



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:

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

瓣 MyCompany	🗱 MyCompany											
Home Customers - Er	mployees 🝷	Categories Customer E	emographics R	egion 🔻						Site Actions -		
Home > Customers Customers												
About	This is a list	t of customers.										
This page allows customers management.	Quick Find	nt 🔎 🔂 New Cu:	stomers Action	s • Report •					View: C	ustomers 🔹		
See Also	Customer#	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone		
Home Customers	ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321		
Employees Categories	ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729		
Customer Demographics	ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932		
• Region	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		
	воттм	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 p	age: 10 , 15,	20, 25	Showing 1	-10 of 91	items Refresh		

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.

# MyCompany		
Home Customers -	Employees Categories Customer Demographics Region	Site Actions -
	Home > Customers Customers	
About	Please fill this form and dick OK button to create a new customers record. Click Cancel to return to the previous screen.	
This page allows customers management.	Record -	View: New Customers •
See Also	* - indicates a required field	OK Cancel
Home Customers Employees Categories Customer Demographics Region	New Customers Complete the form. Make sure to enter all required fields. Customer # Company Name * Contact Name Contact Title	
	Address City Region Postal Code Country Phone Fax	
	* - indicates a required field	OK Cancel

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.

MyCompany												
Home Customers •	Employees • Ca	ategories 🔹 Custo	mer Demographi	cs Region •						Site Actions *		
Home > Customers Customers												
About	This is a list of	customers.										
This page allows customers management.	Quick Find	P Record	ł •						View:	Customers •		
See Also	Customer#	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone		
Home Customers	ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321		
EmployeesCategories	ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729		
Customer Demographics Region	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	er Berguvsvägen 8 inistrator		n/a	S-958 22	Sweden	0921-12 34 65		
	Insert	Cancel										
	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		
										Refresh		

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 prepopulated 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.

_					
н (lome > Customers				
	Please review customers	s information below. Click Edit to change this record, click Delete to delete the rec	ord, or click Cancel/Close	e to return back.	
	Rew Customers	Actions • Report •		View: Review	Customers 🔹
			Edit	Delete	Close
	Customers				
	These are the fields of t	he 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 • E	mployees 🔹 Ca	tegories • Custor	ner Demograph	ics Region -						Site Actions •	
Home > Customers Customers											
Summary	Immary This is a list of customers.										
Customer#	Ouick Find	2 Record	•						View:	Customers •	
BLONP		- N	Contact	a		~		Postal			
Company Name	Customer#	Company Name	Name	Contact litte	Address	City	Region	Code	Country	Phone	
Contact Name	ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321	
Frédérique Citeaux		Ana Trujillo			Avda de la						
Contact Title	ANATR	Emparedados y	Ana Trujillo	Owner	Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729	
Marketing Manager		Antonio Marano	Antonio								
Address	ANTON	Taquería	Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932	
24, place Kleber	AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	n/a	WA1 1DP	UK	(171) 555-7788	
This page allows customers management.	BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	n/a	S-958 22	Sweden	0921-12 34 65	
See Also	BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460	
Home	BLONP	Blondesddsl père (Frédérique C	Marketing Manac	24, place Kléber	Strasbourg		67000	France	88.60.15.31	
Customers											
 Employees 	Save	Cancel									
Categories		Bólido Comidas	Martín								
Customer Demographics Region	BOLID	preparadas	Sommer	Owner	C/ Araquil, 67	Madrid	n/a	28023	Spain	(91) 555 22 82	
Region	BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	n/a	13008	France	91.24.45.40	
	воттм	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555-4729	
	«Previous Pa	age: 123456	78910 Ne	ext »		Items per p	bage: 10 , 15,	20, 25 Sho	wing 1-10 of 9	1 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 dependent records, the operation will be canceled, with an error message displayed at the top of the page.

A The DE been te	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.													
🎁 Му	/Compa	ny												
Home	Customers	•	Employees 🝷	Categories Custome	Demographics Re	egion 👻						Site Actions 🔻		
Home > Customers Customers														
Summa	ry		This is a list	of customers.										
Customer	#		Quick Fina	/ 🔎 🖃 New (Customers Action	s • Report •					View: C	ustomers 🔻		
Company	Name		Customer#	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone		
Antonio M Contact N	loreno Taque Name	ería	ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321		
Antonio M Contact T	1oreno Title		ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729		
Owner	Owner		ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932		
Matadero	is 2312		AROUT -	AROUT Around the Horn		Sales Representative	120 Hanover Sq.	London	n/a	WA1 1DP	UK	(171) 555- 7788		
About This page	allows		Select Edit Berglunds snabbköp		Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	n/a	S-958 22	Sweden	0921-12 34 65		
customers	s managemer	×	Delete	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460		
Home	•			_	Duplicate New	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	n/a	67000	France	88.60.15.31
 Custom Employ 	ees		BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	n/a	28023	Spain	(91) 555 22 82		
 Catego Custom 	ries ner Demograp	ohics	BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	n/a	13008	France	91.24.45.40		
Region			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	8 9 10 Next »		Items per p	age: 10 , 15,	20, 25	Showing 1	- 10 of 91 i	tems 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.

H	ome > Customers			
	Please review customer Cancel/Close to return	rs information b back.	elow. Click Edit to	o change this record, click Delete to delete the record, or click
	New Customers	Actions -	Report -	View: Review Customers •
				Edit Delete Close
	Customers			
	These are the fields of	the customers r	ecord that can b	e edited.
	Customer#	ANATR		
	Company Name	Ana Trujillo	Emparedados y	Message from webpage
	Contact Name	Ana Trujillo		
	Contact Title	Owner		
	Address	Avda. de la	a Constitución 22	Delete?
	City	México D.F		
	Region	XYZ		
	Postal Code	05021		OK Cancel
	Country	Mexico		
	Phone	(5) 555-47	29	
	Fax	(5) 555-37	45	
				Edit Delete Close

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.

🎁 My	yCompany												
Home	Customers •	Employees 🔹	Categories	Customer D	emographics	Region •						s	ite Actions 🔻
		Home > Cus Orders	tomers > Ord	lers									
Summa	ry	This is a list o	forders.										
Customer	r Company Name	Quick Find	Q	🖃 New Orde	rs 🛛 📝 Edit	X Delete	Actions	Report •				View:	Orders •
Toms Spe	ezialitäten	Customer Co	moany Name	Employee Last	Order	Required	Shipped	Ship Via Compa	ny _E ,	aight Ship Nama	Ship Address		Ship City
Employee	e Last Name	Customer Co	inpurty Nume	Name	Date	Date	Date	Name		eight onip Name	onp Address		Ship City
Order Da	ite	Ana Trujillo E y helados	mparedados	Buchanan	7/4/1996	8/1/1996	7/16/1996	Speedy Express	\$3	2.38 Vins et alcools Chevalier	59 rue de l'Abbaye		Reims
7/5/1996	Data	Toms Spezia	itäten	Suvama	7/5/1996	8/16/1996	7/10/1996	Speedy	0 5	1.61 Toms Spezialitä	ten Luisenstr. 48		Münster
8/16/199	6				• .,.,	-,,	.,,	Express	• •				
Shipped [Date	Hanari Carne	es	Peacock	7/8/1996	8/5/1996	7/12/1996	United Package	\$6	5.83 Hanari Carnes	Rua do Paço, 67		Rio de Janeiro
7/10/199	6	Victuailles er	stock	Leverling	7/8/1996	8/5/1996	7/15/1996	Speedy Express	\$-	1.34 Victuailles en st	ock 2, rue du Commerce		Lyon
This page	e allows orders	Suprêmes de	lices	Peacock	7/9/1996	8/6/1996	7/11/1996	United Package	\$	1.30 Suprêmes délice	s Boulevard Tirou, 255		Charleroi
managem	nent.	Hanari Carne	25	Leverling	7/10/1996	7/24/1996	7/16/1996	United Package	\$	8.17 Hanari Carnes	Rua do Paço, 67		Rio de Janeiro
Custon	o ner Demo	Chop-suey C	Chinese	Buchanan	7/11/1996	8/8/1996	7/23/1996	United Package	\$3	2.98 Chop-suey Chinese	Hauptstr. 31		Bern
Order I	Details	Richter Supe	rmarkt	Dodsworth	7/12/1996	8/9/1996	7/15/1996	Federal Shipping	\$14	18.33 Richter Supermarkt	Starenweg 5		Genève
		Wellington Ir	nportadora	Leverling	7/15/1996	8/12/1996	7/17/1996	United Package	\$	13.97 Wellington Importadora	Rua do Mercado, 12		Resende
		HILARION-A	bastos	Peacock	7/16/1996	8/13/1996	7/22/1996	Federal Shipping	\$	1.91 HILARION- Abastos	Carrera 22 con Ave. C Soublette #8-35	Carlos	San Cristóbal
		« Previous	Page: 1 2 3	456789	10 Next	»			It	ems per page: 10 , 15	20, 25 Showing 1-10 of	831 ite	ms Refresh

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.

