



ĐẠI HỌC  
HOA SEN



# Giới thiệu công cụ Data GridControl DevExpress

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BÙI NGỌC LÊ



# Nội Dung

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- **Giới thiệu GridControl**
- **Thiết kế GridControl**
- **Các tính năng cơ bản của GridControl**
- **Demo thao tác trên GridControl**



# Giới thiệu GridControl

- **GridControl là một control thuộc nhóm WinForms Control được cung cấp bởi DevExpress. GridControl được hiển thị bằng cách sử dụng các dạng Views , nhằm:**
  - Trình bày dữ liệu lấy từ Data Source
  - Cung cấp các phương tiện để chỉnh sửa dữ liệu
  - Bao gồm nhiều cấp độ chỉnh sửa , tùy biến và tùy chọn hành vi ....
- **GridControl hỗ trợ các dạng Views sau để hiển thị dữ liệu ( hoặc người dùng có thể tự thiết kế ra View phù hợp với các nhu cầu cụ thể )**



# Giới thiệu GridControl

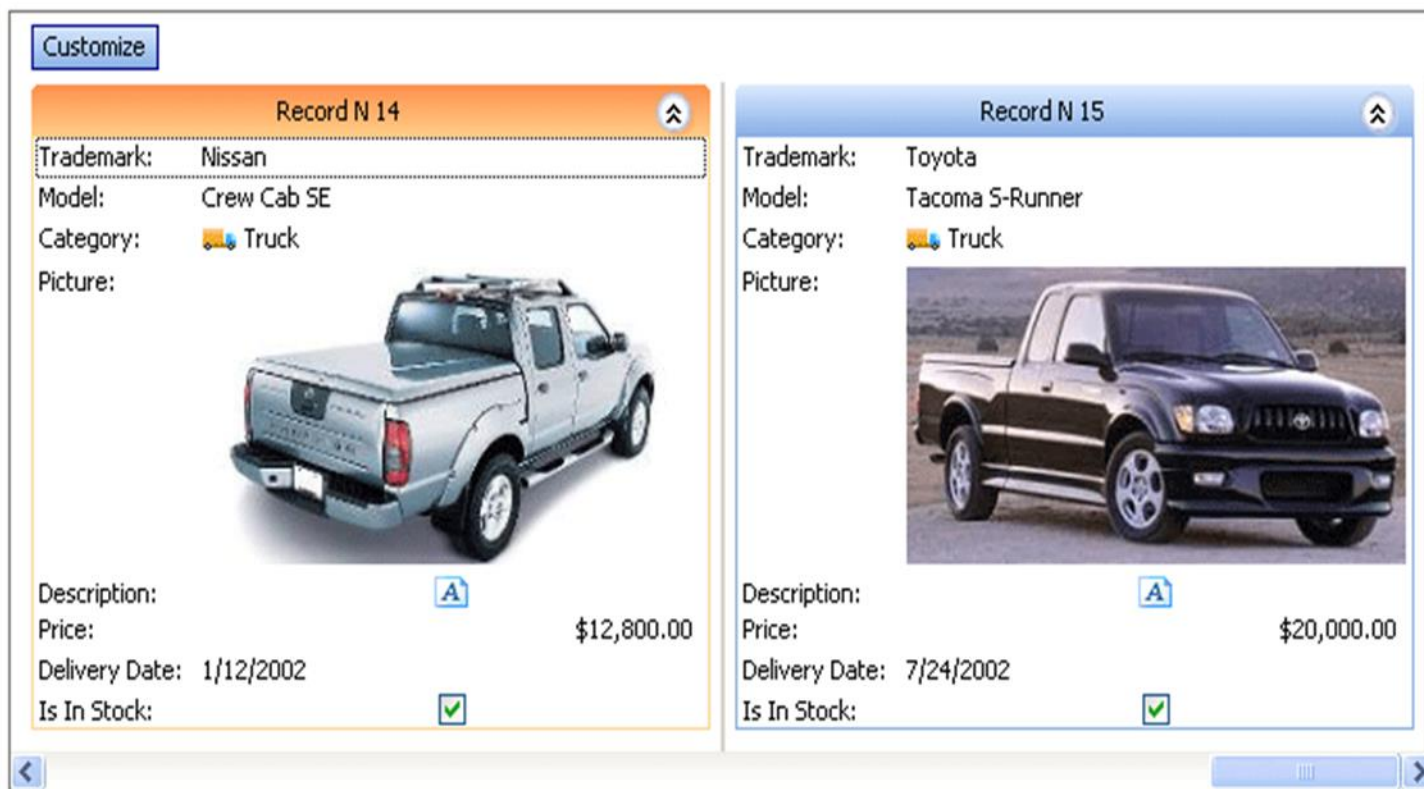
- **GridView** : hiển thị dữ liệu trong một bảng hai chiều

Priority ▼ 🔔					
	Name ▲	Bug	Status	Created Date	Owner
🔔		📄			
[-] Priority: 🔴 High					
>	Check Register	📄	📄 New	8/25/2004	Mike Roller
	Main Menu: Duplicate Items	📄	✅ Fixed	7/27/2004	Mike Roller
[-] Priority: 🟡 Medium					
	Adding New Vendors Fails	✅	📄 New	5/20/2004	Jeffrey W McClain
	Data Export	📄	✅ Fixed	2/24/2004	Ryan Fischer
× [x] [Priority] = 'Medium' Or [Priority] = 'High' <span>Edit Filter</span>					



# Giới thiệu GridControl

- **CardView** : hiển thị dữ liệu theo dạng thẻ, mỗi thẻ sắp xếp các trường dữ liệu theo một cột dọc duy nhất





# Giới thiệu GridControl

- **Banded GridView** : hiển thị dữ liệu trong một dạng bảng tương tự như Grid View, đồng thời tổ chức các nhóm cột trong bảng.

Category ▼

Car			MPG	
Model		Category		
Trademark	Model	Category ▼	MPG City	MPG Highway
> Category: 🏎️ Sports				
Mercedes-Benz	C230 Kompressor Sport Coupe	🏎️ Sports	21	28
Mercedes-Benz	CLK55 AMG Cabriolet	🏎️ Sports	17	24
Mercedes-Benz	SL500 Roadster	🏎️ Sports	16	23
[-] Category: 🚗 Saloon				
Lexus	GS430	🚗 Saloon	18	23
Lexus	LS430	🚗 Saloon	18	25
Cadillac	DeVille	🚗 Saloon	18	27




× ☒ [Category] = 'Sports' Or [Category] = 'Saloon' Edit Filter



# Giới thiệu GridControl

- **Advanced Banded GridView** : hiển thị dữ liệu tương tự như Banded Grid View. Tuy nhiên, cột có thể được sắp xếp dưới một cột khác và có thể tùy chỉnh độ cao của cột

Drag a column header here to group by that column

Main			⚙ Performance Attributes		Picture
🏠 Trademark			HP	Cyl	🖼 Icon
Category ▼	Model		Capacity	# of Gears	
Price	Delivery Date	In Stock?	Automatic Transmission		
Toyota			190	6	
🚚 Truck	Tacoma S-Runner		3.4 Liters	5	
\$20,000.00	7/24/2002	<input checked="" type="checkbox"/>	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Nissan			143	4	
🚚 Truck	Crew Cab SE		2.4 Liters	4	
\$12,800.00	1/12/2002	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Yes <input type="radio"/> No		
GMC			200	6	
🚚 Truck	Sierra Quadrasteer		4.3 Liters	4	
\$17,748.00	3/15/2002	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Yes <input type="radio"/> No		



# Thiết kế Grid Control

- Thiết kế GridControl bao gồm Main , Repository, Appearance, Printing

Property Editor

Selected View : advBandedGridView1

Views

gridControl1

(MainView) advBandedGridView1 (Click here to change view)

CustomersOrders cardView1 (Click here to change view)

(Click here to create a new level)

Retrieve Details

You can convert the current view to another type, assign a new view to the main level and add new levels to represent master-detail relationships. Click the Retrieve Details button to automatically create levels for all the master-detail relationships in the bound data source (when the XtraGrid is bound to a data source).

Repository

Appearance

Printing

DynamicProperties (Name) advBandedGridView1

ActiveFilterEnabled	True
Appearance	DevExpress.XtraGrid.Appearance
AppearancePrint	DevExpress.XtraGrid.AppearancePrint
BandPanelRowHeight	-1
BestFitMaxRowCount	-1
BorderStyle	Default
ChildGridLevelName	
ColumnPanelRowHeight	-1
DefaultRelationIncrement	0
DetailHeight	350
DetailTabHeaderLocation	Top
FixedLineWidth	2
FocusRectStyle	CellFocus
FooterPanelHeight	-1
GroupFooterShow	VisibleIfExpanded
GroupFormat	{0}: [#image]{1} {2}
GroupPanelText	
GroupRowHeight	-1
HorzScrollStep	3
HorzScrollVisibility	Auto

