

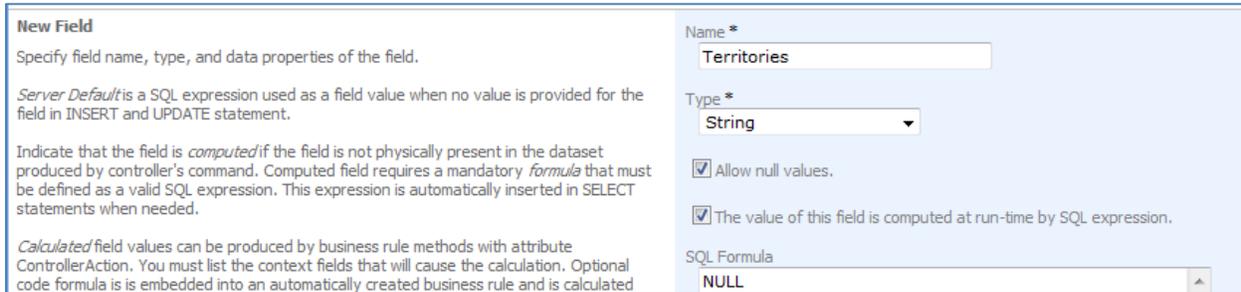
Last Name	First Name	Title	Title Of Courtesy	Birth Date	Hire Date	Address	City	Region	Postal Code
Davolio	Nancy	Sales Representative	Ms.	12/8/1948	5/1/1992	507 - 20th Ave. E.Apt. 2A	Seattle	WA	98122
Leverling	Janet	Sales Representative	Ms.	8/30/1963	4/1/1992	722 Moss Bay Blvd.	Kirkland	WA	98033

We would like to make the form more compact, and move the *Territories* directly onto the *Employees* form, as well as make *Territories* more easily editable.

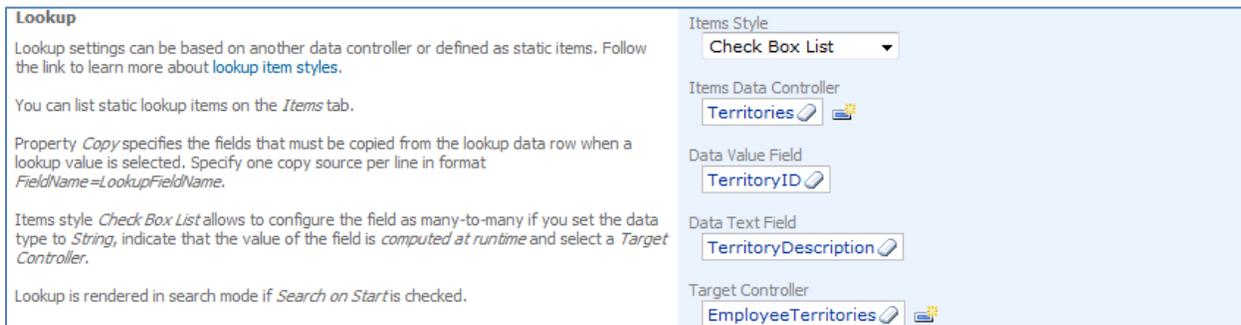
Bring up *Code On Time Generator*, select the project name, and press *Design*. From the list of *All Controllers*, select *Employees*. First, let's make the presentation of the data more compact by switching to *Categories* tab. Change both *New Column* and *Floating* to "Yes" for both categories.



Now, switch to *Fields* tab and create a new *Field*. Give it the *Name* "Territories", *Type* "String", and enable "Allow null values". Enable "The value of this field is computed at run-time", and specify the *SQL Formula* of "NULL". *Label* will be "Territories".



The last step will be to indicate how the items will be displayed. From *Items Style*, choose "Checkbox List". *Items Data Controller* will be "Territories", *Data Value Field* is "TerritoryId", and *Data Text Field* is "Territory Description". *Target Controller* will be "EmployeeTerritories". Save the field, and select it from the list.



Select the field you just created, *Territories*, and then click on *Data Fields* tab. We will need to bind the new field to several views. Create a new data field with *View* of “createForm1”, *Category* of “New Employees”, and set *Columns* to “5”.

The screenshot shows the 'Project Designer' window with the 'Data Fields' tab selected. The breadcrumb path is 'Home > Controller: Employees > Field: Territories'. The 'New Data Field' form is displayed, with the following fields and values:

- View \***: createForm1
- Category**: New Employees
- Alias**: (select)
- Columns**: 5
- Rows**: (empty)
- Values of this field cannot be edited. \***: Default
- Text Mode \***: N/A

The form also includes an 'OK' button and a 'Cancel' button. A note at the top indicates '\* - indicates a required field'.

Save this data field and create a new one. The next data field will be of *View* “editForm1”, *Category* of “Employees”, with *Columns* set to “5”.

The screenshot shows the 'Project Designer' window with the 'Data Fields' tab selected. The breadcrumb path is 'Home > Controller: Employees > Field: Territories'. The 'New Data Field' form is displayed, with the following fields and values:

- View \***: editForm1
- Category**: Employees
- Alias**: (select)
- Columns**: 5
- Rows**: (empty)
- Values of this field cannot be edited. \***: Default
- Text Mode \***: N/A

The form also includes an 'OK' button and a 'Cancel' button. A note at the top indicates '\* - indicates a required field'.

Save, and press the *Preview* button on the action bar.

The new *Employees* page will appear in a browser window. Select an employee and you can see that the detail view is much more compact. There is also a list of territories associated with that employee.

Home > Employees

## Employees

Please review employees information below. Click Edit to change this record, click Delete to delete the record, or click Cancel/Close to return back.

New Employees Actions Report View: Review Employees

↑ ↓ Edit Delete Close

### Employees

These are the fields of the employees record that can be edited.

Last Name	First Name	Title	Title Of Courtesy	Birth Date	Hire Date	Address	City	Region	Postal Code	Country	Home Phone
Fuller	Andrew	Vice President, Sales	Dr.	2/19/1952	8/14/1992	908 W. Capital Way	Tacoma	WA	98401	USA	(206) 555-9482

Extension: 3457 Photo:

Notes: Andrew received his BTS commercial in 1974 and a Ph.D. in international marketing from the University of Dallas in 1981. He is fluent in French and Italian and reads German. He joined the company as a sales representative, was promoted to sales manager in January 1992 and to vice president of sales in March 1993. Andrew is a member of the Sales Management Roundtable, the Seattle Chamber of Commerce, and the Pacific Rim Importers Association.

Reports To Last Name: N/A Photo Path: http://accweb/employees/fuller.bmp Territories: Bedford, Boston, Braintree, Cambridge, Georgetown, Louisville, Westboro

↑ ↓ Edit Delete Close

If you press the *Edit* button, then the fields will become editable. You will notice that the new *Territories* field becomes a list of checkboxes. You can mark however many selections, and the application will save your selection when you press *Ok*.

### Employees

These are the fields of the employees record that can be edited.

Last Name \* First Name \* Title Title Of Courtesy Birth Date Hire Date

Fuller Andrew Vice President, Sales Dr. 2/19/1952 8/14/1992

Address City Region Postal Code Country

908 W. Capital Way Tacoma WA 98401 USA

Home Phone Extension Photo Notes

(206) 555-9482 3457 Andrew received his BTS commercial in 1974 and a Ph.D. in international marketing from the University of Dallas in 1981. He is fluent in French and Italian and reads German. He joined the company as a sales representative, was promoted to sales

Click [here](#) to upload or clear employees photo file. Reports To Last Name (select)

Photo Path: http://accweb/employees/fuller.bmp

Territories

<input type="checkbox"/> Atlanta	<input type="checkbox"/> Cary	<input type="checkbox"/> Hoffman Estates	<input type="checkbox"/> Philadelphia	<input type="checkbox"/> Santa Monica
<input type="checkbox"/> Austin	<input type="checkbox"/> Chicago	<input type="checkbox"/> Hollis	<input type="checkbox"/> Phoenix	<input type="checkbox"/> Savannah
<input type="checkbox"/> Beachwood	<input type="checkbox"/> Colorado Springs	<input checked="" type="checkbox"/> Louisville	<input type="checkbox"/> Portsmouth	<input type="checkbox"/> Scottsdale
<input checked="" type="checkbox"/> Bedford	<input type="checkbox"/> Columbia	<input type="checkbox"/> Melville	<input type="checkbox"/> Providence	<input type="checkbox"/> Seattle
<input type="checkbox"/> Bellevue	<input type="checkbox"/> Dallas	<input type="checkbox"/> Menlo Park	<input type="checkbox"/> Racine	<input type="checkbox"/> Southfield
<input type="checkbox"/> Bentonville	<input type="checkbox"/> Denver	<input type="checkbox"/> Minneapolis	<input type="checkbox"/> Redmond	<input type="checkbox"/> Tampa
<input type="checkbox"/> Bloomfield Hills	<input type="checkbox"/> Edison	<input type="checkbox"/> Morristown	<input type="checkbox"/> Rockville	<input type="checkbox"/> Troy
<input checked="" type="checkbox"/> Boston	<input type="checkbox"/> Fairport	<input type="checkbox"/> New York	<input type="checkbox"/> Roseville	<input checked="" type="checkbox"/> Westboro
<input checked="" type="checkbox"/> Braintree	<input type="checkbox"/> Findlay	<input type="checkbox"/> New York	<input type="checkbox"/> San Francisco	<input type="checkbox"/> Wilton
<input checked="" type="checkbox"/> Cambridge	<input checked="" type="checkbox"/> Georgetown	<input type="checkbox"/> Newark	<input type="checkbox"/> Santa Clara	
<input type="checkbox"/> Campbell	<input type="checkbox"/> Greensboro	<input type="checkbox"/> Orlando	<input type="checkbox"/> Santa Cruz	

↑ ↓ \* - indicates a required field OK Delete Cancel