				Welcome admin, Toda	ay is Tuesday, June	01, 2010 My Acco	unt Logout Help
# MyCompany							
Home Customers -	Employees • Categori	es Customer Demographics	Region - Membership				Site Actions •
	Home > Customers Customers						
Summary	Customers Order	s Customer Demo Order De	etails				
Customer#	Please review customer	rs information below. Click Edit to	change this record, dick Delet	e to delete the record, or click Cance	el/Close to return ba	ck.	
ANATR	New Customers	Actions • Report •				View: Review	Customers 🔹
Ana Trujilo Emparedados		, , ,					
y helados					Edit	Delete	Close
Contact Name	Customers		1. I				
Ana Trujillo	These are the fields of	the customers record that can be	edited.				
Contact Title	Customer#	ANATR					
Address	Company Name	Ana Trujillo Emparedados y ł	nelados				
Avda, de la Constitución	Contact Name	Ana Trujillo					
2222	Contact Title	Owner					
About	Address	Avda. de la Constitución 222	22				
This page allows	City	México D.F.					
customers management.	Region	N/A					
See Also	Postal Code	05021					
Orders	Country	Mexico					
 Customer Demo 	Phone	(5) 555-4729					
 Order Details 	Fax	(5) 555-3745					
					Edit	Delete	Close

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.

斜 MyCompany									
Home Customers -	Employees - Categ	gories 🝷 Cu	ustomer Demograph	ics Regio	on • Membership				Site Actions •
	Home > Customers	5							
Summary	Customers Ord	ers Custom	mer Demo Order	Details					
Customer#	This is a list of order	s.							
ANATR	Ouick Find		lew Orders	Edit 🗙	Delete Actions •	Repor	•	Vie	Orders -
Company Name	Quict i ind	~		Luic M	Delete Actions	Теры			orders
Ana Trujillo Emparedados	Employee Last Name	e Order Date	Required Date Shi	ipped Date	Ship Via Company Nar	ne Freigh	t Ship Name	Ship Address	Ship City
y helados	Buchanan	7/4/1996	8/1/1996 7/2	16/1996	Speedy Express	\$32.38	Vins et alcools Chevalier	59 rue de l'Abbave	Reims
Contact Name									
Ana Trujillo	King	9/18/1996	10/16/1996 9/3	24/1996	Federal Shipping	\$1.6	L Ana Trujillo Emparedados y helados	Avda. de la Constitución 22	22 México D.F.
Contact Title	Leverling	8/8/1997	9/5/1997 8/3	14/1997	Speedy Express	\$43.90) Ana Trujillo Emparedados y helados	Avda. de la Constitución 22	22 México D.F.
Owner									
Address	Leverling	11/28/1997	12/26/1997 12	/12/1997	Federal Shipping	\$11.99	Ana Trujillo Emparedados y helados	Avda. de la Constitución 22	22 México D.F.
Avda. de la Constitución 2222	Peacock	3/4/1998	4/1/1998 3/3	11/1998	Federal Shipping	\$39.92	2 Ana Trujillo Emparedados y helados	Avda. de la Constitución 22	22 México D.F.
About								Showing 1-5 of 5	items Refresh

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.

Customers - Windows Internet Explorer												
	v.codeontime.co	m /demo/WebSiteFa	ctory3/Page	s/Customers.asp	n 🕶 🔯 😽 🗙	🕻 🚼 Goo	gle				ب م	
🚖 Favorites 🛛 🏀 Custor	mers				🏠 🔻	a - 🗆	-	<u>P</u> age		r T <u>o</u> ols ▼ 🤇) • "	
Summary	BSBEV	B's Beverages	Victoria Ashworth	Sales Representative	Fauntleroy Circus	London	n/a	EC2 5NT	UK	(171) 555- 1212	^	
ANATR	CACTU	Cactus Comidas para llevar	Patricio Simpson	Sales Agent	Cerrito 333	Buenos Aires	n/a	1010	Argentina	(1) 135-5555		
Ana Trujillo Emparedados v helados	CENTC	Centro comercial Moctezuma	Francisco Chang	Marketing Manager	Sierras de Granada 9993	México D.F.	n/a	05022	Mexico	(5) 555-3392		
Contact Name	CHOPS	Chop-suey Chinese	Yang Wang	Owner	Hauptstr. 29	Bern	n/a	3012	Switzerland	0452- 076545		
Contact Title	COMMI	Comércio Mineiro	Pedro Afonso	Sales Associate	Av. dos Lusíadas, 23	Sao Paulo	SP	05432- 043	Brazil	(11) 555- 7647		
Address	CONSH	Consolidated Holdings	Elizabeth Brown	Sales Representative	Berkeley Gardens 12 Brewery	London	n/a	WX1 6LT	UK	(171) 555- 2282		
Avda, de la Constitución 2222	DRACD	Drachenblut Delikatessen	Sven Ottlieb	Order Administrator	Walserweg 21	Aachen	n/a	52066	Germany	0241- 039123		
About This page allows customers management.	DUMON	Du monde entier	Janine Labrune	Owner	67, rue des Cinquante Otages	Nantes	n/a	44000	France	40.67.88.88		
See Also	EASTC	Eastern Connection	Ann Devon	Sales Agent	35 King George	London	n/a	WX3 6FW	UK	(171) 555- 0297		
Orders Customer Demo	ERNSH	Ernst Handel	Roland Mendel	Sales Manager	Kirchgasse 6	Graz	n/a	8010	Austria	7675-3425		
Order Details	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	n/a	28034	Spain	(91) 555 94 44		
	FOLIG	Folies gourmandes	Martine Rancé	Assistant Sales Agent	184, chaussée de Tournai	Lille	n/a	59000	France	20.16.10.16	E	
	FOLKO	Folk och fä HB	Maria Larsson	Owner	Åkergatan 24	Bräcke	n/a	S-844 67	Sweden	0695-34 67 21		
	FRANK	Frankenversand	Peter Franken	Marketing Manager	Berliner Platz 43	München	n/a	80805	Germany	089- 0877310		
	«Previous Pa	ge: 1 2 3 4 Next	»		Items per page	: 10, 15, 20,	25 Sł	nowing 1 -	-25 of 91 iter	ns Refresh		
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					🌏 Internet Prote	cted Mode	On			r 🔍 100%	•	

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	E	Employees 🝷	Categories •	Cu	stomer Demogr	aphics Region	•						Site Actions 🔻
	+ (iome > Cust	omers ners										
Summary		This is a list	of customers.										
Customer#		Quick Find		₩ N	ew Customers	Edit 🗙	Delete	Actions •	Report	•		View: Cu	stomers 🔹
BERGS					Contact				C 1.	-	Postal		
Company Name		Customer#	Company Name		Name	Contact little	Addres	S	City	Region	Code	Country	Phone
Contact Name		ALFKI	Alfreds Futterkiste	e	Maria Anders	Sales Representative	Obere	Str. 57	Berlin	XYZ	12209	Germany	030-0074321
Christina Berglund			Ana Trujillo				A						
Contact Title		ANATR	Emparedados y		Ana Trujillo	Owner	Consti	tución 2222	D.F.	XYZ	05021	Mexico	(5) 555-4729
Order Administrator			Antonio Moreno		Antonio				Mévico				
Address		ANTON	Taquería		Moreno	Owner	Matad	eros 2312	D.F.	XYZ	05023	Mexico	(5) 555-3932
About		AROUT	Around the Horn		Thomas Hardy	Sales Representative	120 Ha	nover Sq.	London	XYZ	WA1 1DP	UK	(171) 555- 7788
This page allows customers management.		BERGS	Berglunds snabbki	öp	Christina Berglund	Order Administrator	Bergu	svägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
See Also		BLAUS	Blauer See Delikatessen		Hanna Moos	Sales Representative	Forste	rstr. 57	Mannheim	XYZ	68306	Germany	0621-08460
Orders Customer Demo		BLONP	Blondesddsl père e fils	et	Frédérique Citeaux	Marketing Manager	24, pla	ce Kléber	Strasbourg	XYZ	67000	France	88.60.15.31
Order Details		BOLID	Bólido Comidas preparadas		Martín Sommer	Owner	C/ Ara	quil, 67	Madrid	XYZ	28023	Spain	(91) 555 22 82
		BONAP	Bon app'		Laurence Lebihan	Owner	12, rue Bouche	e des ers	Marseille	XYZ	13008	France	91.24.45.40
		воттм	Bottom-Dollar Markets		Elizabeth Lincoln	Accounting Manager	23 Tsa	wassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555- 4729
		« Previous	Page: 1 2 3 4	56	78910 N	Vext »	I	tems per page	e: 10 , 15, 20	, 25 Sł	nowing 1 -	10 of 91 it	ems Refresh

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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 🔹 Cust	omer Demogra	aphics Region	 Membership 					Site Actions	
	Home > Custome	ers									
About	Customers	1									
This page allows	This is a list of o	customers.									
	Quick Find	P 🛋 Nev	v Customers	Actions 🝷	Report -				View: Cu	stomers •	
Orders	Customer:	# Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone	
Customer Demo Order Details	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 Pa	age: 1234567	78910 N	ext »	Items per page:	10 , 15, 20, 2	5 Shov	ving 1-1	0 of 91 ite	ms Refresh	
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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	Customers Order	rs Custome	r Demo Order	r Details				
Customer#	This is a list of orders.							
BONAP Company Name	Quick Find	P 🖬 Ne	w Orders Ac	tions 🔹 Rep	oort -		View:	Orders •
Bon app'	Employee Last Name	Order Date	Required Date	Shipped Date	Ship Via Company Name	Freight Ship Name	Ship Address	Ship City
Contact Name	Dodsworth	10/16/1996	11/27/1996	10/21/1996	Speedy Express	\$10.19 Bon app'	12, rue des Bouchers	s Marseille
Laurence Lebihan	Davelie	10/20/1006	11/26/1006	11/9/1006	Endoral Chipping	\$166 21 Bon and	12 ruo dos Pauchor	a Marcoille
Contact Title	Davoilo	10/29/1990	11/20/1990	11/0/1990	rederal shipping	\$100.31 Don app	12, rue des bouchers	s Marselle
Owner	Leverling	11/25/1996	12/23/1996	11/28/1996	Speedy Express	\$96.04 Bon app'	12, rue des Bouchers	s Marseille
Address	Peacock	3/11/1997	4/8/1997	3/14/1997	United Package	\$64.56 Bon app'	12, rue des Bouchers	s Marseille
12, rue des Bouchers	Peacock	4/18/1997	5/16/1997	4/21/1997	Federal Shipping	\$350.64 Bon app'	12. rue des Bouchers	s Marseille
About		1,20,2007	5,25,255,	1,22,2007	i caciai sinpping	çosoro r sonropp	12,102 020 00001121	
This page allows	Davolio	5/2/1997	5/30/1997	5/23/1997	United Package	\$11.06 Bon app'	12, rue des Bouchers	s Marseille
customers management.	Fuller	9/10/1997	9/24/1997	10/3/1997	United Package	\$113.15 Bon app'	12, rue des Bouchers	s Marseille
See Also	Leverling	10/23/1997	11/6/1997	10/29/1997	Speedy Express	\$63.20 Bon app'	12, rue des Bouchers	s Marseille
Customer Demo	Buchanan	11/5/1997	12/3/1997	11/14/1997	Speedy Express	\$20.12 Bon app'	12, rue des Bouchers	s Marseille
Order Details	Leverling	11/6/1997	12/4/1997	11/7/1997	Speedy Express	\$16.97 Bon app'	12, rue des Bouchers	s Marseille
	«Previous Page: 1	2 Next »			Items per pa	ge: 10 , 15, 20, 25 Sh	nowing 1-10 of 17 iter	ms Refresh

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 i	s Sunday, Ju	ine 06, 2i	010 M	y Account	Logout Help
瓣 MyCompany										
Home Customers -	Employees • C	ategories 🔻	Customer D	emographics	Region • Me	mbership			Si	ite Actions 🔹
	Home > Customer	s Irs								
Summary	This is a list of c	ustomers.								
Customer#	Quick Find	-# N	lew Custom	ere 🛛 🐺 Edit	X Delete	Actions 🔻	Repo	vet 🗢 🛝	liew: Cus	tomers T
ANTON		P	ien custom		A Delete	Actions -	Кере		cus	conicis
Company Name	Customer#	Company	Contact Name	Contact Title	Address	City	Region	Postal	Country	Phone
Contact Name	11510	Alfreds	Maria	Sales	ol or 57				-	030-
Antonio Moreno	ALFKI	Futterkiste	Anders	Representativ	e Obere Str. 57	Berlin	XYZ	12209	Germany	0074321
Contact Title Owner	ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	XYZ	05021	Mexico	(5) 555- 4729
Address Mataderos 2312	ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	XYZ	05023	Mexico	(5) 555- 3932
About This page allows	AROUT	Around the Horn	Thomas Hardy	Sales Representativ	120 Hanover e Sq.	London	XYZ	WA1 1DP	UK	(171) 555- 7788
customers management.	BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
Orders	BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representativ	e Forsterstr. 57	Mannheim	XYZ	68306	Germany	0621-08460
Customer Demo Order Details	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
	«Previous Pag	ge: 1 2 3 4 5	567891	10 Next » Ite	ems per page: 10), 15, 20, 25	Showin	g 1-10	of 91 item	ıs Refresh
	Orders Cus	stomer Demo	Order Deta	ils						
	This is a list of o	rders.			1					
	Quick Find	<mark>ہ</mark> ا	New Order	s Actions 🤜	7 Report ⊽				View:	Orders •
	Employee Last Name	Order Date D	equired ate	Shipped Sh Date N	hip Via Company ame	Freight Ship	o Name	s	Ship Addres	ss Ship City
	Leverling	11/27/1996 1	2/25/1996	12/2/1996 Ui Pi	nited ackage	\$22.00 Ant Tag	onio More Juería	eno M	Mataderos 2312	México D.F.
	King	4/15/1997 5	/13/1997	4/22/1997 Sp Ex	peedy xpress	\$47.45 Ant Tag	onio More Juería	eno M	Mataderos 2312	México D.F.
	Peacock	5/13/1997 6	/10/1997	5/21/1997 St	peedy xpress	\$15.64 Ant Taq	onio More Juería	eno M	Mataderos 2312	México D.F.
	King	6/19/1997 7	/17/1997	6/20/1997 Fe	ederal	\$84.84 Ant	conio More	eno M	Mataderos	México

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.

MyCompany					Welcome admin,	Today is Su	inday, June	≥ 06, 2010	My Account I	.ogout He	elp			
Home Customers	Employees • C	ategories 👻 Cus	stom	er Demographics	Region 🔻 Memb	ership			Site	Actions	•			
	Home > Customer	'S						Welcome	admin, Today is	Sunday, Juni	e 06, 2010	My Ad	count Lo	ogout Help
	Custome	ers		辩 MyCompany	у								-	
Tasks	This is a list of c	ustomers.		Home Customers	Employees C	ategories 🝷	Customer De	emographics	Region • Men	bership			Site	Actions 🔻
Customers	Quick Find	P 🛋 Ne	ew C		Home > Customer	rs								
Orders Oustomer Demo	Customer#	Company Name	Co	Tasks	This is a list of q	istomers.								
Order Details		Alfreds	Na Ma	Customers Cuders	Quick Find	2	New Custor	mers 🛛 🗔 Ed	lit 🗙 Delete	Actions -	Repo	rt • V	iew: Cus	tomers 🔹
Summary	ALFKI	Futterkiste	An	Customer Demo	Customer#	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
Customer#	ANATR	Ana Trujillo Emparedados v	An	Order Details	ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representati	Obere Str. 57	Berlin	XYZ	12209	Germany	030- 0074321
AROUT		helados		Customer#	ANATR	Ana Trujillo Emparedados	Ana Trujillo	Owner	Avda. de la Constitución	México	XYZ	05021	Mexico	(5) 555-
Company Name Around the Horn	ANTON	Antonio Moreno Taquería	An Mo	BERGS Company Name		y helados Antonio			2222					(7) 555
Contact Name	AROUT	Around the Horn	Th	Berglunds snabbköp	ANTON	Moreno Taquería	Moreno	Owner	2312	D.F.	XYZ	05023	Mexico	3932
Thomas Hardy		Berglunds	Ch	Christina Berglund	AROUT	Around the Horn	Thomas Hardy	Sales Representati	120 Hanover ive Sq.	London	XYZ	WA1 1DP	UK	(171) 555- 7788
Contact Title Sales Representative	BERGS	snabbköp	Be	Contact Title Order Administrator	BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsväger r 8	1 Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
Address	BLAUS	Blauer See Delikatessen	Ha	Address Berguvsvägen 8	BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representati	Forsterstr. 57	Mannheim	XYZ	68306	Germany	0621-08460
120 Hanover Sq.	BLONP	Blondesddsl père	Fre	About	BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing	24, place Kléber	Strasbour	g XYZ	67000	France	88.60.15.31
About		et fils Bólido Comidas	Cit	This page allows customers management.	BOLID	Bólido Comida	s Martín Sommer	Owner	C/ Araquil, 67	Madrid	XYZ	28023	Spain	(91) 555 22
This page allows customers management.	BOLID	preparadas	So	See Also	BONAP	Bon app'	Laurence	Owner	12, rue des	Marseille	XYZ	13008	France	91.24.45.40
See Also	BONAP	Bon app'	La Le	Orders Customer Demo	BOTTM	Bottom-Dollar	Elizabeth	Accounting	23 Tsawasser	Tsawasse	n BC	T2F	Canada	(604) 555-
Orders	BOTTM	Bottom-Dollar	Elia	Order Details	«Previous Pa	markets ge: 1 2 3 4 5	567891	Manager 0 Next »	Items per page:	10 , 15, 20, 2	5 Showir	8M4	of 91 iten	4729 ns Refresh
Customer Demo	W Drowiews Do	Markets	Lin		This is a list of o	rders.								
Order Details	«Previous Pa	ye: 1 2 3 4 3 0	/ 0		Quick Find		New Orders	Shinned	Report -		4		View:	Orders •
					Name	Order Date	Date	Date	Name	Freight S	Ship Name Berolunds	E S	hip Addre	SS City
	© 2010 Code O	n Time LLC, Intel	ilige		Callahan	8/12/1996	9/9/1996	8/16/1996	United Package	\$92.69	snabbköp	8		son Luleă
					Fuller	8/14/1996	9/11/1996	9/12/1996	Speedy Express	\$8.98	snabbköp	8	lei guvsvai	Jen Luleå
Stacked					Leverling	12/16/1996	1/13/1997	12/20/1996	Federal Shipping	\$168.64	snabbköp	8	lerguvsva	^{gen} Luleå
<i>Stacked</i> layout (shown to tl	he right)			Leverling	2/12/1997	3/12/1997	2/21/1997	Federal Shipping	\$3.50 s	Berglunds snabbköp	E 8	lerguvsvä I	gen Luleå
is similar to clas	sic layout, e	except			Leverling	2/13/1997	3/13/1997	2/20/1997	Speedy Express	\$9.30 s	Berglunds snabbköp	E 8	lerguvsvä I	gen Luleå
that all child rec	ord lists are	י ב			«Previous Pa	ge: 1234	Next »		Items per page:	5, 10, 15, 20	, 25 Sho	wing 1-	5 of 18 ite	ms Refresh
		- 			Quick Find	p atomer demo.	New Custor	mer Demo A	Actions • Rep	ort •		View:	Custome	r Demo 🔹
displayed at the	same time	. This			Customer Type (Customer Desc								
layout generally	has the lor	ngest			No records foun	d.								
pages, as all rele	evant record	d lists are												Refresh
displayed as soc	on as a mast	ter			This is a list of o	rder details.		1					-	
unopidyed do ood	d The sist				Quick Find	P =	New Order	Details Act	ions • Repor	• 0	rder Ship	Viev	v: Order	Details •
record is selecte	ea. The pict	ure to			Order Customer# ∀ Pr	oduct Name	Unit Price Qua	antity Discount	Customer En Company La	der Vi iployee Ci st Name N	a ompany	Categ Name	ory C	upplier Jompany
the right display	is the entire	e page –			BERGS G	ula Malacca	\$15.50	16 0	Berglunds Ca	llahan Ur	nited	Condir	ments L	eka Trading
note that the ch	ild record l	ists are			BERGS R	aclette	\$44.00	15 0	Berglunds	llahan Ur	nited	Dairy		ai pâturage
filtered to matc	h the select	ed			BERGS Ve	egie-spread	\$35.10	8 0	Berglunds Ca	llahan Ur	nited	Condir	ments P	avlova, Ltd.
narent record					BERGS	öd Kaviar	\$12.00	25 0	snabbköp Berglunds	llahan Ur	ackage nited	Seafo	nd S	vensk
					DENGS R			25 0	snabbköp	Pa	ackage	Jearo	S R	jöföda AB lefrescos
					BERGS F	antástica	\$3.60	12 0	snabbköp Fu	ller Sp Ex	kpress	Bever	ages A	mericanas TDA

«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 52 items | Refresh © 2010 Code OnTime LLC. Intelligent code generation software for ASP.NET. Visit us at http://codeontime.com

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.

Customers Orders Customer Demo Order Details												
This is a list (of customers.											
Quick Find	🖃 New Cust	omers Actions -	Report -					View: C	ustomers 🔹			
Customer#	Company Name↓ -	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone			
WOLZA	Wolski Zajaz Sort by Com	pany Name Piestrzeniewicz	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	nis is a list of customers.												
Qu	iidk Find 🔎 🖃 New Custo	me	ers 🛛 📝 Edit 💙	Collete Actions	 Report - 				View:	ustomers 🔹			
Cus	tomer# Company Name	•	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone			
A↓	Ascending		Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321			
Ă↓ ₩	Clear Filter from Company Name		Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729			
Y	Custom Filter		Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932			
	Alfreds Futterkiste Ana Trujillo Emparedados y helados	* 	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	n/a	WA1 1DP	UK	(171) 555- 7788			
	Antonio Moreno Taquería	μ	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	n/a	S-958 22	Sweden	0921-12 34 65			
	Around the Horn Berglunds snabhkön		Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460			
	Blauer See Delikatessen		Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	n/a	67000	France	88.60.15.31			
	Blondesddsl père et fils		Martín Sommer	Owner	C/ Araquil, 67	Madrid	n/a	28023	Spain	(91) 555 22 82			
	Bólido Comidas preparadas		Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	n/a	13008	France	91.24.45.40			
	Bottom-Dollar Markets		Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555- 4729			
	B's Beverages		Next »		Items per	page: 10 , 1	5, 20, 25	5 Showing 1	l-10 of 91	items Refresh			

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

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								
F	Customers Orders Customer D This is a list of customers,	emo Order Details							
-	Quick Find	omers Actions -	Report -					View: C	ustomers 🔹
	Customer# Company Name↓ ▼	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
Az↓	Ascending	Zbyszek Piestrzeniewicz	Owner	ul. Filtrowa 68	Warszawa	n/a	01-012	Poland	(26) 642-7012
- ∠ ⊼	Clear Filter from Company Name	Matti Karttunen	Owner/Marketing Assistant	Keskuskatu 45	Helsinki	n/a	21240	Finland	90-224 8858
Y	Custom Filter	Karl Jablonski	Owner	305 - 14th Ave. S. Suite 3B	Seattle	WA	98128	USA	(206) 555- 4112
	Alfreds Futterkiste	Paula Parente	Sales Manager	Rua do Mercado, 12	Resende	SP	08737- 363	Brazil	(14) 555-8122
	Antonio Moreno Taquería	Pirkko Koskitalo	Accounting Manager	Torikatu 38	Oulu	n/a	90110	Finland	981-443655
	Around the Horn	Paul Henriot	Accounting Manager	59 rue de l'Abbaye	Reims	n/a	51100	France	26.47.15.10
	Berglunds snabbköp	Mary Saveley	Sales Agent	2, rue du Commerce	Lyon	n/a	69004	France	78.32.54.86
	Blondesddsl père et fils	Palle Ibsen	Sales Manager	Smagsloget 45	Århus	n/a	8200	Denmark	86 21 32 43
	Bólido Comidas preparadas	Helvetius Nagy	Sales Associate	722 DaVinci Blvd.	Kirkland	WA	98034	USA	(206) 555- 8257
	Bon app' Bottom-Dollar Markets	Anabela Domingues	Sales Representative	Av. Inês de Castro, 414	Sao Paulo	SP	05634- 030	Brazil	(11) 555-2167
	B's Beverages	9 10 Next »		Items per pag	ge: 10 , 15,	20, 25	Showing 1-	10 of 91 i	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.

🎁 MyCompany										
Home Customers •	Er	mployees Categories Custom	ner Demographics	Region 💌						Site Actions *
	H	ome > Customers								
About		This is a list of customers.								
This page allows customers management.		Quick Find 🔎 🖃 New C	Customers Action	ns • Report •					View: C	ustomers 🔹
See Also	1	(i) A filter has been applied. Country i	is equal to USA .							x
Orders		Customer# Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country 🖌	Phone
Customer Demo Order Details	A z↓ z∣	Ascending	Howard Snyder	Marketing Manager	2732 Baker Blvd.	Eugene	OR	97403	USA	(503) 555- 7555
	▲ ♦ ≪	Clear Filter from Company Name	Yoshi Latimer	Sales Representative	City Center Plaza 516 Main St.	Elgin	OR	97827	USA	(503) 555- 6874
	Y	Custom Filter	John Steel	Marketing Manager	12 Orchestra Terrace	Walla Walla	WA	99362	USA	(509) 555- 7969
		Great Lakes Food Market Hungry Covote Import Store	Jaime Yorres	Owner	87 Polk St. Suite 5	San Francisco	CA	94117	USA	(415) 555- 5938
		Lazy K Kountry Store	Fran Wilson	Sales Manager	89 Chiaroscuro Rd.	Portland	OR	97219	USA	(503) 555- 9573
		Let's Stop N Shop Lonesome Pine Restaurant	Rene Phillips	Sales Representative	2743 Bering St.	Anchorage	AK	99508	USA	(907) 555- 7584
		Old World Delicatessen	Paula Wilson	Assistant Sales Representative	2817 Milton Dr.	Albuquerque	NM	87110	USA	(505) 555- 5939
		Rattlesnake Canyon Grocery Save-a-lot Markets	Jose Pavarotti	Sales Representative	187 Suffolk Ln.	Boise	ID	83720	USA	(208) 555- 8097
		Split Rail Beer & Ale The Big Cheese	Art Braunschweiger	Sales Manager	P.O. Box 555	Lander	WY	82520	USA	(307) 555- 4680
		The Cracker Box	Liz Nixon	Marketing Manager	89 Jefferson Way Suite 2	Portland	OR	97201	USA	(503) 555- 3612
		Trail's Head Gourmet Provisioners White Clover Markets			Items p	er page: 10 , 1	5, 20, 25	5 Showing	1-10 of 13	items Refresh

Custom filters are an easy way to apply the exact filtering you want. You can specify several commaseparated 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 -
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	Show all rows in Products when	e column Unit Price r	natches the following :	value(c)	53	0	0 No
Chef Anton's Gumbo Mix	You may separate multiple value	es with comma and	use >, <, >=, or <= $($	operators	0	0	0 Yes
Grandma's Boysenberry Spread	<20				120	0	25 No
Uncle Bob's Organic Dried Pears			ОК С	ancel	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
«Previous Page: 1 2 3 4 5	5 6 7 8 Next »				r page: 10 , 15,		g 1-10 of 77 items Refresh

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	This is a list of customers.									
owner	🔎 📑 New Custom	ers Actions -	Report	•				View:	ustomers 🔹	
🗼 A filter	Type to search the records and	d press Enter							x	
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 fä 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-Delicateses	Felipe Izquierdo	Owner	Ave. 5 de Mayo Porlamar	I. de Margarita	Nueva Esparta	4980	Venezuela	(8) 34-56-12	
« Previous	Page: 1 2 Next »				Items per pag	ge: 10 , 15, 20,	25 Showing	1-10 of 18	items Refresh	

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	This is a list of customers.										
owner ana	🔎 🖃 New Customers	Actions -	Report -					View: C	ustomers 🔹		
🔍 A filter	(i) 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	his is a list of customers.										
owner Mex	owner Mexico 🔎 🛋 New Customers Actions 🔹 Report 🔹 View: Customers 🔹										
🔅 A filter	(i) 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, dick Delete to delete the record, or click Cancel/Close to return back.									
Record • View: Review Products •									
* - indicates a required field OK Delete Cancel									
Products These are the fields of the p	Products These are the fields of the products record that can be edited.								
Product Name *	Chef Anton's Cajun Seasoning								
Supplier Company Name	New Orleans Cajun Delights 🖉 🚔								
Category Name	Condiments 🦉 🖃								
Quantity Per Unit	48 - 6 oz jars								
Unit Price	\$22.00								
Units In Stock	53								
Units On Order	0								
Reorder Level	0								
Discontinued *	No								
* - indicates a required field	OK Delete Cancel								

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: Revie	w Products 🔹
* - indicates a required field	ОК		Delete	Cancel
Products				
These are the fields of the	products record that can	be edited.		
Product Name *	Chef Anton's Cajun	Seasoning		
Supplier Company Name	(select) 🖃 🗲			
Category Name	Condiments 🦉 🛁			
Quantity Per Unit	48 - 6 oz jars			
Unit Price	\$22.00			
Units In Stock	53			
Units On Order	0			
Reorder Level	0			
Discontinued *	No 💌			
* - indicates a required field	ОК		Delete	Cancel

This is a list of s	uppliers.								x
	Q						View:	Supplie	ers 🔹
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 Pa	ge: 1 2 3	4 5 Next »	Items per pa	ge: 10, 15,	20, 25 S	howing	1-7 of 29	items F	Refres

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

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.

рh-1			Products								
≥g	This is a list of suppliers.										
d	mate	Q						View	Suppli	iers 🔹	
n e	(i) A filter has been applied. Any field contains mate.										
F	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone	Fax	
. C	G'day, Mate	Wendy Mackenzie	Sales Representative	170 Prince Edward Parade Hunter's Hill	Sydney	NSW	2042	Australia	(02) 555 -5914	(02) 555- 4873	
a		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.

	istomers • Employees	Categories		phics Region •	Site	Actions •
	Home	Categories > Produce				
	New Suppliers	•				
Summary	Please fill this form and o	lick OK button to creat	a a new suppliers reco	ord. Click Cancel to r	eturn to the	delete
Product Nar	previous screen.		e a new suppliers reco	ind. Click Conter to h	cum to the	
Chef Anton'	New Suppliers					cts 🔹
Supplier Cor	Complete the form. Make	e sure to enter all requi	red fields.			cel
New Orlean	Company Name *	Test Company				
Delights	Contact Name					
Category Na Condiments	Contact Title					
Quantity Pe	Address					
48 - 6 oz jar	City					
Unit Price	Region					
\$22.00	Postal Code					
About	Country					
This page al	Phone					
managemen	Fax					
See Also	Home Page				*	
Home						
 Customer Employee 					-	
 Customer 						
Region	* - indicates a required fi	eld		ок	Cancel	
						-

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.

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		OK Delete	Cancel						
Droducts									
These are the fields of the r	products record that can be edited.								
Product Name *	Chef Anton's Gumbo Mix								
Supplier Company Name	New Orleans Cajun Delights 🖉								
Category Name	N/A Aux joveux ecclésiastiques								
Ouantity Per Unit	Bigfoot Breweries								
Unit Price	Cooperativa de Quesos 'Las Cabras'								
Unite In Stock	Exotic Liquids								
Units In Stock	Forêts d'érables								
Units On Order	Gai pâturage								
Reorder Level	G'day, Mate								
Discontinued *	Grandma Kelly's Homestead								
	Karkki Oy								
* indicator a required field	Leka Trading	OK Delete	Cancel						
· · · indicates a required field	Ma Maison	OK Delete	Cancer						
	Mayumi's								
	New Orleans Cajun Delights								
	Nord-Ost-Fisch Handelsgesellschaft mbH								
	Pasta Buttini s.r.l.								
	Pavlova, Ltd.								
	PB Knäckebröd AB Plutzer Lebensmittelgroßmärkte AG								
	Refrescos Americanas LTDA								
Code OnTime LLC. All r	Specialty Biscuits, Ltd.								
	Tokyo Traders	Internet Protected Mode: On	<i>√</i> 2 ▼ 100%						
	Zaanse Snoepfabriek		1						

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 info	rmation below. Click Edit to change this r	ecord, click Delete to delete the record, or	click Cancel/Close to return back.								
Record •			View: Review Products								
* - indicates a required field			OK Delete Cancel								
Products											
These are the fields of the	These are the fields of the products record that can be edited.										
Product Name *	Chef Anton's Cajun Seasoning										
Supplier Company Name	© N/A	C Grandma Kelly's Homestead	🔘 Norske Meierier								
	Aux joyeux ecclésiastiques	Heli Süßwaren GmbH & Co. KG	Pasta Buttini s.r.l.								
	Bigfoot Breweries	🔘 Karkki Oy	🔘 Pavlova, Ltd.								
	🔘 Cooperativa de Quesos 'Las Cabras'	🔘 Leka Trading	🔘 PB Knäckebröd AB								
	Escargots Nouveaux	🔘 Lyngbysild	Plutzer Lebensmittelgroßmärkte AG								
	Exotic Liquids	🔘 Ma Maison	Refrescos Americanas LTDA								
	Forêts d'érables	🔘 Mayumi's	Specialty Biscuits, Ltd.								
	🔘 Formaggi Fortini s.r.l.	New England Seafood Cannery	🔘 Svensk Sjöföda AB								
	🔘 Gai pâturage	New Orleans Cajun Delights	🔘 Tokyo Traders								
	🔘 G'day, Mate	Nord-Ost-Fisch Handelsgesellschaft mb	oH 🔘 Zaanse Snoepfabriek								
Category Name	Condiments 🥢 🖃										
Quantity Per Unit	48 - 6 oz jars										
Unit Price	\$22.00										
Units In Stock	53										
Units On Order	0										
Reorder Level	0										
Discontinued *	No 💌										
* - 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 info	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		OK Delete Cancel								
Products										
These are the fields of the p	products record that can be edited.									
Product Name *	Chef Anton's Cajun Seasoning									
Supplier Company Name	New England Seafood Cannery New Orleans Cajun Delights Nord-Ost-Fisch Handelsgesellschaft mbH Pasta Buttini s.r.l.									
Category Name	Condiments 🦉 🚔									
Quantity Per Unit	48 - 6 oz jars									
Unit Price	\$22.00									
Units In Stock	53									
Units On Order	0									
Reorder Level	0									
Discontinued *	No 💌									
* - 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 in	nformation below. Click Edit	t to change this re	cord, click Delete to de	elete the record, or	click Cancel/Close t	o return back.		
Record -							View: Review	Employees 🔹
* - indicates a required field Employees These are the fields of the	employees record that car	n be edited.				ОК	Delete	Cancel
Last Name *	First Name *	Title		Title Of	fCourtesy	Birth D	Date	
Leverling	Janet	Sales Re	presentative	Ms.		8/3	30/1963	
Hire Date	Address			City	Reg	jion	Postal Code	_
4/1/1992	722 Moss Bay Blvd.			Kirkland	V	VA	98033	
	Country	Home Phone		Extension Pl	hoto			
	USA	(200) 555	5412	5555		d ar daar amalawaaa	ushata fila	
					Click here to upload	d or clear employees	photo file.	
Notes Janet has a BS degr College (1984). Sh certificate program Janet was hired as a promoted to sales r	ree in chemistry from le has also completed in food retailing mana a sales associate in 15 representative in Febru	Boston a gement. 91 and Jary 1992.	Reports To Last Nai Fuller 🖉 🖨 Territories V Atlanta Austin Beachwood Bedford Bellevue Bentonville Booston Braintree Cambridge Campbell	Photo Path http://accv Cary Chicago Colorado Sprin Columbia Dallas Dallas Denver Edison Fairport Findlay Georgetow Greensboro	web/emmployees Hoffman Esta Hollis Usuile Melivie Melivie Minneapolis Morristown New York New York Neward V Orlando	s/leverling.bmp ites Philadelphia Porenix Portsmouth Providence Racine Redmond Rockville San Francisco Santa Clara Santa Cruz	Santa Monica Savannah Scottsdale Seattle Southfield Tampa Troy Westboro Wilton	
* - indicates a required field	1					ОК	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 > Orde	rs	
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 su	re 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		OK Cancel

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.

			T NULLES									
Summary	ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030- 0074321		
RI OND		Ana Truiillo			Avda, de la							
Company Namo	ANATR	Emparedados y	Ana Trujillo	Owner	Constitución	México D F	n/a	05021	Mexico	(5) 555- 4729		
Company Name Riondorddd pàra at fila		helados			2222	5.1.1				1725		
Contact Name	ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555- 3932		
Frédérique Citeaux	ADOUT	Around the	Thomas	Sales	120 Hanover	Landan	- 1-	WA1		(171) 555-		
Contact Title	AROUT	Horn *	Hardy	Representative	Sq.	London	n/a	1DP	UK	7788		
Marketing Manager Address	BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	n/a	S-958 22	Sweden	0921-12 34 65		
24. place Kléber		Blauer See	Hanna	Sales			,		~			
	BLAUS	Delikatessen	Moos	Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460		
About		Blondesddsl	Frédérique	Marketing	24. place Kléber	Strachourg	0/0	67000	France	00 60 15 21		
This page allows	DECINF	père et fils	Citeaux	Manager	24, place Nebel	Suasbourg	nya	07000	Hance	66.60.15.51		
customers management.	BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	n/a	28023	Spain	(91) 555 22 82		
See Also	PONAD	Rep apr!	Laurence	Owner	12, rue des	Maraailla	n la	12000	Francisco	01 24 45 42		
Orders	BUNAP	bon app	Lebihan	Owner	Bouchers	Marseille	n/a	13008	France	91.24.45.40		
Customer Demo	BOTTM	Bottom-Dollar	Elizabeth	Accounting	23 Tsawassen	Tsawassen	BC	T2F	Canada	(604) 555-		
 Order Details 	bornin	Markets	Lincoln	Manager	Blvd.	radwaaach	00	8M4	Canada	4729		
	« Previous	Page: 1 2 3 4	456789	10 Next »	Items per page: 3	10 , 15, 20, 2	25 Sho	wing 1-1	0 of 92 ite	ems Refresh		
	Orders	Customer Demo	Order De	taile								
		Customer Denio										
	Please fill t	nis form and click (JK DUTTON TO	create a new ord	ers record. Click C	ancel to retu	irn to th	the previous screen.				
	Record •							1	/iew: Nev	v Orders 🔹		
	* - indicate	s a required field						ОК		Cancel		
	New Orde	ers										
	Complete t	he form. Make sur	re to enter all	required fields.								
	Employee	Last Name	(select) 🗉	₽.								
	Order Dai	te										
	Required	Date										
	Shipped D	Date										
	Ship Via C	Company Name	(select)	<u></u>								
	Freight											
	Ship Name	e	Frédérique	Citeaux								
	Ship Addr	ess	24, place K	(léber								
	Ship City		Strashourg									
	chie Deer		oc asoury									
	Ship Kegi	on										
	Ship Post	al Code										
	Ship Cour	ntry	France									
	the standing to							014		Canad		
	 Indicate 	s 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.

Cust	omers	Orders Customer Demo O	der Details							
This is	a list of cu	stomers.								
Quick	Find	New Customers	Actions • F	Report -					View: C	ustomers 🔹
V C	Customer#	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
V /	ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	XYZ	12209	Germany	030-0074321
4	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
V /	AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	XYZ	WA1 1DP	UK	(171) 555- 7788
V a	asdsa	qwe23	sada	n/a	n/a	n/a	XYZ	n/a	n/a	n/a
V	BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
VE	BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	XYZ	68306	Germany	0621-08460
V	BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	XYZ	67000	France	88.60.15.31
V E	BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	XYZ	28023	Spain	(91) 555 22 82
V E	BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	XYZ	13008	France	91.24.45.40
«Prev	ious Pag	e: 1 2 3 4 5 6 7 8 9 10 N	lext »		Items per page: 10, 15	, 20, 25 Sho	owing 1 -	10 of 92 ite	ms (8 sele	cted) 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*.

		H (lome > Customer Custome	s I rs								
About			Customers	Orders Customer Demo C	order Details							
This page allows customers managen	nent.		This is a list of cu	ustomers.								
See Also			Quick Find	P 🖃 New Customers	Actions •	Report •					View:	ustomers 🔻
Home			Customer#	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
CustomersEmployees			ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	n/a	12209	Germany	030-0074321
 Categories Customer Demogr 	raphic	s	ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	n/a	05021	Mexico	(5) 555-4729
Region Membership				Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	n/a	05023	Mexico	(5) 555-3932
- Hembership		Sele Edit	ct	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	n/a	WA1 1DP	UK	(171) 555- 7788
	×	Dele	te	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	n/a	S-958 22	Sweden	0921-12 34 65
	_	Dupl New	licate	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460
		Bato	h Edit	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	n/a	67000	France	88.60.15.31
		Bato	h Edit (Form)	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
			воттм	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555- 4729
				ge: 1 2 3 4 5 6 7 8 9 10	Next »		Items per page: 10, 1	5, 20, 25 Sh	owing 1-	10 of 91 ite	ems (5 sele	cted) Refresh

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.

Cus	stomers Or	ders Customer De	mo Order De	tails						
This i	is a list of custo <i>ck Find</i>	P							View:	Customers 🔹
V	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
V	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 1	Antonio Morei	Owner	Mataderos 2312	México D.F.		05023	Mexico	(5) 555-3932
×	update 📃	🔽 update	🔲 update	update	🔲 update	🔽 update	🔽 update	🔲 update	🔽 update	🔲 update
U	pdate Selecti	on Cancel								
	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
V	BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	n/a	68306	Germany	0621-08460
V	BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	n/a	67000	France	88.60.15.31
V	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

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.

Cu	stomers	Orders Customer Demo O	rder Details							
This	is a <mark>list of c</mark> u	stomers.								
Qui	ick Find	P 🖻 New Customers	Edit 🗙 🛙	Delete Actions -	Report -				View:	ustomers 🔹
V	Customer#	Company Name	Contact Name	Contact Title	Address	City	Region	Postal Code	Country	Phone
V	ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	XYZ	12209	Germany	030-0074321
V	ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	XYZ	05021	Mexico	(5) 555-4729
V	ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.	XYZ	05023	Mexico	(5) 555-3932
V	AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	XYZ	WA1 1DP	UK	(171) 555- 7788
1	asdsa	qwe23	sada	n/a	n/a	n/a	XYZ	n/a	n/a	n/a
V	BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
V	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
V	BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	XYZ	28023	Spain	(91) 555 22 82
v	BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	XYZ	13008	France	91.24.45.40
«Pre	evious Pag	e: 1 2 3 4 5 6 7 8 9 10 N	lext »		Items per page: 10, 15, 2	20, 25 Show	ing 1-1(of 92 item	s (10 sele	cted) Refresh

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.

oreturn back.		
		View: Review Customers
- indicates a required	field	Update Selection Close
ustomers		
hese 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	
C 1.	update	
City	México D.F.	
	v update	
Region	XYZ	
	✓ update	
Postal Code	05023	
	🔲 update	
Country	Mexico	
	update	
Phone	(5) 555-3932	
Fav	Dupuate	
	update [

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.									
Quick Find	🔎 📑 New Customers	Actions -	Report -						View: C	ustomers 🔹
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 Cons 2222	titución	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 F	Page: 1 2 3 4 5 6 7 8 9 10	. Next »			Items per pa	ige: 5 , 10, 1	15, 20, 2	5 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.

uctomore

						Customers
Record -		,	,	View: Review	v Customers 🔻	Please review customers information below.
* - indicates a required f	îeld		ОК	Delete	Cancel	Annotate Record -
Customers						* - indicates a required field
These are the fields of t	he customers record that can be edited.					Customers
Customer#*	ANTON					These are the fields of the customers record
Company Name *	Antonio Moreno Taquería					Customer#* BLONP
Contact Name	Antonio Moreno					Customer#
Contact Title	Owner					
Address	Mataderos 2312					
City	México D.F.					
Region	XYZ					
Postal Code	05023					
Country	Mexico					
Phone	(5) 555-3932					
Fax						
Notes and Attachme	nts					
Enter optional notes and	d attach files.					
Notes			*			
	N/A		*			
Attachment	Click berg to upload attachment file					
	Click <u>Here</u> to upload attachment hie.					
* - indicates a required f	aeld			Delete	Cancel	
- mucates a requireu r	iciu		UK J	Delete	Cancer	

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*.

Customers - Windows Int	ternet Explorer	- 114	1		1		X
📀 🕞 マ 🙋 http://de	v. codeontime.com /demo/a	annotations/pages/customers.aspx	🕶 🗟 😽	🗙 🚼 Google			۰ م
🔶 Favorites 🛛 🄏 Custor	mers		<u>ن</u> 1	· 🔊 · 🖃 🌐	▼ <u>P</u> age ▼ <u>S</u> a	ifety ▼ T <u>o</u> ols ▼	@ ▼ [»]
Confirmation: attachment ha	s been uploaded successfully.	It may take up to 5 minutes for the	thumbnail to refle	ct the uploaded co	ntent.		*
	Customers						
Summary	Please review customers in	formation below. Click Edit to change this re	ecord, dick Delete to	delete the record, or	dick Cancel/Close	to return back.	
Customer#	Record -				View: Revie	w Customers 🔹	
ANTON							
Company Name	* - indicates a required field	1		ОК	Delete	Cancel	
Contact Name	General Notes & A	ttachments					_
Antonio Moreno	Notes and Attachments	5					
Contact Title	Enter optional notes and at	ttach files.					
Owner	Notes	This is a note.		*			
Address							
Mataderos 2312							E
About							
This page allows		51/A		Ŧ			
customers management.	Attachment	N/A					
See Also		Click here to upload attachment file.					
Home	admin@acme.com	address street					
Customers	(admin) attached	0					
Employees	12:53:52 PM						
Categories							
Region		Click here to upload attachment file.					
Membership	admin @agma com	download					
	(admin) attached	Click here to upload attachment file.					
	Rethink Code Generation.docx at						
	6/5/2010 12:49:57 PM						
	* - indicates a required field			ок	Delete	Cancel	
							,
	Orders Customer Dem	o Order Details					-
Done			😌 Internet Pr	otected Mode: On		 100% 	•

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.

Please review customers i	nformation below. Click Edit to chan	ge this record, click Delete to delete	the record, or click Cancel/	Close to return back.
New Customers	Actions - Report -		View: R	Review Customers 🔹
General Notes &	Attachments		Edit Delete	e Close
Notes and Attachmen Enter optional notes and a	ts attach files.			
admin@acme.com (admin) written at 6/5/2010 12:56:16 PM	This is a note.			
admin@acme.com (admin) attached bear.jpg at 6/5/2010 12:53:52 PM				
admin@acme.com (admin) attached Rethink Code Generation.docx at 6/5/2010 12:49:57 PM	<u>download</u>			
			Edit Delete	e Close

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*.

Home > Categories > Produ Products	ucts						
This is a list of products.							
Quick Find	New Products Action	is 🔹 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	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
Unde 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, 2	5 Showing 1-1	0 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 > Pro	ducts						
This is a list of products.	New Products Actions	▼ Report ▼					View: Products •
(A filter has been applie	d. Category Name is equal to C	onfections					x
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	e: 10 , 15, 20, 2	5 Showing 1-1	0 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	P 📑 New Custon	ners Actions -	Report	•					View: C	ustomers 🔹
Customer#	Company Name	Contact Name	c	PDF Doc View item:	ument s as Adobe PDF document.	v	Region	Postal Code	Country	Phone
ALFKI	Alfreds Futterkiste	Maria Anders	S R	Requires a	a compatible reader.	lin	XYZ	12209	Germany	030-0074321
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	c	View item	s as a multipage TIFF image.	xico F.	XYZ	05021	Mexico	(5) 555-4729
ANTON	Antonio Moreno Taquería	Antonio Moreno	c	View item Microsoft	s in a formatted Excel spreadsheet.	xico	XYZ	05023	Mexico	(5) 555-3932
AROUT	Around the Horn	Thomas Hardy	Sales Represent	tative	120 Hanover Sq.	London	XYZ	WA1 1DP	UK	(171) 555- 7788
BERGS	Berglunds snabbköp	Christina Berglund	Order Adn	ninistrator	Berguvsvägen 8	Luleå	XYZ	S-958 22	Sweden	0921-12 34 65
BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Represent	tative	Forsterstr. 57	Mannheim	XYZ	68306	Germany	0621-08 4 60
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	g Manager	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555- 4729
« Previous	Page: 1 2 3 4 5 6 7 8 9 1	0 Next »			Items per	page: 10 , 15	i, 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.

t <u>V</u> ie	w <u>D</u> ocu	iment <u>T</u> ools <u>W</u> indow	<u>H</u> elp							
• 실	(💿 💿 74%	- 🖶 😫	Find	•				
				Cu	stomers					
	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
	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	Walserweg 21	Aachen		52066	Germany	0241-039123
	DUMON	Du monde entier	Janine Labrune	Owner	67, rue des Cinquante Otages	Nantes		44000	France	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 Rancé	Assistant Sales Agent	184, chaussée de Tournai	Lille		59000	France	20.16.10.16
	FOLKO	Folk och fä 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
	Printed on 6	/6/2010 1:08:11 PM								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*.

Quick Fina	/ p 🖃	New Customers	Actions	Report	•				View: Cust	omers 🔹
🔍 A filter	has been applied. Co	untry starts with U		Download	- in COV (course)					x
Customer#	Company Name	Contact Name		Export to Sp	readsheet	:y	Region	Postal Code	Country 🍸	Phone
GREAL	Great Lakes Food Market	Howard Snyder	-	Analyze items application.	with spreadsheet	gene	OR	97403	USA	(503) 555- 7555
HUNGC	Hungry Coyote Import Store	Yoshi Latimer		View RSS Fee Syndicate item	ed s with an RSS reader.	jin	OR	97827	USA	(503) 555- 6874
LAZYK	Lazy K Kountry Store	John Steel	Marketi	ng 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 M	anager	89 Chiaroscuro Rd.	Portland	OR	97219	USA	(503) 555- 9573
OLDWO	Old World Delicatessen	Rene Phillips	Sales R	epresentative	2743 Bering St.	Anchorage	AK	99508	USA	(907) 555- 7584
RATTC	Rattlesnake Canyon Grocery	Paula Wilson	Assista Repres	nt Sales entative	2817 Milton Dr.	Albuquerque	NM	87110	USA	(505) 555- 5939
SAVEA	Save-a-lot Markets	Jose Pavarotti	Sales R	epresentative	187 Suffolk Ln.	Boise	ID	83720	USA	(208) 555- 8097
SPLIR	Split Rail Beer & Ale	Art Braunschweiger	Sales M	anager	P.O. Box 555	Lander	WY	82520	USA	(307) 555- 4680
THEBI	The Big Cheese	Liz Nixon	Marketi	ng Manager	89 Jefferson Way Suite 2	Portland	OR	97201	USA	(503) 555- 3612
« Previous	Page: 1 2 Next	»			Items per pa	ge: 10 , 15, 20	, 25 Sł	nowing 1 -	10 of 13 iten	ıs Refresh

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.



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	Edit Delete Close								
Customers									
These are the fields of	f the customers record that can be edited.	_							
Company Name	Alfreds Futterkiste								
Contact Name	Maria Anders								
Contact Title	Sales Representative	=							
Address	Obere Str. 57								
City	Berlin								
Region	XYZ								
Postal Code	132								
Country	Germany								
Phone	030-0074321								
Fax	030-0076545								
	Edit Delete Close								
© 2010 Code OnTime http://codeontime.co	e LLC. Intelligent code generation software for ASP.NET. Visit us at								
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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.

Retail sales suffe	r largest decline in 8 mo	
MSNBC News	Fri Jun 11 13:57:29 PDT	
BP plans to susp	end shareholder dividen Op	tion
	Fri Jun 11 13:42:34 PDT	
Science of flash f	loods	
MSNBC News	Fri Jun 11 12:56:38 PDT	2
Energy chief: Cap	didn't make spill much	
MSNBC News	Fri Jun 11 12:51:36 PDT	
	73-76 🔻	
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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.

Customers Customers - Wind	lows Internet Explorer		X	
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Add to Favorites Bar V Favorites Feeds History Microsoft Feeds	Customers Customers Today, June 10, 2010, 7 hours ago	Displaying 1/15	•	
S Customers Customers	USAC			
	Company Name: USA Company Contact Name: Contact Title: Address: City:	Sort by: Date Title	III	
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And the sidebar gadget is updated as well.

Customers Customers	HUNGC Customers Customers Sat Dec 30 00:00:00
Company Name: USA Company Contact Name:	GREAL Customers Customers - Sat Dec 30 00:00:00
Contact Title: Address: City: Region: Postal Code:	USAC Customers Customers Sat Dec 30 00:00:00
Country: USA Phone:	▲ 13·15 ▼

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*.

Home > Custome	ers > Orders								
This is a list of or	ders.								
Quick Find	р 🖃 N	ew Orders	Actions	- Report	•			View: 0	orders 🔹
Customer Company Name	Employee Last Name	Order Date		Download Download iter	ns in CSV format		Ship Name	Ship Address	Ship City
Vins et alcools Chevalier	Buchanan	7/4/1996		Export to S Analyze items application.	with spreadsheet	et	/ins et alcools Chevalier	59 rue de l'Abbaye	Reims
Toms Spezialitäten	Suyama	7/5/1996		View RSS Fe Syndicate iter	ed ns with an RSS r	eader.	Foms 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
Victuailles en stock	Leverling	7/8/1996	8/5/1996	7/15/1996	Speedy Express	\$41.34	Victuailles 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
«Previous Pag	e: 1 2 3 4 5 6	78910	Next	»	Items per p	age: 10 ,	15, 20, 25 Shov	ving 1-10 of 832 item	s Refresh

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.

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2	Vins et alcools Chevalier	Buchanan	7/4/1996 12:08	8/1/1996 0:00	7/16/1996 0:00	Federal Shipping	
3	Toms Spezialitäten	Suyama	7/5/1996 0:00	8/16/1996 0:00	7/10/1996 0:00	Speedy Express	
4	Hanari Carnes	Peacock	7/8/1996 0:00	8/5/1996 0:00	7/12/1996 0:00	United Package	
5	Victuailles en stock	Leverling	7/8/1996 0:00	8/5/1996 0:00	7/15/1996 0:00	Speedy Express	
6	Suprêmes délices	Peacock	7/9/1996 0:00	8/6/1996 0:00	7/11/1996 0:00	United Package	
7	Hanari Carnes	Leverling	7/10/1996 0:00	7/24/1996 0:00	7/16/1996 0:00	United Package	
8	Chop-suey Chinese	Buchanan	7/11/1996 0:00	8/8/1996 0:00	7/23/1996 0:00	United Package	
9	Richter Supermarkt	Dodsworth	7/12/1996 0:00	8/9/1996 0:00	7/15/1996 0:00	Federal Shipping	
10	Wellington Importadora	Leverling	7/15/1996 0:00	8/12/1996 0:00	7/17/1996 0:00	United Package	
11	HILARION-Abastos	Peacock	7/16/1996 0:00	8/13/1996 0:00	7/22/1996 0:00	Federal Shipping	
12	Ernst Handel	Davolio	7/17/1996 0:00	8/14/1996 0:00	7/23/1996 0:00	Speedy Express	
13	Centro comercial Moctezuma	Peacock	7/18/1996 0:00	8/15/1996 0:00	7/25/1996 0:00	Federal Shipping	
14	Ottilies Käseladen	Peacock	7/19/1996 0:00	8/16/1996 0:00	7/29/1996 0:00	Speedy Express	
15	Que Delícia	Peacock	7/19/1996 0:00	8/16/1996 0:00	7/30/1996 0:00	United Package	
16	Rattlesnake Canyon Grocery	Callahan	7/22/1996 0:00	8/19/1996 0:00	7/25/1996 0:00	Federal Shipping	
17	Ernst Handel	Dodsworth	7/23/1996 0:00	8/20/1996 0:00	7/31/1996 0:00	Federal Shipping	
18	Folk och fä HB	Suyama	7/24/1996 0:00	8/21/1996 0:00	8/23/1996 0:00	Federal Shipping	
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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.

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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.

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5	Buchanan		13	Required Date
6	Callahan		29	Shipped Date
7	Davolio		41	Ship Via Company Name
8	Dodsworth		14	Freight
9	Fuller		25	Ship Name
10	King		28	Ship Address
11	Descerk		46	
12	Peacock		40	
14			240	
14	Buchanan		14	
16	Callahan		27	
17	Davolio		38	
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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.

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Security Alert - Data Connection							
Data Connection							
Data connections have been blocked. If you choose to enable data connections, your computer may no longer be secure. Do not enable this content unless you trust the source of this file.							
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