DevExpress.XtraGrid3.Design, Version=2.9.9.0

Explorer style

XtraGrid Designer's sections

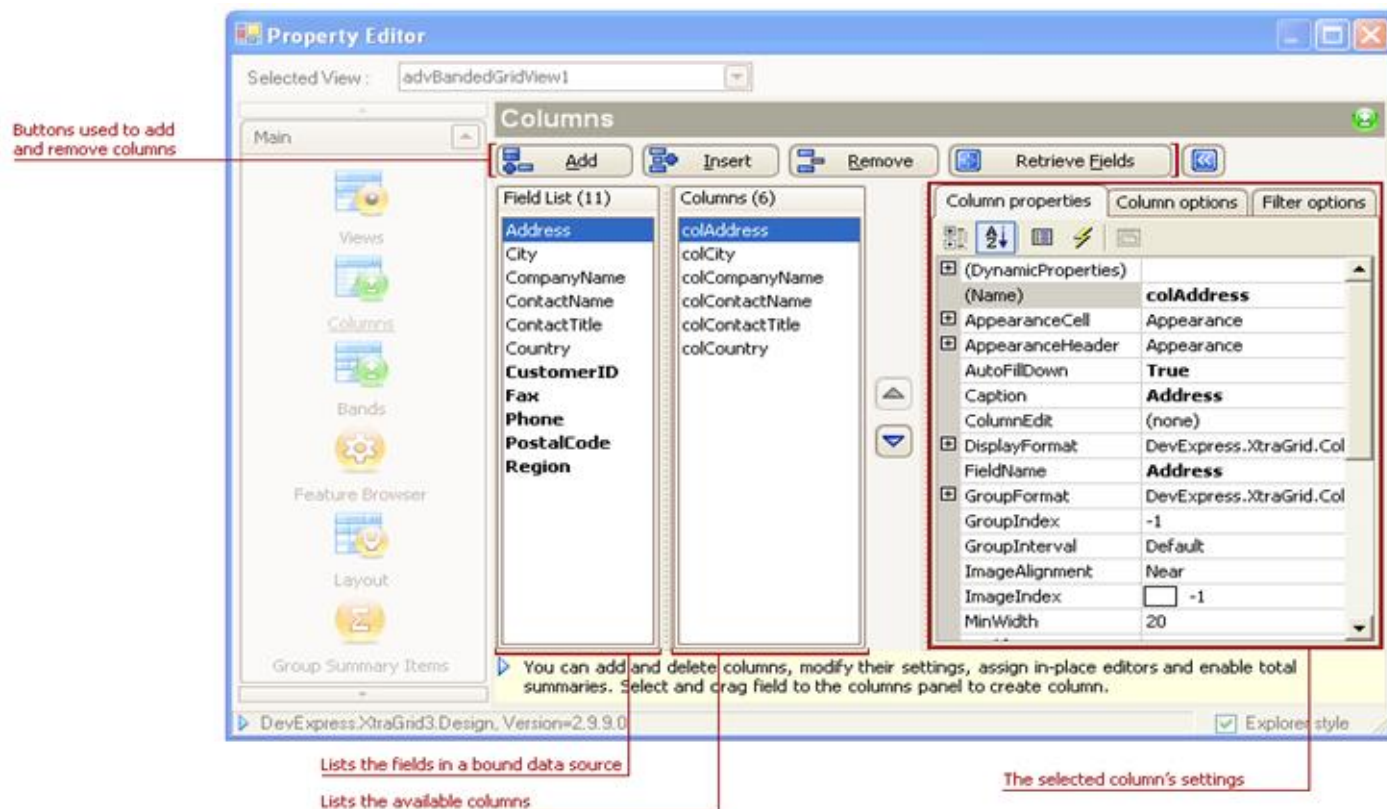
Selects a view





# Thiết kế Grid Control

- Main :
  - Columns : cung cấp các tính năng quản lý cột





# Thiết kế Grid Control

## ■ Main :

- Bands : cung cấp các tính năng quản lý band (chỉ xuất hiện đối với BandedGridView và Advanced BandedGridView)

Property Editor

Selected View : advBandedGridView1

Main

Views

Columns

Bands

Feature Browser

Layout

Group Summary Items

Preview section

Creates a new band

Shows/hides the customization form

Deletes the selected band

Cancels all the actions performed within the page

The selected band's settings

Bands

Customer		Location		
Company Name	Contact Title	Address	City	Country
Contact Name				

click a band in order to select it...

Add New Band...

Show columns selector

Delete selected band

☒ Auto Width

Reset

Band properties

Band options

Main properties

AppearanceHeader	Appearance
AutoFillDown	True
Caption	Customer
Fixed	None
ImageAlignment	Near
ImageIndex	-1
MinWidth	10
OptionsBand	AllowHotTrack, AllowMove, A
RowCount	1

You can add and delete bands and modify their settings. Add columns to bands using drag and drop.

DevExpress.XtraGrid3.Design, Version=2.9.9.0

Explorer style



# Thiết kế Grid Control

## ■ Main :

- **Feature Browser** : cung cấp một danh sách các tính năng giúp người dùng dễ dàng tùy chỉnh

Feature Browser

Lists the available features

- ✖ Data Binding
- ✖ Column, Rows, Cells Layout
- ✖ **Preview**
  - Preview Appearance
- ