

2010



END USER GUIDE

Code OnTime Generator: Intelligent code generation software for Microsoft ASP.NET

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Preface

About This Book

This book introduces you to your web application. It will teach you the basics of navigation and record manipulation, as well as advanced features such as batch editing and data analysis. It will prepare you to efficiently use your web application.

This book refers to an application, which is similar to your own. The application database contains the sales data for a fictitious company called *Northwind Traders*, which imports and exports specialty foods from around the world. This guide will help illustrate the user interface features of your application, and shows common situations that you may encounter. The illustrations are referring to *Northwind Traders* application pages.

Intended Audience

This book focuses on the user interface features of your application, and can easily be read and understood by anyone from an end user, to a business user, to a professional developer.

Use the following URLs to try the samples described in the guide:

- <http://dev.codeontime.com/demo/WebSiteFactory1/> - An application with simple layout.
- <http://dev.codeontime.com/demo/WebSiteFactory3/> - An example of tabbed layout.
- <http://dev.codeontime.com/demo/WebSiteFactory4/> - An application showing inline layout.
- <http://dev.codeontime.com/demo/WebSiteFactory5/> - This is stacked layout.
- <http://dev.codeontime.com/demo/WebSiteFactory6/> - This is the classic layout.
- <http://dev.codeontime.com/demo/Annotations/> - An example of global annotations.
- <http://dev.codeontime.com/demo/BatchEdit/> - An example of batch editing.

If you are looking for an in-depth coverage of programming techniques with Code OnTime products, then refer to *Getting Started with Web Site Factory* guide.

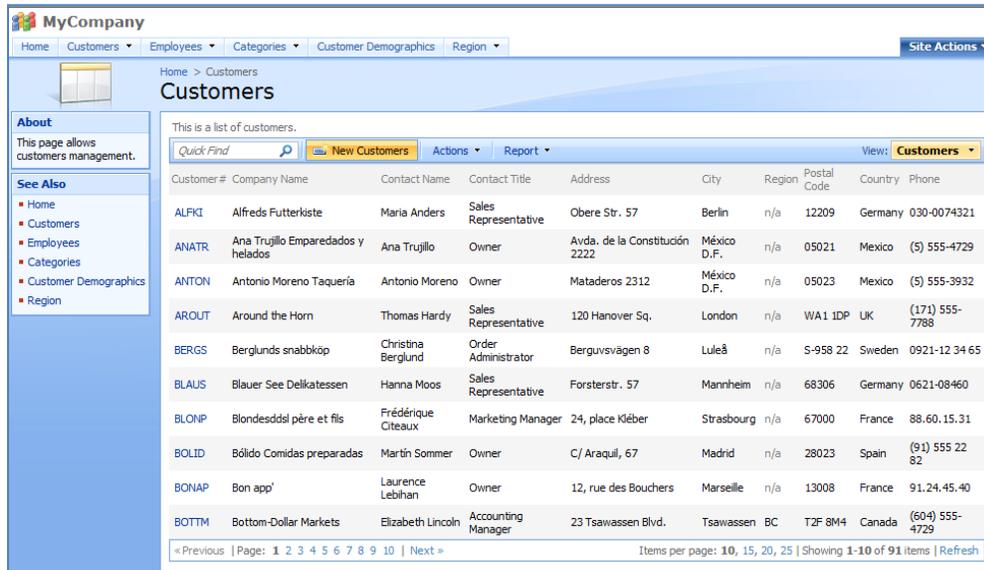
If you are building applications with Code OnTime Designer and Designer Spreadsheet, then refer to *Code OnTime Designer Reference* guide.

Desktop-Like User Interface

Your web application acts much like a traditional desktop application. It is very responsive and fluid. The pages rarely need to refresh, and actions performed are much smoother, without having to wait for the browser to respond.

Working with Data Records

Your application allows for simple and quick insertion, modification, and deletion of records. Below, you can see the *Customers* page of our sample application, which we will use for examples.

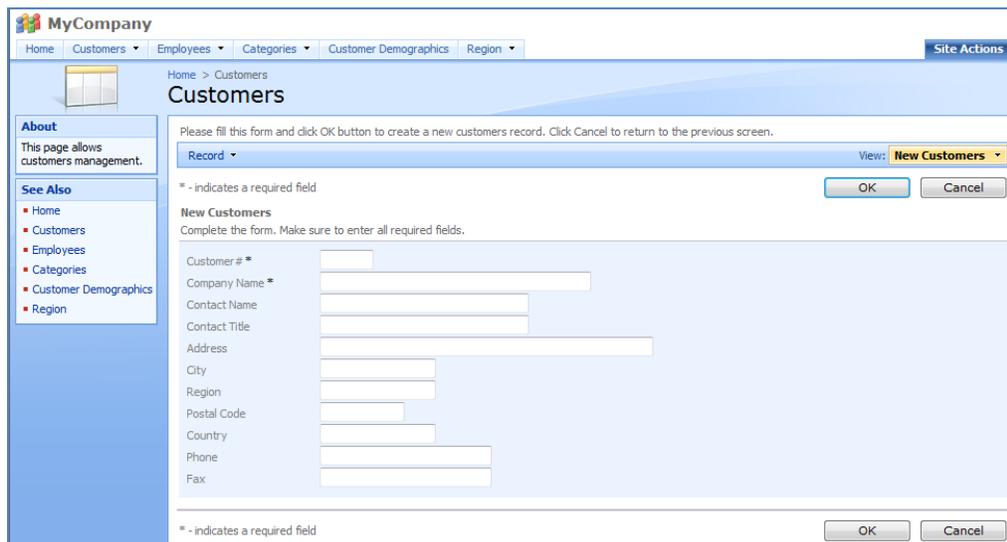


The screenshot shows the 'MyCompany' web application interface. The top navigation bar includes 'Home', 'Customers', 'Employees', 'Categories', 'Customer Demographics', and 'Region'. The main content area is titled 'Customers' and contains a table of customer records. The table has columns for Customer #, Company Name, Contact Name, Contact Title, Address, City, Region, Postal Code, Country, and Phone. The records are listed in a table with alternating light and dark rows. Below the table is a pagination control showing 'Page: 1 2 3 4 5 6 7 8 9 10 | Next >' and 'Items per page: 10, 15, 20, 25 | Showing 1-10 of 91 items | Refresh'.

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932
AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	n/a	WA 1 IDP	UK	(171) 555-7788
BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	n/a	S-958 22	Sweden	0921-12 34 65
BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460
BLONP	Blondesdidi père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	n/a	67000	France	88.60.15.31
BOLID	Bólido Comidas preparadas	Martin Sommer	Owner	C/ Araquil, 67	Madrid	n/a	28023	Spain	(91) 555 22 82
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	n/a	13008	France	91.24.45.40
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen BC	T2F 8M4		Canada	(604) 555-4729

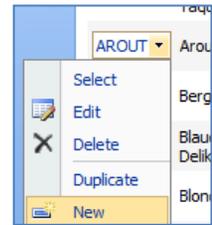
Inserting

There are many methods to inserting a record. The easiest is to press the *New [Record Type]* button on the action bar at the top of the list. In our example, the button is *New Customers*, and can be seen in the image above. This will take you to the *new* record detail view.



The screenshot shows the 'MyCompany' web application interface. The top navigation bar includes 'Home', 'Customers', 'Employees', 'Categories', 'Customer Demographics', and 'Region'. The main content area is titled 'Customers' and contains a form for creating a new customer record. The form has a title 'New Customers' and a subtitle 'Complete the form. Make sure to enter all required fields.' The form fields are: Customer #*, Company Name*, Contact Name, Contact Title, Address, City, Region, Postal Code, Country, Phone, and Fax. The asterisk (*) indicates a required field. There are 'OK' and 'Cancel' buttons at the bottom of the form.

Here, you will specify details of the new record. Those fields marked with asterisk (*) are required. To save your new record, press *Ok*. You can also click on the *Record* menu in the top left corner, and select *Save*. To go back without saving, press *Cancel* above or below the fields, or *Cancel* on the *Record* menu on the action bar, or select *Customers* view in the view selector, at the top on the right-hand side of the action bar.



You can also create new records in the list view. To do this, move mouse pointer over the link in any row, which will cause a dropdown of context menu to display. Click on the dropdown arrow to open the menu options. Choose *New* menu option in the context menu to create a new record. An empty row will appear below the record. Fill in these fields and press *Insert* to save the new record, or press *Cancel* to go back. Note that, as some pages do not display every field available, invisible fields will be left blank when persisted. You can edit the record later in detail view to enter more information.

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932
AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	n/a	WA1 1DP	UK	(171) 555-7788
BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	n/a	S-958 22	Sweden	0921-12 34 65
BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460
BLOP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	n/a	67000	France	88.60.15.31
BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	n/a	28023	Spain	(91) 555 22 82
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	n/a	13008	France	91.24.45.40
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555-4729

Additionally, you can create new records by duplicating existing records. To do this, mouse over the link in the row of the record you would like to duplicate, click on the dropdown in the first column of the row, and press *Duplicate*. You will be taken to a detail view for a new record, but with the fields pre-populated from the duplicated record.

Updating

The primary method for updating a record is to first click on the link in the first column in the list view row. You will be taken to detail view. Then, click on the *Edit* button. The fields will become editable. To save your changes, press *OK*, or press *Cancel* to go back.

The next illustration shows the detail view of a record with *Edit*, *Delete*, and *Close* buttons.

Home > Customers

Customers

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

[New Customers](#) | Actions | Report | View: **Review Customers**

[Edit](#) | [Delete](#) | [Close](#)

Customers
These are the fields of the customers record that can be edited.

Customer #	BLONP
Company Name	Blondesddsl père et fils
Contact Name	Frédérique Citeaux
Contact Title	Marketing Manager
Address	24, place Kléber
City	Strasbourg
Region	N/A
Postal Code	67000
Country	France
Phone	88.60.15.31
Fax	88.60.15.32

[Edit](#) | [Delete](#) | [Close](#)

You can also edit records *in-place*. Mouse over the link in the first column, click on the dropdown, and choose *Edit*. The fields will become editable. To save, press the *Save* button underneath the row, or press *Cancel* to undo changes.

MyCompany

Home Customers Employees Categories Customer Demographics Region Site Actions

Home > Customers

Customers

This is a list of customers.

Quick Find | Record | View: **Customers**

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932
AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	n/a	WA1 1DP	UK	(171) 555-7788
BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	n/a	S-958 22	Sweden	0921-12 34 65
BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460
BLONP	Blondesddsl père et fils	Frédérique C	Marketing Manag	24, place Kléber	Strasbourg		67000	France	88.60.15.31
Save Cancel									
BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	n/a	28023	Spain	(91) 555 22 82
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	n/a	13008	France	91.24.45.40
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555-4729

« Previous | Page: 1 2 3 4 5 6 7 8 9 10 | Next » | Items per page: 10, 15, 20, 25 | Showing 1-10 of 91 items | Refresh

Deleting

To delete a record, mouse over the link in the first column of the record you would like to delete, click on the dropdown, and press *Delete*. A popup will appear asking you to confirm the deletion. Press *Ok* to confirm. If the record has dependant records, the operation will be canceled, with an error message displayed at the top of the page.

The DELETE statement conflicted with the REFERENCE constraint "FK_Orders_Customers". The conflict occurred in database "Northwind", table "dbo.Orders", column "CustomerID". The statement has been terminated.

MyCompany

Home > Customers > Employees > Categories > Customer Demographics > Region > **Site Actions**

Customers

This is a list of customers.

Quick Find View: **Customers**

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932
AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	n/a	WA1 1DP	UK	(171) 555-7788
	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	n/a	S-958 22	Sweden	0921-12 34 65
	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460
	Blondesdssl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	n/a	67000	France	88.60.15.31
BOLID	Bólido Comidas preparadas	Martin Sommer	Owner	C/ Araquil, 67	Madrid	n/a	28023	Spain	(91) 555 22 82
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	n/a	13008	France	91.24.45.40
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen BC	T2F 8M4		Canada	(604) 555-4729

« Previous | Page: 1 2 3 4 5 6 7 8 9 10 | Next » Items per page: 10, 15, 20, 25 | Showing 1-10 of 91 items | Refresh

You can also delete records from the detail view. Press the *Delete* button above or below the fields to initiate this operation. The popup will appear, asking you to confirm the operation. Press *Ok* to confirm.

Home > Customers

Customers

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

View: **Review Customers**

Customers
These are the fields of the customers record that can be edited.

Customer #	ANATR
Company Name	Ana Trujillo Emparedados y helados
Contact Name	Ana Trujillo
Contact Title	Owner
Address	Avda. de la Constitución 2222
City	México D.F.
Region	XYZ
Postal Code	05021
Country	Mexico
Phone	(5) 555-4729
Fax	(5) 555-3745

Message from webpage

?

Delete?

Data Summary

The data summary is a universal feature, available across most pages in your web application. It is a summary of the selected record in the master record list, and displays some of the fields of that record.

The screenshot shows the 'Orders' page in the MyCompany application. The left sidebar contains a 'Summary' section with the following details:

- Customer Company Name: Toms Spezialitäten
- Employee Last Name: Suyama
- Order Date: 7/5/1996
- Required Date: 8/16/1996
- Shipped Date: 7/10/1996

The main content area displays a table of orders with the following columns: Customer Company Name, Employee Last Name, Order Date, Required Date, Shipped Date, Ship Via Company Name, Freight, Ship Name, Ship Address, and Ship City. The table contains 10 rows of order data.

Customer Company Name	Employee Last Name	Order Date	Required Date	Shipped Date	Ship Via Company Name	Freight	Ship Name	Ship Address	Ship City
Ana Trujillo Emparedados y helados	Buchanan	7/4/1996	8/1/1996	7/16/1996	Speedy Express	\$32.38	Vins et alcools Chevalier	59 rue de l'Abbaye	Reims
Toms Spezialitäten	Suyama	7/5/1996	8/16/1996	7/10/1996	Speedy Express	\$11.61	Toms Spezialitäten	Luisenstr. 48	Münster
Hanari Carnes	Peacock	7/8/1996	8/5/1996	7/12/1996	United Package	\$65.83	Hanari Carnes	Rua do Paço, 67	Rio de Janeiro
Victualles en stock	Leverling	7/8/1996	8/5/1996	7/15/1996	Speedy Express	\$41.34	Victualles en stock	2, rue du Commerce	Lyon
Suprêmes délices	Peacock	7/9/1996	8/6/1996	7/11/1996	United Package	\$51.30	Suprêmes délices	Boulevard Tirou, 255	Charleroi
Hanari Carnes	Leverling	7/10/1996	7/24/1996	7/16/1996	United Package	\$58.17	Hanari Carnes	Rua do Paço, 67	Rio de Janeiro
Chop-suey Chinese	Buchanan	7/11/1996	8/8/1996	7/23/1996	United Package	\$22.98	Chop-suey Chinese	Hauptstr. 31	Bern
Richter Supermarkt	Dodsworth	7/12/1996	8/9/1996	7/15/1996	Federal Shipping	\$148.33	Richter Supermarkt	Starenweg 5	Genève
Wellington Importadora	Leverling	7/15/1996	8/12/1996	7/17/1996	United Package	\$13.97	Wellington Importadora	Rua do Mercado, 12	Resende
HILARION-Abastos	Peacock	7/16/1996	8/13/1996	7/22/1996	Federal Shipping	\$81.91	HILARION-Abastos	Carrera 22 con Ave. Carlos Soublette #8-35	San Cristóbal

This summary is available even when you navigate to a different tab within the page. For example, in *Tabbed* layout, if you click on a link in the first column of a row, you will be taken to the detail view for that customer. The data summary will be visible on the left.

The screenshot shows the 'Customers' page in the MyCompany application. The left sidebar contains a 'Summary' section with the following details:

- Customer #: ANATR
- Company Name: Ana Trujillo Emparedados y helados
- Contact Name: Ana Trujillo
- Contact Title: Owner
- Address: Avda. de la Constitución 2222

The main content area displays the 'Customers' detail view for the selected customer. It includes a 'Summary' section with the following fields:

- Customer #: ANATR
- Company Name: Ana Trujillo Emparedados y helados
- Contact Name: Ana Trujillo
- Contact Title: Owner
- Address: Avda. de la Constitución 2222
- City: México D.F.
- Region: N/A
- Postal Code: 05021
- Country: Mexico
- Phone: (5) 555-4729
- Fax: (5) 555-3745

However, when you navigate to the *Orders* tab within the page, the data summary will still be available for the selected customer record. This way, you can always know what the master record is.

The screenshot shows the 'MyCompany' web application interface. The navigation menu includes 'Home', 'Customers', 'Employees', 'Categories', 'Customer Demographics', 'Region', and 'Membership'. The 'Customers' page is active, with the 'Orders' tab selected. A sidebar on the left contains a 'Summary' section with fields for Customer # (ANATR), Company Name (Ana Trujillo Emparedados y helados), Contact Name (Ana Trujillo), Contact Title (Owner), and Address (Avda. de la Constitución 2222). The main content area displays a table of orders with columns for Employee Last Name, Order Date, Required Date, Shipped Date, Ship Via, Company Name, Freight, Ship Name, Ship Address, and Ship City. The table lists five orders, with the third one (Leverling) highlighted in blue.

Employee Last Name	Order Date	Required Date	Shipped Date	Ship Via	Company Name	Freight	Ship Name	Ship Address	Ship City
Buchanan	7/4/1996	8/1/1996	7/16/1996	Speedy Express		\$32.38	Vins et alcools Chevalier	59 rue de l'Abbaye	Reims
King	9/18/1996	10/16/1996	9/24/1996	Federal Shipping		\$1.61	Ana Trujillo Emparedados y helados	Avda. de la Constitución 2222	México D.F.
Leverling	8/8/1997	9/5/1997	8/14/1997	Speedy Express		\$43.90	Ana Trujillo Emparedados y helados	Avda. de la Constitución 2222	México D.F.
Leverling	11/28/1997	12/26/1997	12/12/1997	Federal Shipping		\$11.99	Ana Trujillo Emparedados y helados	Avda. de la Constitución 2222	México D.F.
Peacock	3/4/1998	4/1/1998	3/11/1998	Federal Shipping		\$39.92	Ana Trujillo Emparedados y helados	Avda. de la Constitución 2222	México D.F.

If the page is long, then when you scroll down, the summary will stay in the top left corner of your screen, so that it will always be visible to you.

The screenshot shows a Windows Internet Explorer browser window displaying a long list of customers. The address bar shows the URL 'http://dev.codeontime.com/demo/WebSiteFactory3/Pages/Customers.aspx'. The browser's Favorites bar shows 'Customers'. The main content area displays a table of customer records with columns for Customer #, Company Name, Contact Name, Contact Title, Owner, Address, and various other details. The table is scrollable, and the 'Summary' sidebar on the left remains visible at the top left corner of the browser window. The table lists 25 customers, with the 15th one (ERNSH) highlighted in blue.

Customer #	Company Name	Contact Name	Contact Title	Owner	Address	Phone
BSBEV	B's Beverages	Victoria Ashworth	Sales Representative		Fauntleroy Circus London	(171) 555-1212
CACTU	Cactus Comidas para llevar	Patricio Simpson	Sales Agent		Cerrito 333 Buenos Aires	(1) 135-5555
CENTC	Centro comercial Moctezuma	Francisco Chang	Marketing Manager		Sierras de Granada 9993 México D.F.	(5) 555-3392
CHOPS	Chop-suey Chinese	Yang Wang	Owner		Hauptstr. 29 Bern	0452-076545
COMMI	Comércio Mineiro	Pedro Afonso	Sales Associate		Av. dos Lusíadas, 23 Sao Paulo SP	(11) 555-7647
CONSH	Consolidated Holdings	Elizabeth Brown	Sales Representative		Berkeley Gardens 12 Brewery London	(171) 555-2282
DRACD	Drachenblut Delikatessen	Sven Ottlieb	Order Administrator		Walsweg 21 Aachen	0241-039123
DUMON	Du monde entier	Janine Labruno	Owner		67, rue des Cinquante Otages Nantes	40.67.88.88
EASTC	Eastern Connection	Ann Devon	Sales Agent		35 King George London	(171) 555-0297
ERNSH	Ernst Handel	Roland Mendel	Sales Manager		Kirchgasse 6 Graz	7675-3425
FAMIA	Familia Arquibaldo	Aria Cruz	Marketing Assistant		Rua Orós, 92 Sao Paulo SP	(11) 555-9857
FISSA	FISSA Fabrica Inter. Salchichas S.A.	Diego Roel	Accounting Manager		C/ Moralzarzal, 86 Madrid	(91) 555 94 44
FOLIG	Folies gourmandes	Martine Rancé	Assistant Sales Agent		184, chaussée de Tournai Lille	20.16.10.16
FOLKO	Folk och få HB	Maria Larsson	Owner		Åkergatan 24 Bräcke	0695-34 67 21
FRANK	Frankenversand	Peter Franken	Marketing Manager		Berliner Platz 43 München	089-0877310

Page Layouts

The data in your application can be presented in various ways. Here we have explanations of the most common page layouts, and how to use them.

Simple

A simple page layout has just one master record list, and you need to navigate to another page to view any dependant record lists. However, all features are available, such as reporting, generating RSS feeds, and more.

You can access related pages using the *See Also* box, underneath the data summary or through the tabs and dropdown options of the main menu of the application.

MyCompany

Home Customers Employees Categories Customer Demographics Region Site Actions

Home > Customers

Customers

This is a list of customers.

Quick Find New Customers Edit Delete Actions Report View: Customers

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	XYZ	12209	Germany	030-0074321
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	XYZ	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	XYZ	05023	Mexico	(5) 555-3932
AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	XYZ	WA1 1DP	UK	(171) 555-7788
BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	XYZ	68306	Germany	0621-08460
BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	XYZ	67000	France	88.60.15.31
BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	XYZ	28023	Spain	(91) 555 22 82
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	XYZ	13008	France	91.24.45.40
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen BC	T2F 8M4		Canada	(604) 555-4729

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Tabbed

At first appearances, *Tabbed* layout looks the same as simple layout. The record list is inside of a tab, with the name of the page. Select any record by clicking on the link in the leftmost column, and new child tabs become available inside the page. These tabs allow you to view related record lists, and use the selected record to filter records relevant to that original selected record.

The following illustration shows a list of customers without a selection. You can see the *Customers* tab above the list.

Welcome **admin**, Today is Wednesday, June 16, 2010 | My Account | Logout | Help

MyCompany

Home **Customers** Employees Categories Customer Demographics Region Membership **Site Actions**

Home > Customers

Customers

This is a list of customers.

Quick Find [New Customers](#) Actions Report View: **Customers**

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932
AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	n/a	WA1 1DP	UK	(171) 555-7788
BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	n/a	S-958 22	Sweden	0921-12 34 65
BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460
BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	n/a	67000	France	88.60.15.31
BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	n/a	28023	Spain	(91) 555 22 82
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	n/a	13008	France	91.24.45.40
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen BC	T2F 8M4		Canada	(604) 555-4729

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In the example below, you can see that all of the orders displayed are those from the customer “Bon app’”, which was the selected *Customer* record from the original tab, as you can see on the data summary.

Summary

Customer #
BONAP

Company Name
Bon app'

Contact Name
Laurence Lebihan

Contact Title
Owner

Address
12, rue des Bouchers

About
This page allows customers management.

See Also
Orders
Customer Demo
Order Details

Customers **Orders** Customer Demo Order Details

This is a list of orders.

Quick Find [New Orders](#) Actions Report View: **Orders**

Employee Last Name	Order Date	Required Date	Shipped Date	Ship Via	Company Name	Freight	Ship Name	Ship Address	Ship City
Dodsworth	10/16/1996	11/27/1996	10/21/1996	Speedy Express	Bon app'	\$10.19	Bon app'	12, rue des Bouchers	Marseille
Davolio	10/29/1996	11/26/1996	11/8/1996	Federal Shipping	Bon app'	\$166.31	Bon app'	12, rue des Bouchers	Marseille
Leverling	11/25/1996	12/23/1996	11/28/1996	Speedy Express	Bon app'	\$96.04	Bon app'	12, rue des Bouchers	Marseille
Peacock	3/11/1997	4/8/1997	3/14/1997	United Package	Bon app'	\$64.56	Bon app'	12, rue des Bouchers	Marseille
Peacock	4/18/1997	5/16/1997	4/21/1997	Federal Shipping	Bon app'	\$350.64	Bon app'	12, rue des Bouchers	Marseille
Davolio	5/2/1997	5/30/1997	5/23/1997	United Package	Bon app'	\$11.06	Bon app'	12, rue des Bouchers	Marseille
Fuller	9/10/1997	9/24/1997	10/3/1997	United Package	Bon app'	\$113.15	Bon app'	12, rue des Bouchers	Marseille
Leverling	10/23/1997	11/6/1997	10/29/1997	Speedy Express	Bon app'	\$63.20	Bon app'	12, rue des Bouchers	Marseille
Buchanan	11/5/1997	12/3/1997	11/14/1997	Speedy Express	Bon app'	\$20.12	Bon app'	12, rue des Bouchers	Marseille
Leverling	11/6/1997	12/4/1997	11/7/1997	Speedy Express	Bon app'	\$16.97	Bon app'	12, rue des Bouchers	Marseille

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Tabbed layout is the most compact master-detail layout that may be available in your application.

Classic

Classic page layout is presenting master-detail relationships as well. It shows the main record list at the top of the page. No child records are visible. However, when you select a record from that list, another tabbed group of lists appears underneath, showing related records. You can specify which child record list you want to bring forward by selecting a tab with the list name. With this longer page layout, the data summary is quite useful, as it stays with you if you scroll down the page.

Welcome **admin**, Today is Sunday, June 06, 2010 | My Account | Logout | Help

MyCompany

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Customers

This is a list of customers.

Quick Find New Customers Edit Delete Actions Report View: Customers

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
<input type="checkbox"/> ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	XYZ	05023	Mexico	(5) 555-3932
<input type="checkbox"/> ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	XYZ	12209	Germany	030-0074321
<input type="checkbox"/> ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	XYZ	05021	Mexico	(5) 555-4729
<input type="checkbox"/> AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	XYZ	WA1 1DP	UK	(171) 555-7788
<input type="checkbox"/> BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
<input type="checkbox"/> BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	XYZ	68306	Germany	0621-08460
<input type="checkbox"/> BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	XYZ	67000	France	88.60.15.31
<input type="checkbox"/> BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	XYZ	28023	Spain	(91) 555 22 82
<input type="checkbox"/> BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	XYZ	13008	France	91.24.45.40
<input type="checkbox"/> BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen BC	T2F 8M4		Canada	(604) 555-4729

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Orders Customer Demo Order Details

This is a list of orders.

Quick Find New Orders Actions Report View: Orders

Employee Last Name	Order Date	Required Date	Shipped Date	Ship Via Company Name	Freight	Ship Name	Ship Address	Ship City
Leverling	11/27/1996	12/25/1996	12/2/1996	United Package	\$22.00	Antonio Moreno Taquería	Mataderos 2312	México D.F.
King	4/15/1997	5/13/1997	4/22/1997	Speedy Express	\$47.45	Antonio Moreno Taquería	Mataderos 2312	México D.F.
Peacock	5/13/1997	6/10/1997	5/21/1997	Speedy Express	\$15.64	Antonio Moreno Taquería	Mataderos 2312	México D.F.
King	6/19/1997	7/17/1997	6/20/1997	Federal Shipping	\$84.84	Antonio Moreno Taquería	Mataderos 2312	México D.F.

The advantage of the classic layout is that you can see a list of master records simultaneously with a list of one of the child record sets. Click on any master row without selecting a row link, and the row will become highlighted, its details will be presented on the data summary, and the visible child list will automatically refresh according to the selection.

Inline

Inline layout is similar to *Tabbed* layout, except that there is a *Tasks* box on the side bar instead of tabs in the main area of the page. When you select a record, you can use the *Tasks* box, above the data summary, to view relevant record lists. The selected master record will be used to filter the child lists. An example can be seen below, with the *Tasks* box to the upper left on the side bar.

The screenshot illustrates the inline layout in a web application. On the left, a sidebar contains a 'Tasks' box with a list of actions: Customers, Orders, Customer Demo, and Order Details. Below this is a 'Summary' section for the selected customer, showing details like Customer #, Company Name, Contact Name, and Address. The main content area displays a list of customers, with one record selected and its details shown in a summary box below. The right side shows a detailed view of the selected customer's orders and order details.

Customers List:

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	XYZ	12209	Germany	030-0074321
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	XYZ	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	XYZ	05023	Mexico	(5) 555-3932
AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	XYZ	WA1 1DP	UK	(171) 555-7788
BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	XYZ	68306	Germany	0621-08460
BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	XYZ	67000	France	88.60.15.31
BOLID	Bólido Comidas preparadas	Martin Sommer	Owner	C/ Araquil, 67	Madrid	XYZ	28023	Spain	(91) 555 22 82
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	XYZ	13008	France	91.24.45.40
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen BC	TZF 8M4		Canada	(604) 555-4729

Orders List:

Employee Last Name	Order Date	Required Date	Shipped Date	Ship Via	Company Name	Freight	Ship Name	Ship Address	Ship City
Callahan	8/12/1996	9/9/1996	8/16/1996	United Package	Berglunds snabbköp	\$92.69	Berglunds snabbköp	Berguvsvägen 8	Luleå
Fuller	8/14/1996	9/11/1996	9/12/1996	Speedy Express	Berglunds snabbköp	\$8.98	Berglunds snabbköp	Berguvsvägen 8	Luleå
Leverling	12/16/1996	1/13/1997	12/20/1996	Federal Shipping	Berglunds snabbköp	\$168.64	Berglunds snabbköp	Berguvsvägen 8	Luleå
Leverling	2/12/1997	3/12/1997	2/21/1997	Federal Shipping	Berglunds snabbköp	\$3.50	Berglunds snabbköp	Berguvsvägen 8	Luleå
Leverling	2/13/1997	3/13/1997	2/20/1997	Speedy Express	Berglunds snabbköp	\$9.30	Berglunds snabbköp	Berguvsvägen 8	Luleå

Order Details:

Order Customer #	Product Name	Unit Price	Quantity	Discount	Order Customer Company Name	Order Employee Last Name	Order Ship Via Company Name	Product Category Name	Product Supplier Company Name
BERGS	Gula Malacca	\$15.50	16	0	Berglunds snabbköp	Callahan	United Package	Condiments	Leka Trading
BERGS	Radette Courdavault	\$44.00	15	0	Berglunds snabbköp	Callahan	United Package	Dairy Products!	Gai pâturage
BERGS	Vegie-spread	\$35.10	8	0	Berglunds snabbköp	Callahan	United Package	Condiments	Pavlova, Ltd.
BERGS	Röd Kaviar	\$12.00	25	0	Berglunds snabbköp	Callahan	United Package	Seafood	Svensk Sjöföda AB
BERGS	Guaraná Fantástica	\$3.60	12	0	Berglunds snabbköp	Fuller	Speedy Express	Beverages	Refrescos Americanas LTDA

Stacked

Stacked layout (shown to the right) is similar to classic layout, except that all child record lists are displayed at the same time. This layout generally has the longest pages, as all relevant record lists are displayed as soon as a master record is selected. The picture to the right displays the entire page – note that the child record lists are filtered to match the selected parent record.

When you scroll down, the data summary will stay in the upper left corner of your screen.

If no master record is selected then the page will contract and will look very much like a page with a *Simple* layout. Detail records will only be requested from the server and displayed when a master record is selected.

When you create a new master record or delete an existing one on a page with *Stacked* layout, the child record lists will disappear. This layout also features a *Tasks* box, and it can be used to automatically jump up or down to the selected list to quickly bring it into focus.

The advantage of a *Stacked* layout is that a lot more information can be presented simultaneously.

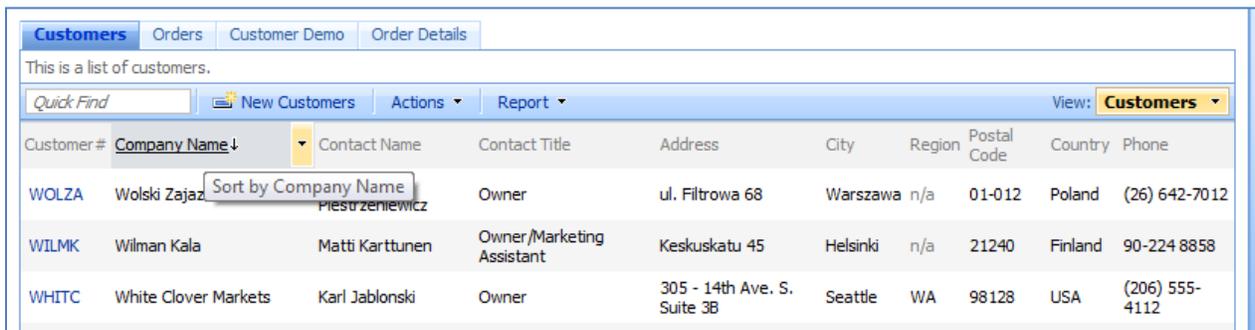
Finding Your Data

In this chapter, we will teach you how to use sorting, paging, and filtering to find the data you want.

Sorting and Paging

Sorting

Sorting helps you organize your records in a specific order. Click on the column header to sort the records alphabetically by the field in that column. If you click on the name again, it will sort in reverse alphabetical order. This can be done on any of the headers. The data is sorted according to the data type.

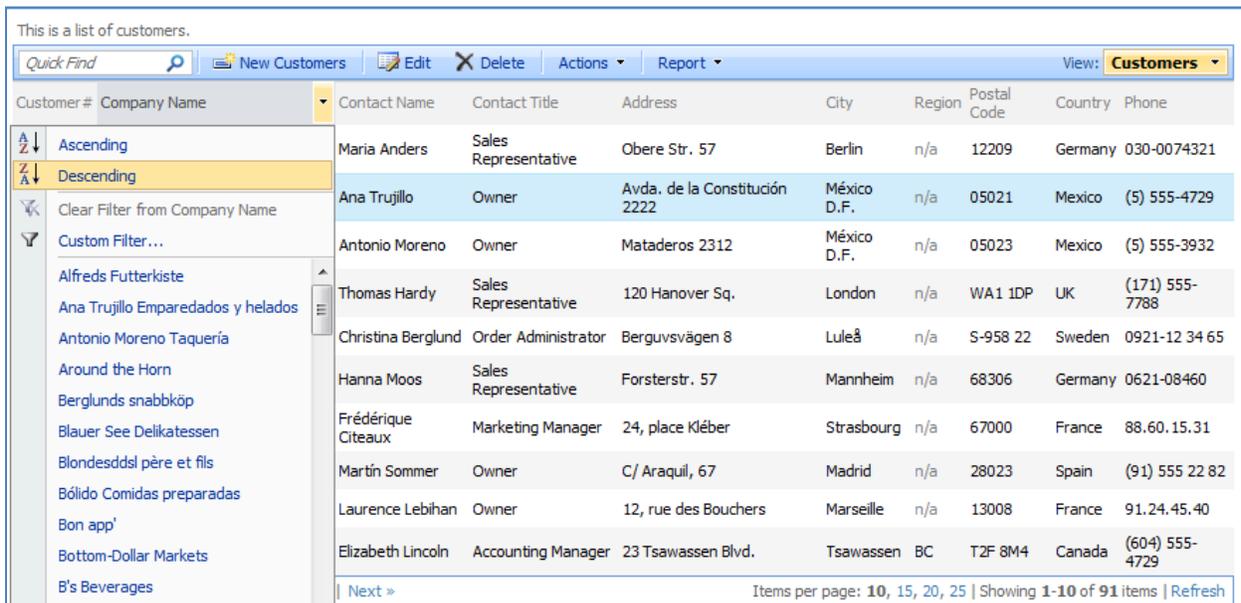


This is a list of customers.

Quick Find New Customers Actions Report View: Customers

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
WOLZA	Wolski Zajazd	Piestruzeniewicz	Owner	ul. Filtrowa 68	Warszawa	n/a	01-012	Poland	(26) 642-7012
WILMK	Wilman Kala	Matti Karttunen	Owner/Marketing Assistant	Keskuskatu 45	Helsinki	n/a	21240	Finland	90-224 8858
WHITC	White Clover Markets	Karl Jablonski	Owner	305 - 14th Ave. S. Suite 3B	Seattle	WA	98128	USA	(206) 555-4112

Alternatively, you can click on the dropdown next to the column name in the header row, and specify which order you want the records to be sorted in.



This is a list of customers.

Quick Find New Customers Edit Delete Actions Report View: Customers

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
	Ascending	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321
	Descending	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729
	Clear Filter from Company Name	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932
	Custom Filter...	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	n/a	WA1 1DP	UK	(171) 555-7788
	Alfreds Futterkiste	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	n/a	S-958 22	Sweden	0921-12 34 65
	Ana Trujillo Emparedados y helados	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460
	Antonio Moreno Taquería	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	n/a	67000	France	88.60.15.31
	Around the Horn	Martin Sommer	Owner	C/ Araquil, 67	Madrid	n/a	28023	Spain	(91) 555 22 82
	Berglunds snabbköp	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	n/a	13008	France	91.24.45.40
	Blauer See Delikatessen	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555-4729
	Blondesd'sl père et fils								
	Bóldo Comidas preparadas								
	Bon app'								
	Bottom-Dollar Markets								
	B's Beverages								

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Paging

At the bottom of the page are the paging controls. We can navigate back and forth between pages by pressing *Previous* or *Next* links, or directly go to a page by clicking on its page number. We can also specify how many items per page are displayed, and refresh the list view with the help of the links on the right side of the pager. There is a display of the total items in the list, and the range of items that are currently being viewed.

Northwoods Cranberry Sauce	Grandma Kelly's Homestead	Condiments	12 - 12 oz jars	\$40.00	6	0	0 No
Mishi Kobe Niku	Tokyo Traders	Meat/Poultry	18 - 500 g pkgs.	\$97.00	29	0	0 Yes
Ikura	Tokyo Traders	Seafood	12 - 200 ml jars	\$31.00	31	0	0 No

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Adaptive Filtering

When you mouse over the column headers, you can see a dropdown. If you click anywhere on the header besides the title text, a header context menu will appear. From here, you can select sorting options, choose a sample value filter, clear the filter, or create your own custom filter.

Home > Customers

Customers

Customers Orders Customer Demo Order Details

This is a list of customers.

Quick Find New Customers Actions Report View: Customers

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
		Zbyszek Piestzeniewicz	Owner	ul. Filtrowa 68	Warszawa	n/a	01-012	Poland	(26) 642-7012
		Matti Karttunen	Owner/Marketing Assistant	Keskuskatu 45	Helsinki	n/a	21240	Finland	90-224 8858
		Karl Jablonski	Owner	305 - 14th Ave. S. Suite 3B	Seattle	WA	98128	USA	(206) 555-4112
		Paula Parente	Sales Manager	Rua do Mercado, 12	Resende	SP	08737-363	Brazil	(14) 555-8122
		Pirkko Koskitalo	Accounting Manager	Torikatu 38	Oulu	n/a	90110	Finland	981-443655
		Paul Henriot	Accounting Manager	59 rue de l'Abbaye	Reims	n/a	51100	France	26.47.15.10
		Mary Saveley	Sales Agent	2, rue du Commerce	Lyon	n/a	69004	France	78.32.54.86
		Palle Ibsen	Sales Manager	Smagsloget 45	Århus	n/a	8200	Denmark	86 21 32 43
		Helvetius Nagy	Sales Associate	722 DaVinci Blvd.	Kirkland	WA	98034	USA	(206) 555-8257
		Anabela Domingues	Sales Representative	Av. Inês de Castro, 414	Sao Paulo	SP	05634-030	Brazil	(11) 555-2167

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Items per page: 10, 15, 20, 25 | Showing 1-10 of 91 items | Refresh

If you select a sample value filter, the list will display all records corresponding to the value. Only the values that are physically present in the database are visible in the list. When you go to select another sample value in another column, only relevant options that are available with currently active filters will be displayed. This is called *adaptive filtering*. In the example below, only records from the country “USA” are displayed, and when we look at available filters for *Company Name*, it only shows companies from USA.

This is a list of customers.

Quick Find New Customers Actions Report View: Customers

A filter has been applied. Country is equal to USA. X

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
	Ascending	Howard Snyder	Marketing Manager	2732 Baker Blvd.	Eugene	OR	97403	USA	(503) 555-7555
	Descending	Yoshi Latimer	Sales Representative	City Center Plaza 516 Main St.	Elgin	OR	97827	USA	(503) 555-6874
	Clear Filter from Company Name	John Steel	Marketing Manager	12 Orchestra Terrace	Walla Walla	WA	99362	USA	(509) 555-7969
	Custom Filter...	Jaime Yorres	Owner	87 Polk St. Suite 5	San Francisco	CA	94117	USA	(415) 555-5938
	Great Lakes Food Market	Fran Wilson	Sales Manager	89 Chiaroscuro Rd.	Portland	OR	97219	USA	(503) 555-9573
	Hungry Coyote Import Store	Rene Phillips	Sales Representative	2743 Bering St.	Anchorage	AK	99508	USA	(907) 555-7584
	Lazy K Kountry Store	Paula Wilson	Assistant Sales Representative	2817 Milton Dr.	Albuquerque	NM	87110	USA	(505) 555-5939
	Let's Stop N Shop	Jose Pavarotti	Sales Representative	187 Suffolk Ln.	Boise	ID	83720	USA	(208) 555-8097
	Lonesome Pine Restaurant	Art Braunschweiger	Sales Manager	P.O. Box 555	Lander	WY	82520	USA	(307) 555-4680
	Lonesome Pine Restaurant	Liz Nixon	Marketing Manager	89 Jefferson Way Suite 2	Portland	OR	97201	USA	(503) 555-5612

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Custom filters are an easy way to apply the exact filtering you want. You can specify several comma-separated values, or use $>$, $<$, $>=$, or $<=$ operators placed before the value. For example, let's navigate to *Products* page, under *Categories*, using the tabs at the top of the page. Activate the dropdown on the *Unit Price* column by moving the mouse over it, and press *Custom Filter*. Type in " <20 " and press *Ok*, and we will view a list of all products under \$20.

Quick Find New Products Actions Report View: Products

Product Name	Supplier Company Name	Category Name	Quantity Per Unit	Unit Price	Units In Stock	Units On Order	Reorder Level	Discontinued
Chai	Exotic Liquids	Beverages	10 boxes x 20 bags	\$18.00	39	0	10	No
Chang	Exotic Liquids	Beverages	24 - 12 oz bottles	\$19.00	17	40	25	No
Aniseed Syrup	Exotic Liquids	Condiments	12 - 550 ml bottles	\$10.00	13	70	25	No
Chef Anton's Cajun Seasoning					53	0	0	No
Chef Anton's Gumbo Mix					0	0	0	Yes
Grandma's Boysenberry Spread					120	0	25	No
Uncle Bob's Organic Dried Pears					15	0	10	No
Northwoods Cranberry Sauce					6	0	0	No
Mishi Kobe Niku	Tokyo Traders	Meat/Poultry	18 - 500 g pkgs.	\$97.00	29	0	0	Yes
Ikura	Tokyo Traders	Seafood	12 - 200 ml jars	\$31.00	31	0	0	No

Show all rows in Products where column Unit Price matches the following value(s). You may separate multiple values with comma and use $>$, $<$, $>=$, or $<=$ operators placed before the value.

OK Cancel

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Filters can easily be cleared by pressing the "Clear Filter" button in the dropdown list. Also, you can press the "X" at the top right corner of the grid, on the filter information panel, to clear all active filters.

Quick Find with Multiple Words

The *Quick Find* box, found in the upper left corner of the record list, can be used to easily find records that contain the parameters you search by. Here is an example: if you type in “owner” in the *quick find* field of the *Customers* page and press the *Search* icon (or hit *Enter* on your keyboard), a list of owners will appear. Use the *quick find* as you would use your favorite Internet search engine.

This is a list of customers.

owner [New Customers](#) [Actions](#) [Report](#) View: **Customers**

A filter Type to search the records and press Enter

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932
BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	n/a	28023	Spain	(91) 555 22 82
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	n/a	13008	France	91.24.45.40
CHOPS	Chop-suey Chinese	Yang Wang	Owner	Hauptstr. 29	Bern	n/a	3012	Switzerland	0452-076545
DUMON	Du monde entier	Janine Labrune	Owner	67, rue des Cinquante Otages	Nantes	n/a	44000	France	40.67.88.88
FOLKO	Folk och få HB	Maria Larsson	Owner	Åkergatan 24	Bräcke	n/a	S-844 67	Sweden	0695-34 67 21
GROSR	GROSELLA-Restaurante	Manuel Pereira	Owner	5ª Ave. Los Palos Grandes	Caracas	DF	1081	Venezuela	(2) 283-2951
LETSS	Let's Stop N Shop	Jaime Yorres	Owner	87 Polk St. Suite 5	San Francisco	CA	94117	USA	(415) 555-5938
LINOD	LINO-Delicatesses	Felipe Izquierdo	Owner	Ave. 5 de Mayo Porlamar	I. de Margarita	Nueva Esparta	4980	Venezuela	(8) 34-56-12

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You can type in any combination of words and numbers, and a search will be performed in all fields of all records. If you type in “owner ana”, then you will find all records that have “owner” and “ana” somewhere in the record (but not necessarily in the same field). The order of the words does not matter, and “ana owner” will give you the same search results.

This is a list of customers.

owner ana [New Customers](#) [Actions](#) [Report](#) View: **Customers**

A filter has been applied. Any field contains owner ana.

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729

Showing 1-1 of 1 items | Refresh

You can also search for all the owners in Mexico, by searching with the values “owner Mexico”. This will give us a list of records containing “owner” and “Mexico”.

This is a list of customers.

owner Mexico [New Customers](#) [Actions](#) [Report](#) View: **Customers**

A filter has been applied. Any field contains owner Mexico.

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932
TORTU	Tortuga Restaurante	Miguel Angel Paolino	Owner	Avda. Azteca 123	México D.F.	n/a	05033	Mexico	(5) 555-2933

Showing 1-3 of 3 items | Refresh

Data Lookups

Data lookups help you select the record you want, quickly and easily. Using it properly, you can sort, filter, and search to find the record, with a beautiful implementation.

Working with Dynamic Lookups

Let's say you want to edit a record. Click on the link in the leftmost column to navigate to its detail view. Then click *Edit*, and the record becomes editable. The data lookup fields turn into clickable links, as you can see below.

Home > Categories > Products

Products

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

Record ▾ View: **Review Products** ▾

* - indicates a required field

Products
These are the fields of the products record that can be edited.

Product Name *	<input type="text" value="Chef Anton's Cajun Seasoning"/>
Supplier Company Name	<input type="text" value="New Orleans Cajun Delights"/>  
Category Name	<input type="text" value="Condiments"/>  
Quantity Per Unit	<input type="text" value="48 - 6 oz jars"/>
Unit Price	<input type="text" value="\$22.00"/>
Units In Stock	<input type="text" value="53"/>
Units On Order	<input type="text" value="0"/>
Reorder Level	<input type="text" value="0"/>
Discontinued *	<input type="text" value="No"/> ▾

* - indicates a required field

Next to the link, there is an eraser icon. Click on this icon to clear the field, and the link will default to *(select)*, which indicates that no value is selected in the lookup field. You can create a new lookup record without leaving the page by clicking on the *New Record* icon to the right of the field when available.

Record ▾ View: **Review Products** ▾

* - indicates a required field

Products
These are the fields of the products record that can be edited.

Product Name *	<input type="text" value="Chef Anton's Cajun Seasoning"/>
Supplier Company Name	<input type="text" value="(select)"/>   ←
Category Name	<input type="text" value="Condiments"/>  
Quantity Per Unit	<input type="text" value="48 - 6 oz jars"/>
Unit Price	<input type="text" value="\$22.00"/>
Units In Stock	<input type="text" value="53"/>
Units On Order	<input type="text" value="0"/>
Reorder Level	<input type="text" value="0"/>
Discontinued *	<input type="text" value="No"/> ▾

* - indicates a required field

If you click on the link, a data lookup presenting a list of all the choices will pop up.

Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone	Fax
Exotic Liquids	Charlotte Cooper	Purchasing Manager	49 Gilbert St.	London	n/a	EC1 4SD	UK	(171) 555-2222	n/a
New Orleans Cajun Delights	Shelley Burke	Order Administrator	P.O. Box 78934	New Orleans	LA	70117	USA	(100) 555-4822	n/a
Grandma Kelly's Homestead	Regina Murphy	Sales Representative	707 Oxford Rd.	Ann Arbor	MI	48104	USA	(313) 555-5735	(313) 555-3349
Tokyo Traders	Yoshi Nagase	Marketing Manager	9-8 Sekimai Musashino-shi	Tokyo	n/a	100	Japan	(03) 3555-5011	n/a
Cooperativa de Quesos 'Las Cabras'	Antonio del Valle Saavedra	Export Administrator	Calle del Rosal 4	Oviedo	Asturias	33007	Spain	(98) 598 76 54	n/a
Mayumi's	Mayumi Ohno	Marketing Representative	92 Setsuko Chuo-ku	Osaka	n/a	545	Japan	(06) 431-7877	n/a
Pavlova, Ltd.	Ian Devling	Marketing Manager	74 Rose St. Moonie Ponds	Melbourne	Victoria	3058	Australia	(03) 444-2343	(03) 444-6588

« Previous | Page: 1 2 3 4 5 | Next » Items per page: 10, 15, 20, 25 | Showing 1-7 of 29 items | Refresh

This lookup is searchable, filterable, and sortable, just like the list views of your application. It also has the *Quick Find* box, which allows you to quickly find records. Here, type in “mate” and click on the search icon (or press *Enter* on your keyboard) to produce the following search result.

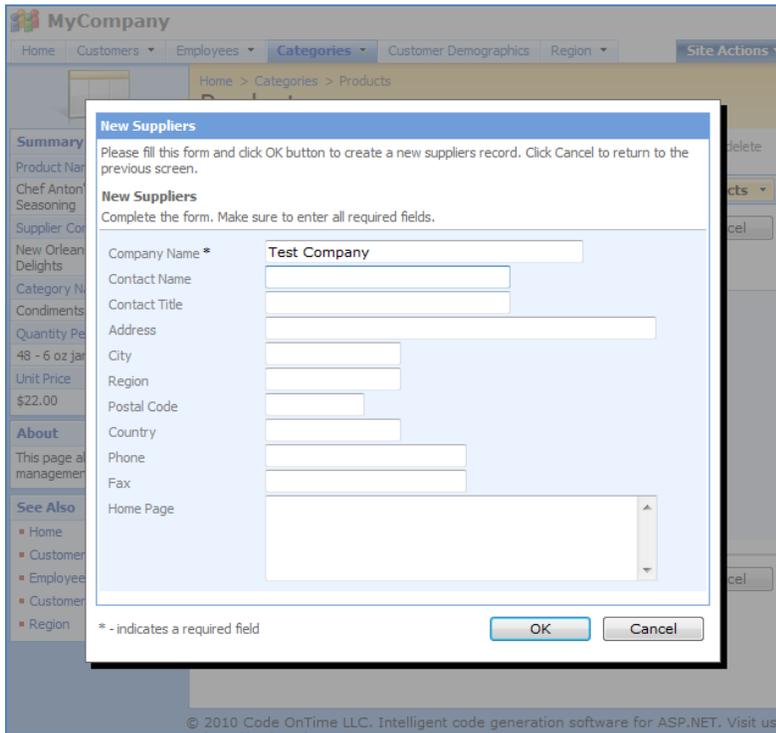
Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone	Fax
G'day, Mate	Wendy Mackenzie	Sales Representative	170 Prince Edward Parade Hunter's Hill	Sydney	NSW	2042	Australia	(02) 555-5914	(02) 555-4873

Showing 1-1 of 1 items | Refresh

To select the record you want, click on the link in the leftmost column. To exit out of the lookup, press the *X* in the top right corner, or hit *Esc* on your keyboard.

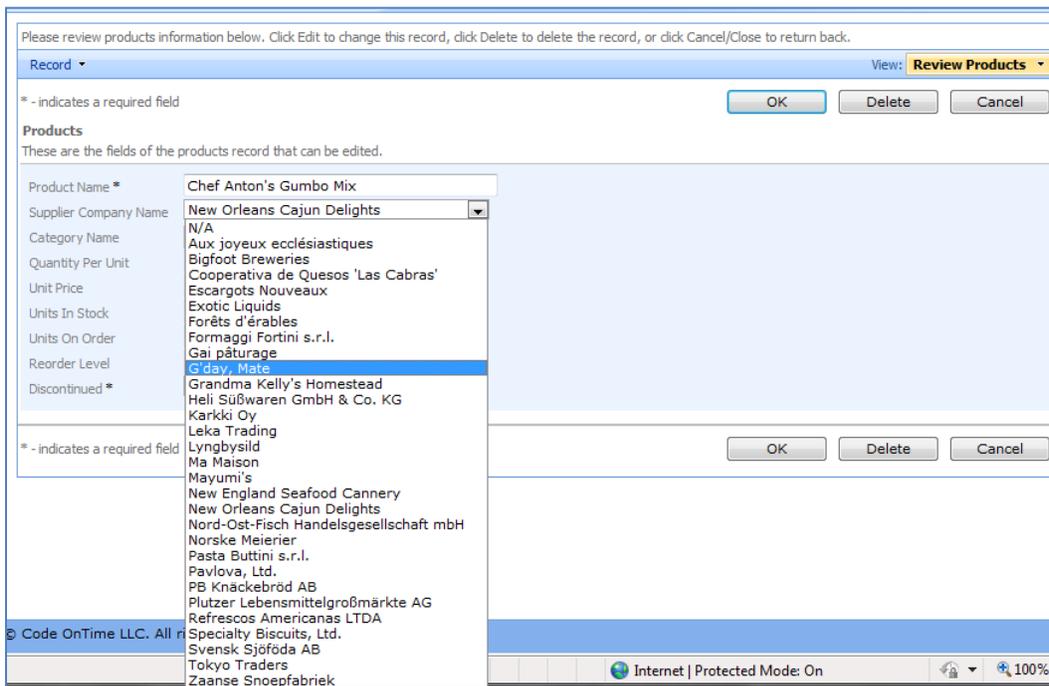
You can also create a new record in the lookup when available. Press the *New Record* button to the right of the *Quick Find* box, and it will open a new record popup. Fill in the required fields, and press *OK*, and this will create the new record and insert it into the original record field and close the lookup window at the same time.

This illustration shows a *New Suppliers* window activated to create a new lookup value.



Lookup Styles

There may be other lookup styles in your application. One such example is the drop down list. This is simply a list of all the options. Select an option in the list to signify your choice.



Radio buttons are another method of presenting mutually exclusive value choices. You can select one option by clicking on its respective radio button. Option “N/A” usually indicates that no selection is made.

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

Record ▾ View: **Review Products** ▾

* - indicates a required field

Products
These are the fields of the products record that can be edited.

Product Name *

Supplier Company Name

<input type="radio"/> N/A	<input type="radio"/> Grandma Kelly's Homestead	<input type="radio"/> Norske Meierier
<input type="radio"/> Aux joyeux ecclésiastiques	<input type="radio"/> Heli Süßwaren GmbH & Co. KG	<input type="radio"/> Pasta Buttini s.r.l.
<input type="radio"/> Bigfoot Breweries	<input type="radio"/> Karkki Oy	<input type="radio"/> Pavlova, Ltd.
<input type="radio"/> Cooperativa de Quesos 'Las Cabras'	<input type="radio"/> Leka Trading	<input type="radio"/> PB Knäckebröd AB
<input type="radio"/> Escargots Nouveaux	<input type="radio"/> Lyngbysild	<input type="radio"/> Plutzer Lebensmittelgroßmärkte AG
<input type="radio"/> Exotic Liquids	<input type="radio"/> Ma Maison	<input type="radio"/> Refrescos Americanas LTDA
<input type="radio"/> Forêts d'érables	<input type="radio"/> Mayumi's	<input type="radio"/> Specialty Biscuits, Ltd.
<input type="radio"/> Formaggi Fortini s.r.l.	<input type="radio"/> New England Seafood Cannery	<input type="radio"/> Svensk Sjöföda AB
<input type="radio"/> Gai pâturage	<input checked="" type="radio"/> New Orleans Cajun Delights	<input type="radio"/> Tokyo Traders
<input type="radio"/> G'day, Mate	<input type="radio"/> Nord-Ost-Fisch Handelsgesellschaft mbH	<input type="radio"/> Zaanse Snoepfabriek

Category Name

Quantity Per Unit

Unit Price

Units In Stock

Units On Order

Reorder Level

Discontinued *

* - indicates a required field

OK Delete Cancel

There is also the list box. You can select the option you want by clicking on it. You can scroll through the list using the scrollbar.

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

Record ▾ View: **Review Products** ▾

* - indicates a required field

Products
These are the fields of the products record that can be edited.

Product Name *

Supplier Company Name

Category Name

Quantity Per Unit

Unit Price

Units In Stock

Units On Order

Reorder Level

Discontinued *

* - indicates a required field

OK Delete Cancel

Finally, there is checkbox list. This is a list of checkboxes, and you can check all options that apply. This is the only type of value list that allows multiple selections. No checkboxes selected indicates that no selection has been made.

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

Record ▾ View: **Review Employees** ▾

* - indicates a required field OK Delete Cancel

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

Last Name *	First Name *	Title	Title Of Courtesy	Birth Date
Leverling	Janet	Sales Representative	Ms.	8/30/1963
Hire Date	Address	City	Region	Postal Code
4/1/1992	722 Moss Bay Blvd.	Kirkland	WA	98033
Country	Home Phone	Extension	Photo	
USA	(206) 555-3412	3355		

Click [here](#) to upload or clear employees photo file.

Notes
Janet has a BS degree in chemistry from Boston College (1984). She has also completed a certificate program in food retailing management. Janet was hired as a sales associate in 1991 and promoted to sales representative in February 1992.

Reports To Last Name Photo Path
Fuller  http://accweb/emmployees/leverling.bmp

Territories

<input checked="" 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 checked="" type="checkbox"/> Savannah
<input type="checkbox"/> Beachwood	<input type="checkbox"/> Colorado Springs	<input type="checkbox"/> Louisville	<input type="checkbox"/> Portsmouth	<input type="checkbox"/> Scottsdale
<input 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 checked="" 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 type="checkbox"/> Boston	<input type="checkbox"/> Fairport	<input type="checkbox"/> New York	<input type="checkbox"/> Roseville	<input type="checkbox"/> Westboro
<input type="checkbox"/> Braintree	<input type="checkbox"/> Findlay	<input type="checkbox"/> New York	<input type="checkbox"/> San Francisco	<input type="checkbox"/> Wilton
<input type="checkbox"/> Cambridge	<input type="checkbox"/> Georgetow	<input type="checkbox"/> Newark	<input type="checkbox"/> Santa Clara	
<input type="checkbox"/> Campbell	<input type="checkbox"/> Greensboro	<input checked="" type="checkbox"/> Orlando	<input type="checkbox"/> Santa Cruz	

* - indicates a required field OK Delete Cancel

In the example above, the fields are floating to allow more space on the screen. Resize the browser window and the fields on the page will re-arrange to fit into the available space.

Multi-Field Lookup

Multi-field lookups occur when you have multiple fields that are related to a selected lookup record. For example, if you place an order, you would expect that the shipping details transfer along with the customer that you selected, if they were in the database.

When you choose *Customer Company Name*, the fields *Address*, *Contact Name*, *City*, *Region*, *Postal Code*, and *Country* are automatically copied from the selected *Customer Company Name*, if available.

Note that if you have an existing record with multi-field lookup then the lookup value selection will overwrite the existing field values without warning.

Home > Customers > Orders

Orders

Please fill this form and click OK button to create a new orders record. Click Cancel to return to the previous screen.

Record ▾ View: **New Orders** ▾

* - indicates a required field

New Orders
Complete the form. Make sure to enter all required fields.

Customer Company Name	Trail's Head Gourmet Provisioners
Employee Last Name	(select)
Order Date	
Required Date	
Shipped Date	
Ship Via Company Name	(select)
Freight	
Ship Name	Helvetius Nagy
Ship Address	722 DaVinci Blvd.
Ship City	Kirkland
Ship Region	WA
Ship Postal Code	
Ship Country	USA

* - indicates a required field

Reverse (Implicit) Lookup

Reverse lookups occur when you use child record lists. For example, go to *Customers* page. Select a customer by clicking on the link in the first column, and go to the *Orders* child record list (underneath or on a different tab, depending on your layout). If you press *New Order*, the information from the selected customer will be used to fill in shipping and customer information.

Customer Code	Name	Address	City	Country	Phone
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57 Berlin	n/a 12209 Germany 030-0074321
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222 México D.F.	n/a 05021 Mexico (5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312 México D.F.	n/a 05023 Mexico (5) 555-3932
AROUT	Around the Horn *	Thomas Hardy	Sales Representative	120 Hanover Sq. London	n/a WA1 1DP UK (171) 555-7788
BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8 Luleå	n/a S-958 22 Sweden 0921-12 34 65
BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57 Mannheim	n/a 68306 Germany 0621-08460
BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber Strasbourg	n/a 67000 France 88.60.15.31
BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67 Madrid	n/a 28023 Spain (91) 555 22 82
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers Marseille	n/a 13008 France 91.24.45.40
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd. Tsawassen BC	T2F 8M4 Canada (604) 555-4729

« Previous | Page: 1 2 3 4 5 6 7 8 9 10 | Next » Items per page: 10, 15, 20, 25 | Showing 1-10 of 92 items | Refresh

Orders Customer Demo Order Details

Please fill this form and click OK button to create a new orders record. Click Cancel to return to the previous screen.

Record ▾ View: **New Orders** ▾

* - indicates a required field OK Cancel

New Orders
Complete the form. Make sure to enter all required fields.

Employee Last Name

Order Date

Required Date

Shipped Date

Ship Via Company Name

Freight

Ship Name

Ship Address

Ship City

Ship Region

Ship Postal Code

Ship Country

* - indicates a required field OK Cancel

Advanced Data Operations

In this section, we will talk about the more advanced features of your web application, such as batch editing (also known as “mass editing”) and global annotations.

Multiple Row Selection

This feature allows you to easily edit and delete large groups of records in grid view. A checkbox column on the left allows you to select the records you want. The checkboxes appear when you move the mouse over the row, and will stay visible when checked. The choices you make will be preserved even if you page, sort, or filter. The checkbox in the column header will select all items in the list. If all items are already selected, then click the check box in the header again to deselect the items. Using multiple row selection, you can delete or perform “batch” edits on multiple records.



The screenshot shows a web application interface for managing customers. At the top, there are navigation tabs: "Customers" (active), "Orders", "Customer Demo", and "Order Details". Below the tabs, a message reads "This is a list of customers." A search bar labeled "Quick Find" is on the left, and a "New Customers" button is next to it. To the right of the search bar are "Actions" and "Report" dropdown menus. On the far right, a "View:" dropdown menu is set to "Customers".

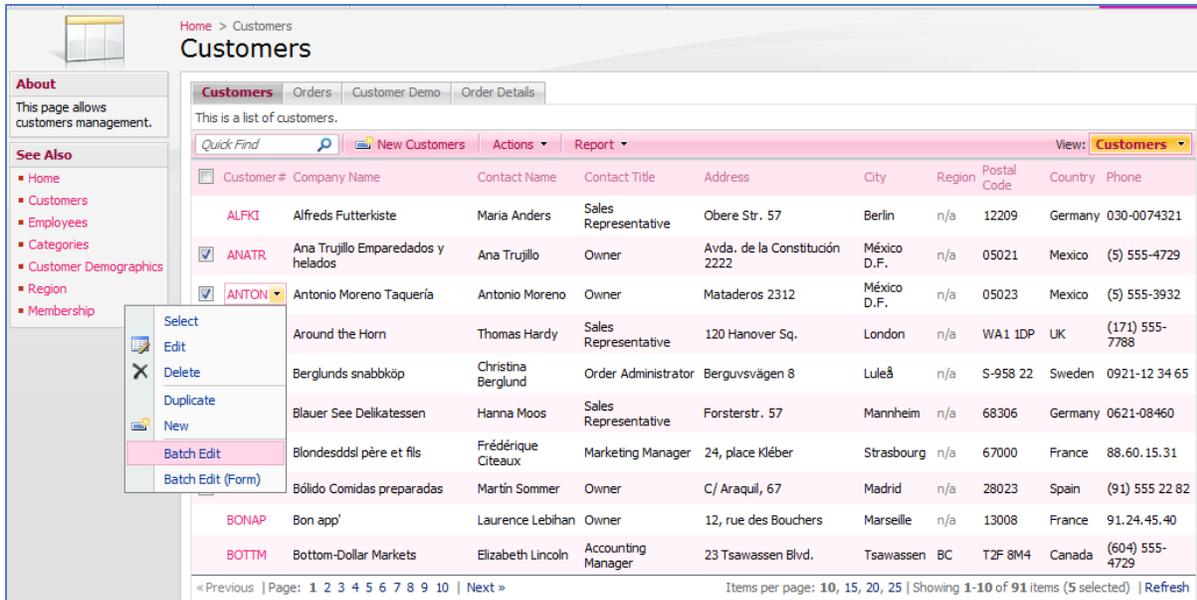
<input checked="" type="checkbox"/>	Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
<input checked="" type="checkbox"/>	ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	XYZ	12209	Germany	030-0074321
<input checked="" type="checkbox"/>	ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	XYZ	05021	Mexico	(5) 555-4729
<input type="checkbox"/>	ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	XYZ	05023	Mexico	(5) 555-3932
<input checked="" type="checkbox"/>	AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	XYZ	WA1 1DP	UK	(171) 555-7788
<input checked="" type="checkbox"/>	asdsa	qwe23	sada	n/a	n/a	n/a	XYZ	n/a	n/a	n/a
<input checked="" type="checkbox"/>	BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
<input checked="" type="checkbox"/>	BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	XYZ	68306	Germany	0621-08460
<input checked="" type="checkbox"/>	BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	XYZ	67000	France	88.60.15.31
<input checked="" type="checkbox"/>	BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	XYZ	28023	Spain	(91) 555 22 82
<input checked="" type="checkbox"/>	BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	XYZ	13008	France	91.24.45.40

At the bottom of the table, there is a pagination bar: "« Previous | Page: 1 2 3 4 5 6 7 8 9 10 | Next »" and "Items per page: 10, 15, 20, 25 | Showing 1-10 of 92 items (8 selected) | Refresh".

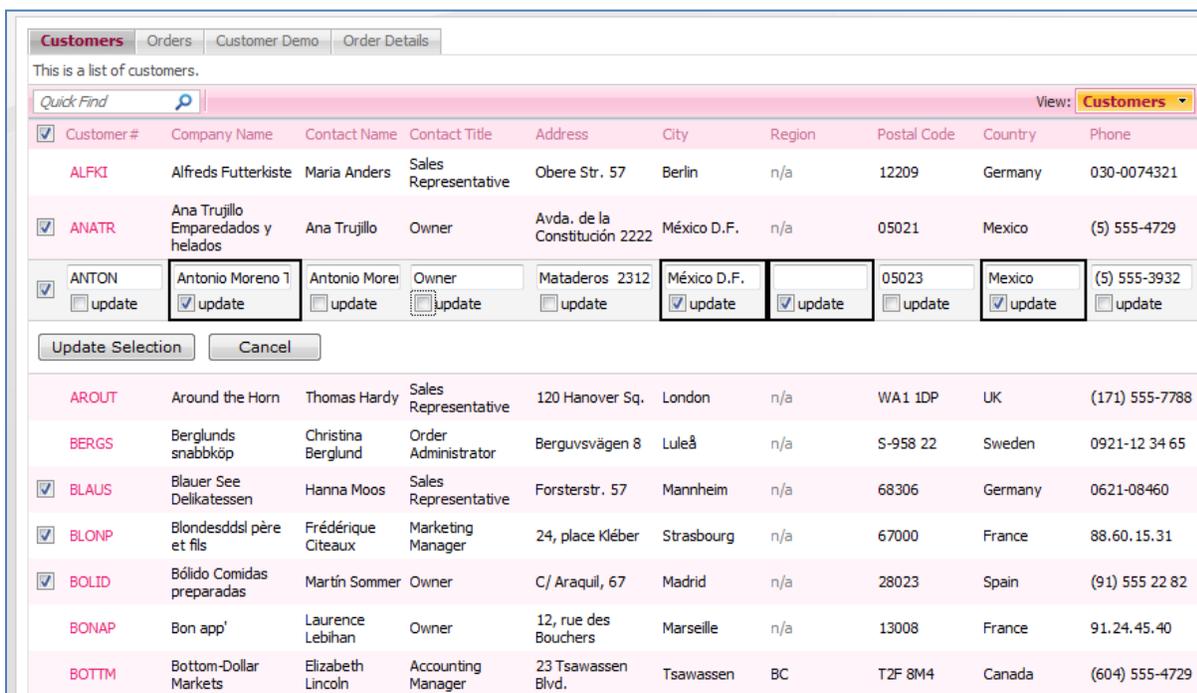
Batch Editing

This feature will allow you to edit multiple records and multiple fields at the same time.

To batch edit, first select multiple rows. Click on the checkboxes next to the records that you wish to edit. The checkbox on the column header will either deselect or select all selected items. Your selections will be preserved while you page, so you can select multiple items across different pages. Click on the dropdown next a link in the leftmost column of the record that will serve as a *batch sample*, and press *Batch Edit*.



The row with activated *Batch Edit* will provide the values for each corresponding field of records selected in the list. When you enter batch edit mode, the fields will become editable, and will have *update* checkboxes displayed underneath. By default, these are unchecked, and the corresponding fields in selected records will not be modified when you save the changes. When you check the *update* box underneath a field, it will be highlighted by a frame, which indicates that the field value will be applied to all items in the current batch of selected items. Press *Update Selection* to modify the selected batch.



Once the *Update Selection* button is pressed, all checked records will be modified according to the edits you made. You can press the *Cancel* button to cancel changes. For example, in the picture below, select

Region to be edited, and check all the records on the page. Then change *Region* to “XYZ” and check the “update” flag under the *Region* field. Press *Update Selection* to propagate the change through the selected records.

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
<input checked="" type="checkbox"/> ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	XYZ	12209	Germany	030-0074321
<input checked="" type="checkbox"/> ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	XYZ	05021	Mexico	(5) 555-4729
<input checked="" type="checkbox"/> ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	XYZ	05023	Mexico	(5) 555-3932
<input checked="" type="checkbox"/> AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	XYZ	WA1 1DP	UK	(171) 555-7788
<input checked="" type="checkbox"/> asdsa	qwe23	sada	n/a	n/a	n/a	XYZ	n/a	n/a	n/a
<input checked="" type="checkbox"/> BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
<input checked="" type="checkbox"/> BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	XYZ	68306	Germany	0621-08460
<input checked="" type="checkbox"/> BLONP	Blondesdssl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	XYZ	67000	France	88.60.15.31
<input checked="" type="checkbox"/> BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	XYZ	28023	Spain	(91) 555 22 82
<input checked="" type="checkbox"/> BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	XYZ	13008	France	91.24.45.40

Another available option on the dropdown list is *Batch Edit (Form)*. This takes you to a detail view of the edited record, with the *update* checkboxes underneath each field. Check the *update* checkbox to permit changes, and modify the fields. When you press *Update Selection*, above or below the fields, the changes will be saved.

Customers

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

View: **Review Customers**

* - indicates a required field

Customers
These are the fields of the customers record that can be edited.

Customer # * ANTON update

Company Name * Antonio Moreno Taquería update

Contact Name Antonio Moreno update

Contact Title Owner update

Address Mataderos 2312 update

City México D.F. update

Region XYZ update

Postal Code 05023 update

Country Mexico update

Phone (5) 555-3932 update

Fax update

* - indicates a required field

Global Annotations

Using global annotations, you can mark up or attach a number of files or text notes to any record in your web application. Below is a picture of a list view. You can see which records have annotations by the attachment icon at the very left of the record.

This is a list of customers.

Customer #	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
 ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	XYZ	12209	Germany	030-0074321
 ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	XYZ	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	XYZ	05023	Mexico	(5) 555-3932
AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	XYZ	WA1 1DP	UK	(171) 555-7788
BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65

« Previous | Page: 1 2 3 4 5 6 7 8 9 10 ... | Next » Items per page: 5, 10, 15, 20, 25 | Showing 1-5 of 91 items | Refresh

To add an attachment to any record, first navigate to its detail view by clicking on the link in the first column. Press the *Edit* button, above or below the fields. Click on the *Annotate* button on the very left of the action bar. A new section will appear under the details of the record.

Record View: **Review Customers**

* - indicates a required field

Customers
These are the fields of the customers record that can be edited.

Customer # *	ANTON
Company Name *	Antonio Moreno Taquería
Contact Name	Antonio Moreno
Contact Title	Owner
Address	Mataderos 2312
City	México D.F.
Region	XYZ
Postal Code	05023
Country	Mexico
Phone	(5) 555-3932
Fax	

Notes and Attachments
Enter optional notes and attach files.

Notes

Attachment

N/A

[Click here](#) to upload attachment file.

* - indicates a required field

Home > Customers

Customers

Please review customers information below. C

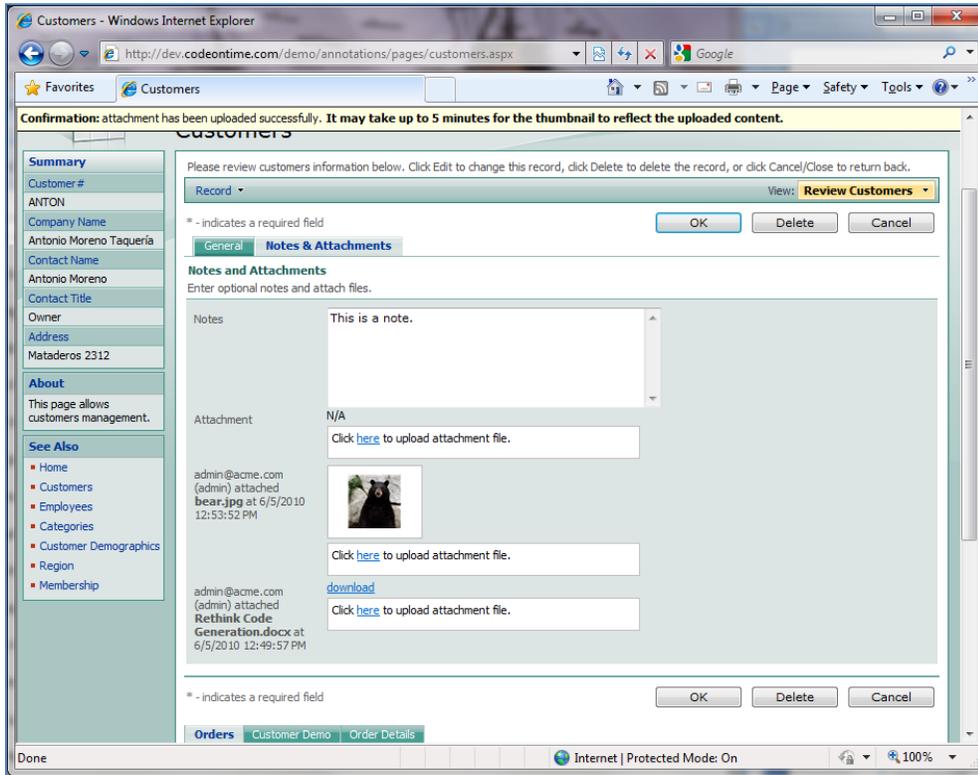
* - indicates a required field

Customers
These are the fields of the customers record t

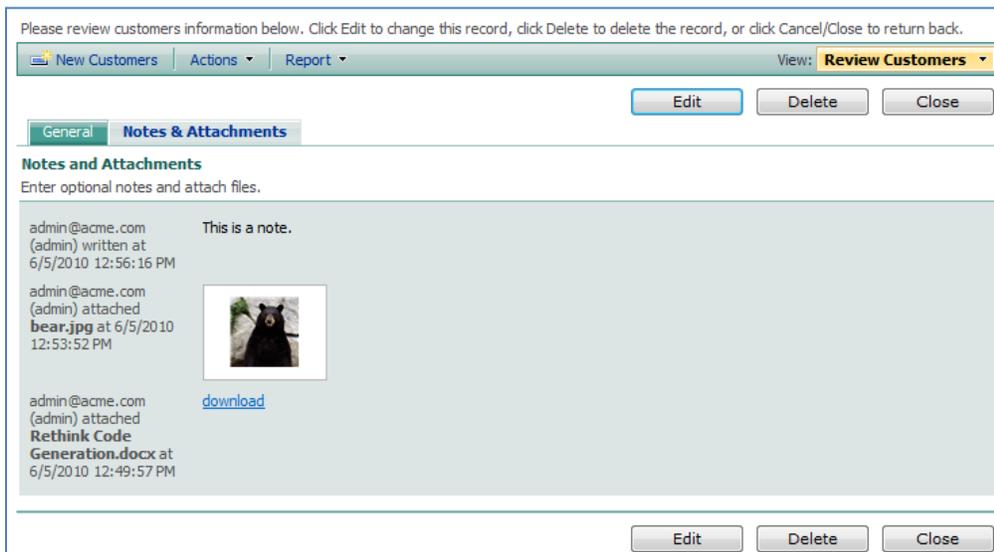
Customer # *

You can write a note, or click on the link (where it says “Click here to upload attachment file”) to attach any kind of file. Once a file is attached, a notification will appear telling you that the file was attached successfully. Only administrators can replace the attachment with other files by clicking on the link underneath or modify notes. All attachments will have a virtual field label, with information about time and date, as well as which user uploaded the attachment. Images will have a thumbnail preview.

Once you successfully add an annotation, the record detail view will be split into two tabs, *General* and *Notes & Attachments*.



To save a note, press the *OK* button. You will see the *clip* icon appear next to the record you annotated. If you select the record and go to the *Notes & Attachments* tab, you can view the annotations that have been added. You can remove a note by clicking on the *Delete* button next to the note (when the record is in edit mode), and you can remove images by selecting a link to replace the file, and then pressing the clear button instead of uploading a new attachment.



Data Reporting, Exporting, and Analysis

Applications developed using Code OnTime have very simple, easy, and yet powerful data manipulation tools.

Aggregates

Aggregate is a calculated value displayed at the bottom of a column to show average, count, sum, minimum, or maximum of the values in the column. In the picture below, you can see the distinct count of *Supplier Company Name*, average of *Unit Price*, and total number of *Units in Stock*.

The screenshot shows a web application interface for a product list. At the top, there is a breadcrumb trail: Home > Categories > Products. Below this is a yellow header with the title 'Products'. A sub-header indicates 'This is a list of products.' Below the sub-header is a navigation bar with a search box labeled 'Quick Find', a 'New Products' button, and dropdown menus for 'Actions' and 'Report'. On the right side of the navigation bar, there is a 'View:' dropdown menu set to 'Products'. The main content area is a table with the following columns: Product Name, Supplier Company Name, Category Name, Quantity Per Unit, Unit Price, Units In Stock, Units On Order, Reorder Level, and Discontinued. The table lists 10 products, including Chai, Chang, Aniseed Syrup, Chef Anton's Cajun Seasoning, Chef Anton's Gumbo Mix, Grandma's Boysenberry Spread, Uncle Bob's Organic Dried Pears, Northwoods Cranberry Sauce, Mishi Kobe Niku, and Ikura. At the bottom of the table, there is a summary row with the following data: Count: 29, Avg: \$1,459,158.74, and Sum: 6189. Below the summary row is a pagination bar with the text: « Previous | Page: 1 2 3 4 5 6 7 8 | Next » and 'Items per page: 10, 15, 20, 25 | Showing 1-10 of 77 items | Refresh'.

Product Name	Supplier Company Name	Category Name	Quantity Per Unit	Unit Price	Units In Stock	Units On Order	Reorder Level	Discontinued
Chai	Exotic Liquids	Beverages	10 boxes x 20 bags	\$18.00	39	0	10	No
Chang	Exotic Liquids	Beverages	24 - 12 oz bottles	\$19.00	17	40	25	No
Aniseed Syrup	Exotic Liquids	Condiments	12 - 550 ml bottles	\$10.00	13	70	25	No
Chef Anton's Cajun Seasoning	New Orleans Cajun Delights	Condiments	48 - 6 oz jars	\$22.00	53	0	0	No
Chef Anton's Gumbo Mix	New Orleans Cajun Delights	Condiments	36 boxes	\$21.35	0	0	0	Yes
Grandma's Boysenberry Spread	Grandma Kelly's Homestead	Condiments	12 - 8 oz jars	\$25.00	120	0	25	No
Uncle Bob's Organic Dried Pears	Grandma Kelly's Homestead	Produce	12 - 1 lb pkgs.	\$30.00	15	0	10	No
Northwoods Cranberry Sauce	Grandma Kelly's Homestead	Condiments	12 - 12 oz jars	\$40.00	6	0	0	No
Mishi Kobe Niku	Tokyo Traders	Meat/Poultry	18 - 500 g pkgs.	\$97.00	29	0	0	Yes
Ikura	Tokyo Traders	Seafood	12 - 200 ml jars	\$31.00	3100	0	0	No

Count: 29 Avg: \$1,459,158.74 Sum: 6189

« Previous | Page: 1 2 3 4 5 6 7 8 | Next » Items per page: 10, 15, 20, 25 | Showing 1-10 of 77 items | Refresh

Filters do apply to the aggregate, so if you filter down the records to only display those you want, the aggregate will calculate only those filtered fields.

The aggregates will also take into account any *quick find* filters.

Aggregate *Count* will yield the count of distinct values when applied to a text field. For example, in the picture above you can see that there are 29 suppliers of the 77 products.

If the aggregate function is applied to a currency field then the aggregate will inherit its format from the field.

If you filter down products to display only *confections*, the aggregates will change to reflect your filter selection, as shown below. You can see there is only 6 suppliers of *confections*, the average *Unit Price* went down, and there is less *Units in Stock*.

Home > Categories > Products

Products

This is a list of products.

Quick Find New Products Actions Report View: Products

A filter has been applied. Category Name is equal to **Confections**.

Product Name	Supplier Company Name	Category Name	Quantity Per Unit	Unit Price	Units In Stock	Units On Order	Reorder Level	Discontinued
Pavlova	Pavlova, Ltd.	Confections	32 - 500 g boxes	\$17.45	29	0	10	No
Teatime Chocolate Biscuits	Specialty Biscuits, Ltd.	Confections	10 boxes x 12 pieces	\$9.20	25	0	5	No
Sir Rodney's Marmalade	Specialty Biscuits, Ltd.	Confections	30 gift boxes	\$81.00	40	0	0	No
Sir Rodney's Scones	Specialty Biscuits, Ltd.	Confections	24 pkgs. x 4 pieces	\$10.00	3	40	5	No
NuNuCa Nuß-Nougat-Creme	Heli Süßwaren GmbH & Co. KG	Confections	20 - 450 g glasses	\$14.00	76	0	30	No
Gumbär Gummibärchen	Heli Süßwaren GmbH & Co. KG	Confections	100 - 250 g bags	\$31.23	15	0	0	No
Schoggi Schokolade	Heli Süßwaren GmbH & Co. KG	Confections	100 - 100 g pieces	\$43.90	49	0	30	No
Zaanse koeken	Zaanse Snoepfabriek	Confections	10 - 4 oz boxes	\$9.50	36	0	0	No
Chocolade	Zaanse Snoepfabriek	Confections	10 pkgs.	\$12.75	15	70	25	No
Maxilaku	Karkki Oy	Confections	24 - 50 g pkgs.	\$20.00	10	60	15	No

Count: 6 Avg: \$25.16 Sum: 386

« Previous | Page: 1 2 | Next » Items per page: 10, 15, 20, 25 | Showing 1-10 of 13 items | Refresh

Automatic Reports

Reporting allows you to export data from your web application. You can generate a report as a *PDF* document, *TIFF* image, or as *CSV* (comma-separated value) file. To generate a report, first click on the *Report* button on the action bar. Select which type of report you want to generate, and click on it. Your browser will display a file download prompt.

This is a list of customers.

Quick Find New Customers Actions Report View: Customers

Customer #	Company Name	Contact Name	City	Region	Postal Code	Country	Phone
ALFKI	Alfreds Futterkiste	Maria Anders	Seattle	WA	98102	USA	(206) 555-4522
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Guadalajara	JALISCO	46100	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Guadalajara	JALISCO	46106	Mexico	(5) 555-3932
AROUT	Around the Horn	Thomas Hardy	120 Hanover Sq.	London	W1A 0DP	UK	(171) 555-7788
BERGS	Berglunds snabbköp	Christina Berglund	Berguvsvägen 8	Luleå	S-958 22	Sweden	0921-12 34 65
BLAUS	Blauer See Delikatessen	Hanna Moos	Forsterstr. 57	Mannheim	68306	Germany	0621-08460
BLONP	Blondesddd père et fils	Frédérique Citeaux	24, place Kléber	Strasbourg	67000	France	88.60.15.31
BOLID	Bólido Comidas preparadas	Martin Sommer	C/ Araquil, 67	Madrid	28023	Spain	(91) 555 22 82
BONAP	Bon app'	Laurence Leblan	12, rue des Bouchers	Marseille	13008	France	91.24.45.40
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	23 Tsawassen Blvd.	Tsawassen BC	T2F 8M4	Canada	(604) 555-4729

« Previous | Page: 1 2 3 4 5 6 7 8 9 10 | Next » Items per page: 10, 15, 20, 25 | Showing 1-10 of 91 items | Refresh

Here, you can see the *PDF* document generated from the *Customers* list. You can print or email the document, or view it without requiring an Internet connection.

Customers

Customer#	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	XYZ	12209	Germany	030-0074321
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	XYZ	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	XYZ	05023	Mexico	(5) 555-3932
AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	XYZ	WA1 1DP	UK	(171) 555-7788
BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	XYZ	68306	Germany	0621-08460
BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	XYZ	67000	Franoe	88.60.15.31
BOLID	Bóolido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	XYZ	28023	Spain	(91) 555 22 82
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	XYZ	13008	Franoe	91.24.45.40
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555-4729
BSBEV	B's Beverages	Victoria Ashworth	Sales Representative	Fauntleroy Circus	London		EC2 5NT	UK	(171) 555-1212
CACTU	Cactus Comidas para llevar	Patricio Simpson	Sales Agent	Cerrito 333	Buenos Aires		1010	Argentina	(1) 135-5555
CENTC	Centro comercial Moctezuma	Francisco Chang	Marketing Manager	Sierras de Granada 9993	México D.F.		05022	Mexico	(5) 555-3392
CHOPS	Chop-suey Chinese	Yang Wang	Owner	Hauptstr. 29	Bern		3012	Switzerland	0452-076545
COMMI	Comércio Mineiro	Pedro Afonso	Sales Associate	Av. dos Lusíadas, 23	Sao Paulo	SP	05432-043	Brazil	(11) 555-7647
CONSH	Consolidated Holdings	Elizabeth Brown	Sales Representative	Berkeley Gardens 12 Brewery	London		WX1 6LT	UK	(171) 555-2282
DRACD	Drachenblut Delikatessen	Sven Ottlieb	Order Administrator	Walsenweg 21	Aachen		52066	Germany	0241-039123
DUMON	Du monde entier	Janine Labrune	Owner	67, rue des Cinquante Otages	Nantes		44000	Franoe	40.67.88.88
EASTC	Eastern Connection	Ann Devon	Sales Agent	35 King George	London		WX3 6FW	UK	(171) 555-0297
ERNSH	Ernst Handel	Roland Mendel	Sales Manager	Kirchgasse 6	Graz		8010	Austria	7675-3425
FAMIA	Familia Arquibaldo	Aria Cruz	Marketing Assistant	Rua Orós, 92	Sao Paulo	SP	05442-030	Brazil	(11) 555-9857
FISSA	FISSA Fabrica Inter. Salchichas S.A.	Diego Roel	Accounting Manager	C/ Moralzarzal, 86	Madrid		28034	Spain	(91) 555 94 44
FOLIG	Folies gourmandes	Martine Ranoé	Assistant Sales Agent	184, chaussée de Tournai	Lille		59000	Franoe	20.16.10.16
FOLKO	Folk och få HB	Maria Larsson	Owner	Åkergatan 24	Bräcke		S-844 67	Sweden	0695-34 67 21
FRANK	Frankenversand	Peter Franken	Marketing Manager	Berliner Platz 43	München		80805	Germany	089-0877310

Page 1 of 4

Active filters also apply to generated reports. If we sort the record list to display only owners, and then generate a report, then we will get a report that only lists *owners*. Sort order will also be taken into account.

Request your IT department to develop reports that present data in a custom format if the standard automatic reports require additional formatting.

CSV Export

You can also download the record list in a *comma separated value* format. Viewable and editable in spreadsheet applications, you can manipulate the exported data, or put it in another application. Note that sorting and filtering applied to a list view on the page of your application will be reflected in the exported file as well. Below is a picture of some exported records in Excel, formatted as a table.

To download a .csv file, first click on *Actions* on the action bar. Then, press *Download*. Follow the instruction from your browser to save or open the file.

RSS Data Feeds

Timely notifications and data reporting are important in any application. Typically, developers set up an emailing system that sends emails based on certain conditions applied to the database records, such as a new customer cropping up in Paris. When a record with matching field values is added to the database, an email notification would be sent to the specified users.

There is no need to contact your developers and wait for implementation of yet another data notification. Instead of using email to notify you about recent database changes, you can have an RSS feed that sends notifications about the data that meets your criteria.

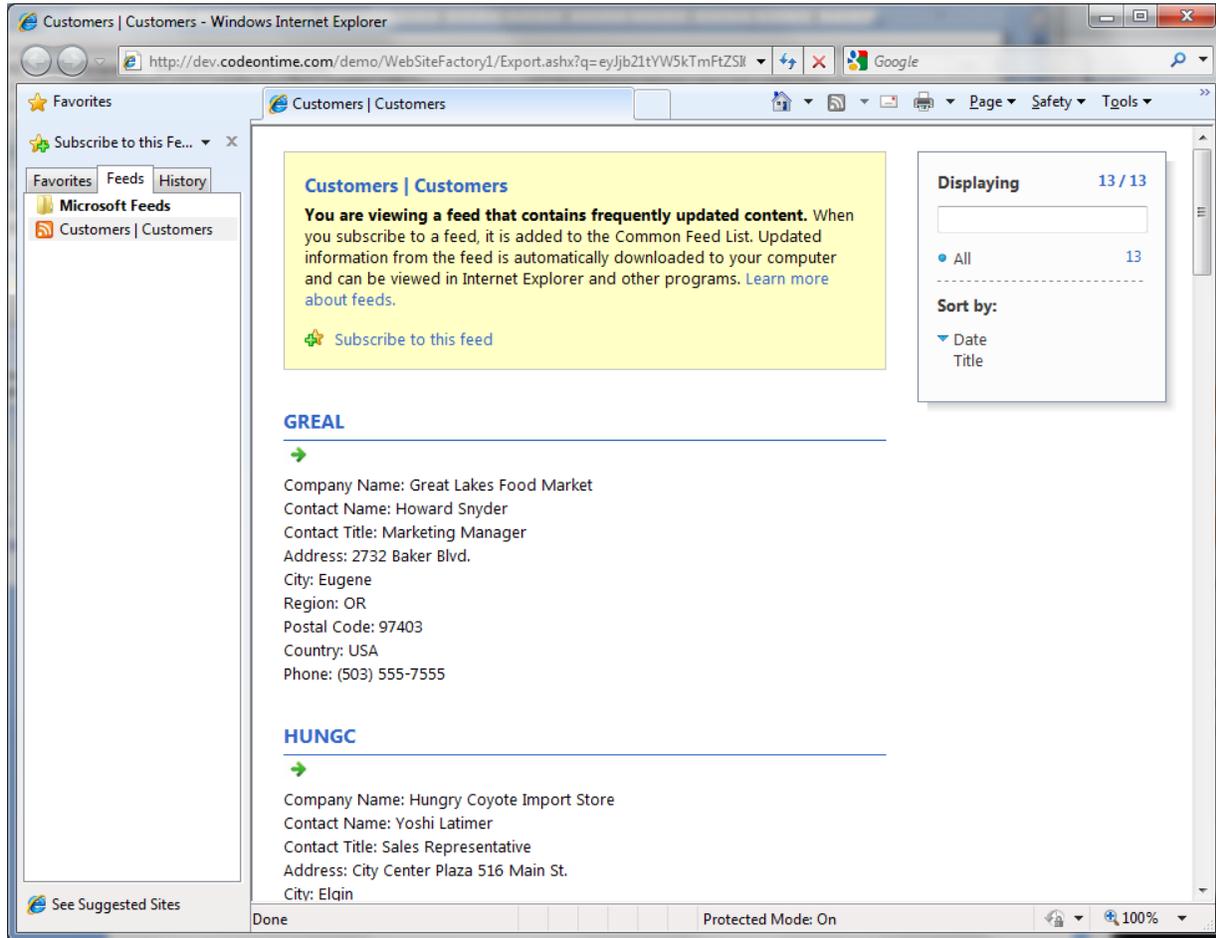
RSS (*Real Simple Syndication*) is a web feed format used to publish frequently updated information. These feeds can be viewed in your default RSS reader. In our examples, we use the built-in reader of *Internet Explorer*.

To start, choose which record list you would like to follow. You can apply filters and sort, so that the information you want will be followed. Apply a filter to display only customers from the country *USA*. Then, click on the *Actions* button on the action bar, and press *View RSS Feed*.

Customer #	Company Name	Contact Name	Region	Postal Code	Country	Phone
GREAL	Great Lakes Food Market	Howard Snyder	gene	OR 97403	USA	(503) 555-7555
HUNGC	Hungry Coyote Import Store	Yoshi Latimer	gin	OR 97827	USA	(503) 555-6874
LAZYK	Lazy K Kountry Store	John Steel	Marketing Manager	12 Orchestra Terrace	Walla Walla WA	99362 USA (509) 555-7969
LETSS	Let's Stop N Shop	Jaime Yorres	Owner	87 Polk St. Suite 5	San Francisco CA	94117 USA (415) 555-5938
LONEP	Lonesome Pine Restaurant	Fran Wilson	Sales Manager	89 Chiaroscuro Rd.	Portland OR	97219 USA (503) 555-9573
OLDWO	Old World Delicatessen	Rene Phillips	Sales Representative	2743 Bering St.	Anchorage AK	99508 USA (907) 555-7584
RATTC	Rattlesnake Canyon Grocery	Paula Wilson	Assistant Sales Representative	2817 Milton Dr.	Albuquerque NM	87110 USA (505) 555-5939
SAVEA	Save-a-lot Markets	Jose Pavarotti	Sales Representative	187 Suffolk Ln.	Boise ID	83720 USA (208) 555-8097
SPLIR	Split Rail Beer & Ale	Art Braunschweiger	Sales Manager	P.O. Box 555	Lander WY	82520 USA (307) 555-4680
THEBI	The Big Cheese	Liz Nixon	Marketing Manager	89 Jefferson Way Suite 2	Portland OR	97201 USA (503) 555-3612

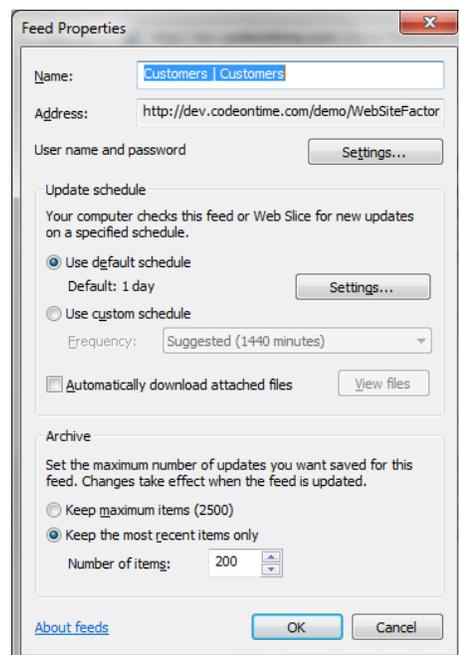
At this point, your preferred RSS reader will open the RSS feed.

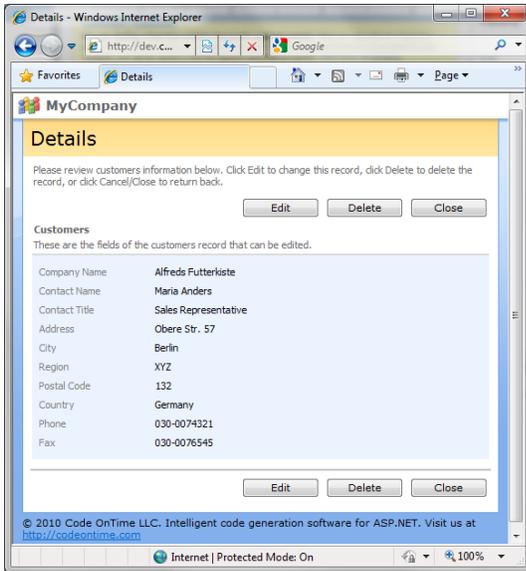
From there, you can subscribe to the feed by pressing *Subscribe*. This will have your reader follow the feed, and you can easily access the feed at any time.



The feed will be auto-updated according to the settings. You can access these by right-clicking on the feed name in the *Feeds* bar, and pressing *Properties*. From here, you can change multiple settings. You can specify how often the feed is checked for updates, and how many updates are saved to your computer. You can rename the feed, or change the address of the feed.

The feed displays the corresponding information about customers from USA. If you click on the arrow underneath each item, you will be taken to a detail view for the record. From here, you can edit or delete the record.

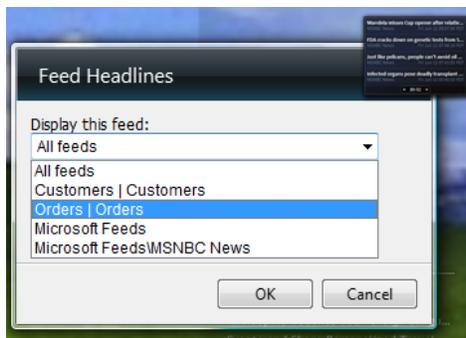




You can also display this feed on your *Windows sidebar*. Access your gadget settings. These will appear when you mouse over the upper right corner of the gadget.



Change "Display this feed" to your RSS feed. Press *Ok* to save.



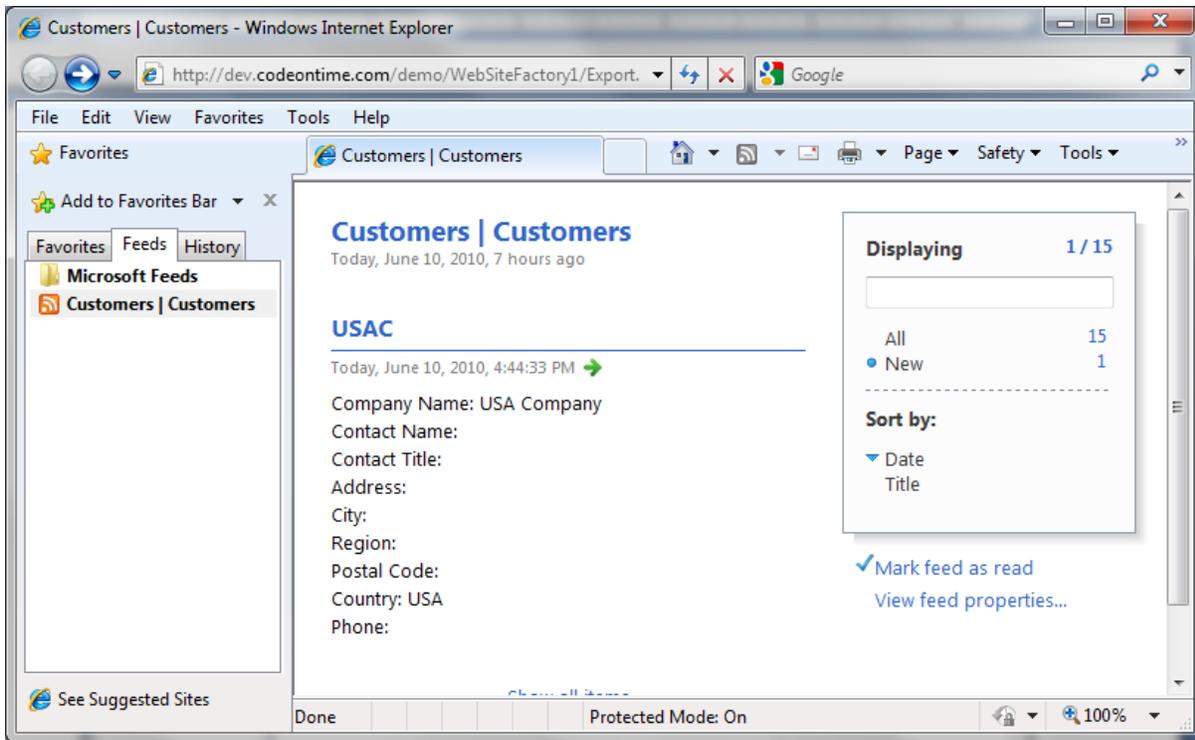
Now you can monitor your feed from your desktop.



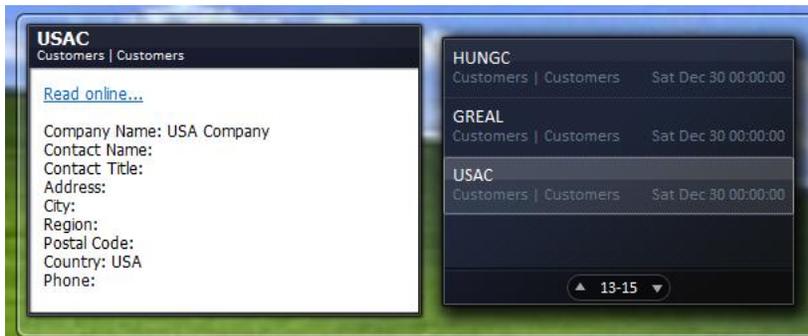
Whenever changes are made to the record list behind the feed, they will be displayed at the top of the feed when feed is processed by the RSS reader.

For example, let's say we have a new customer from USA. When this customer is added to the database, the feed will receive the changes, and push the new record to the top of the list.

By pressing *Refresh* on the feed (accessed by right-clicking on the feed in the *Feed bar*), the new record will be displayed. Also, related metadata will be displayed, including time of update.



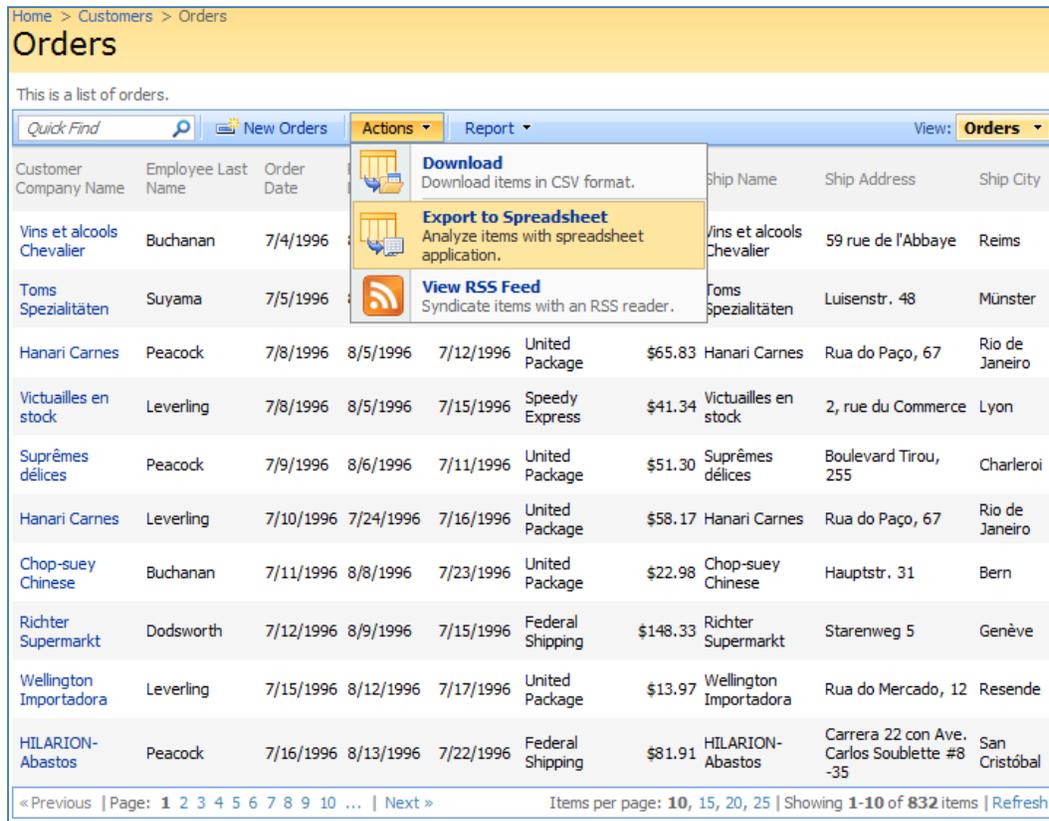
And the sidebar gadget is updated as well.



Live Export to Spreadsheet

You can also export the **live** list of records to a *Microsoft Excel* spreadsheet. This list of records will automatically update when records have been modified without the need to visit the web site.

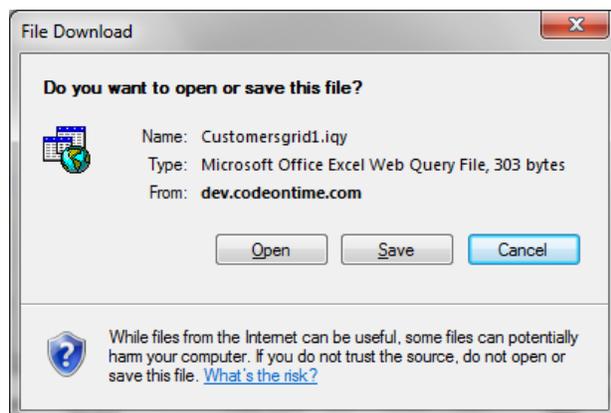
To export a list of records to a spreadsheet, you must choose which records you want to use. You can sort and filter to shape your data set. In our example, no filters were applied. Click on the *Actions* button on the action bar, and press *Export to Spreadsheet*.



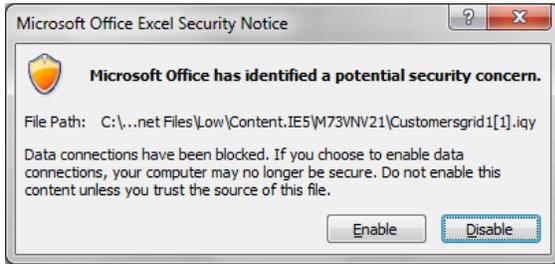
The screenshot shows a web application interface for 'Orders'. The page title is 'Orders' and it includes a breadcrumb trail 'Home > Customers > Orders'. Below the title, there is a navigation bar with 'Quick Find', 'New Orders', 'Actions', and 'Report' buttons. A 'View: Orders' dropdown is also present. The main content area is a table of orders with columns for Customer Name, Employee Last Name, Order Date, and Ship Name, Ship Address, and Ship City. The 'Actions' menu is open, showing options: 'Download' (Download items in CSV format), 'Export to Spreadsheet' (Analyze items with spreadsheet application), and 'View RSS Feed' (Syndicate items with an RSS reader). The 'Export to Spreadsheet' option is highlighted. The table contains 10 rows of order data.

Customer Company Name	Employee Last Name	Order Date	Ship Name	Ship Address	Ship City
Vins et alcools Chevalier	Buchanan	7/4/1996	Vins et alcools Chevalier	59 rue de l'Abbaye	Reims
Toms Spezialitäten	Suyama	7/5/1996	Toms Spezialitäten	Luisenstr. 48	Münster
Hanari Carnes	Peacock	7/8/1996	Hanari Carnes	Rua do Paço, 67	Rio de Janeiro
Victuailles en stock	Leverling	7/8/1996	Victuailles en stock	2, rue du Commerce	Lyon
Suprêmes délices	Peacock	7/9/1996	Suprêmes délices	Boulevard Tirou, 255	Charleroi
Hanari Carnes	Leverling	7/10/1996	Hanari Carnes	Rua do Paço, 67	Rio de Janeiro
Chop-suey Chinese	Buchanan	7/11/1996	Chop-suey Chinese	Hauptstr. 31	Bern
Richter Supermarkt	Dodsworth	7/12/1996	Richter Supermarkt	Starenweg 5	Genève
Wellington Importadora	Leverling	7/15/1996	Wellington Importadora	Rua do Mercado, 12	Resende
HILARION-Abastos	Peacock	7/16/1996	HILARION-Abastos	Carrera 22 con Ave. Carlos Soublette #8-35	San Cristóbal

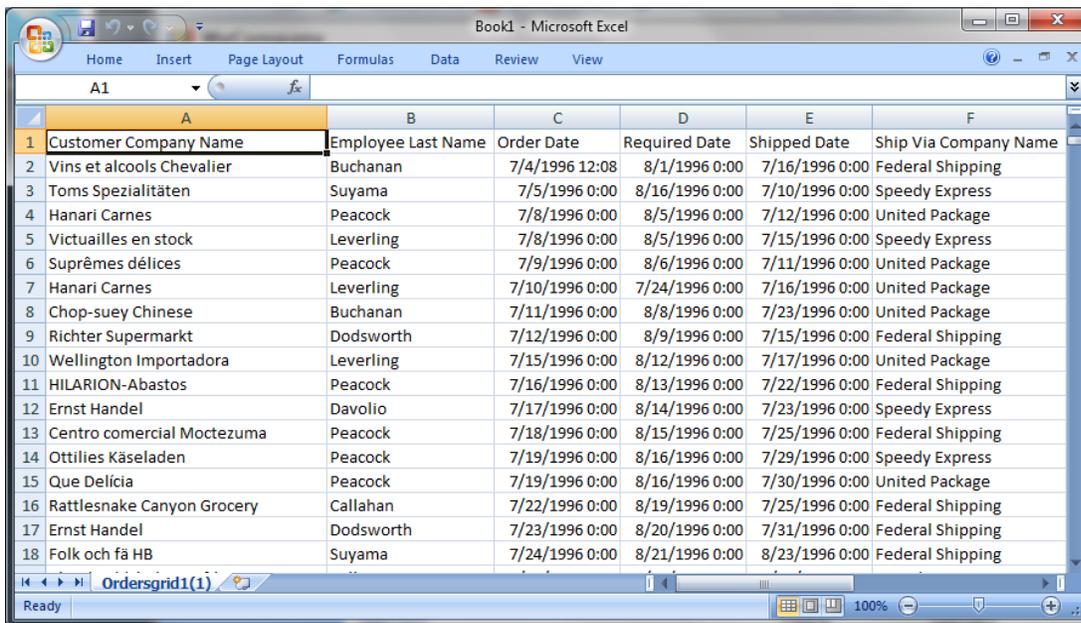
This will prompt a download window. You can save the file by pressing *Save*, or press *Open* to view the file.



Once the download is complete, *Microsoft Excel* will open to display the file. The spreadsheet has an external connection that you need to approve. Press *Enable* to view the data.

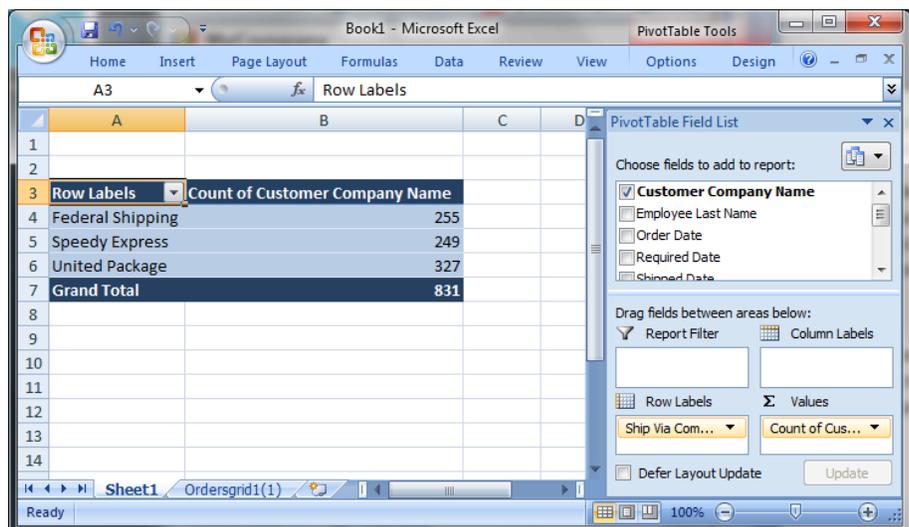


Now, Excel will download the record list and display it in a bland list, with no formatting.



Let's make this list easier to read and use. Go the *Insert* tab, and press *Pivot Table*. The table boundaries should be automatically determined, so press *Ok* if the data is highlighted correctly.

The PivotTable Field List is now visible, at the right side of the spreadsheet. You can manipulate the data in many ways to obtain useful information.



For example, you can show the distribution of orders by shipping companies by dragging *Customer Company Name* into Values, and *Ship via Company Name* into Row Labels. This will show a list of shipping companies, and a count of how many orders were served by each.

We can also see which employees got the most orders, by shipping company. Drag *Employee Last Name* into Row Labels, underneath *Ship via Company Name*. This way, we can easily see the best performing employee, grouped to shipping company.

The screenshot shows a Microsoft Excel window with a PivotTable and the PivotTable Field List task pane. The PivotTable is located in the range B3:B35 and shows the count of orders by shipping company and employee. The PivotTable Field List task pane is on the right side of the window, showing the fields used in the report.

Row Labels	Count of Customer Company Name
Federal Shipping	255
Buchanan	13
Callahan	29
Davolio	41
Dodsworth	14
Fuller	25
King	28
Leverling	46
Peacock	40
Suyama	19
Speedy Express	249
Buchanan	14
Callahan	27
Davolio	38
Dodsworth	10
Fuller	35
King	20
Leverling	36
Peacock	46
Suyama	23
United Package	327
Buchanan	15
Callahan	48
Davolio	44
Dodsworth	19
Fuller	36
King	24
Leverling	45
Peacock	70
Suyama	25
(blank)	1
Grand Total	831

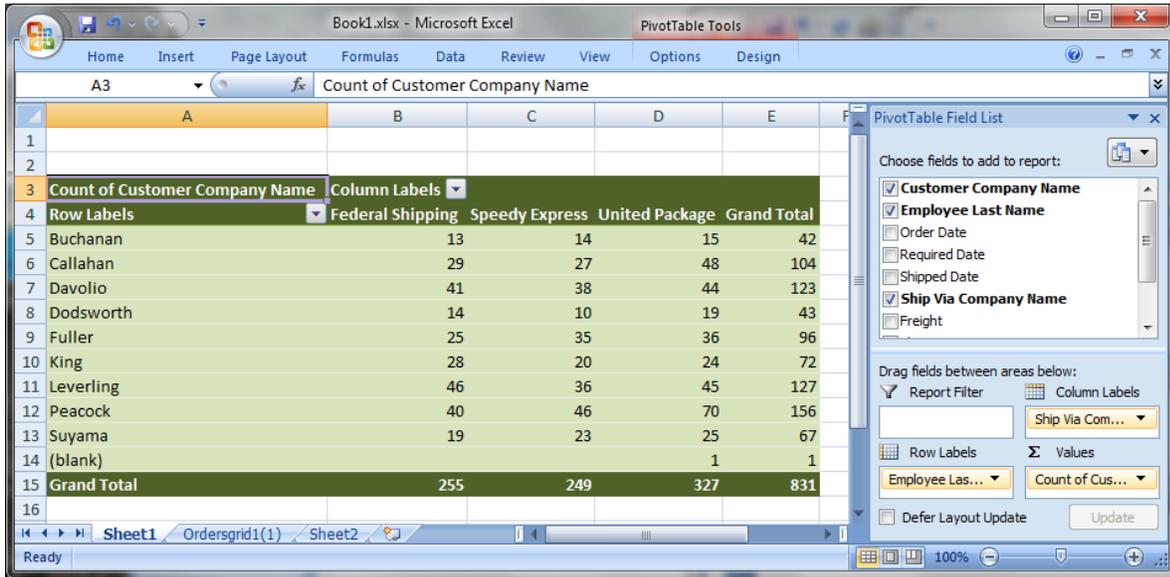
The PivotTable Field List task pane shows the following fields:

- Customer Company Name (checked)
- Employee Last Name (checked)
- Order Date (unchecked)
- Required Date (unchecked)
- Shipped Date (unchecked)
- Ship Via Company Name (checked)
- Freight (unchecked)
- Ship Name (unchecked)
- Ship Address (unchecked)
- Ship City (unchecked)

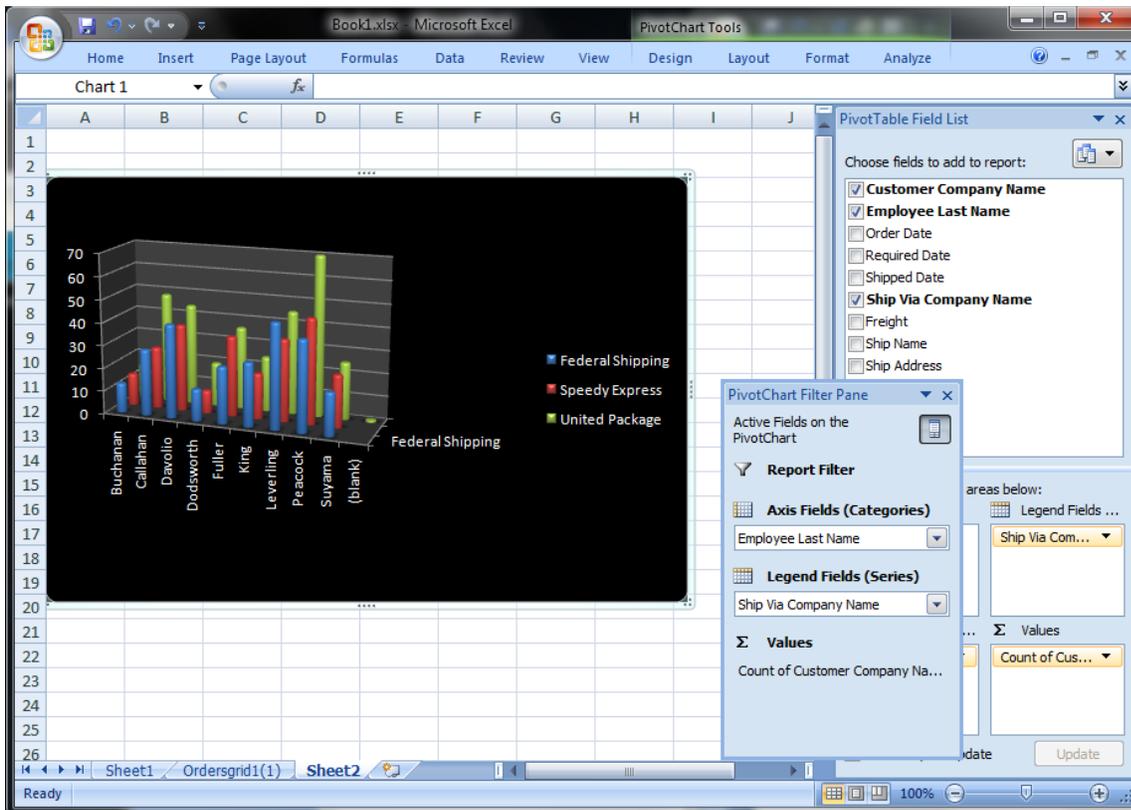
The PivotTable Field List task pane also shows the following fields in the Report Filter, Column Labels, Row Labels, and Values areas:

- Report Filter: Ship Via Com... (dropdown)
- Column Labels: Count of Cus... (dropdown)
- Row Labels: Ship Via Com... (dropdown), Employee Las... (dropdown)
- Values: Count of Cus... (dropdown)

You could drag *Ship via Company Name* into Column Labels, for an alternative view.



You can also create a graph from the data. In the *Insert* tab, choose a graph type, such as *3D Cylinder*, under *Column* in *Charts*. Copy the graph into a new sheet in the document. Then, go to the *Design* tab, and choose a new *Chart Style*.



Next time that you open the Excel document, there will be a security alert. Press *Options* on the security notification, and choose the option *Enable this content*, and press *Ok*, so that the data will be refreshed and visible.

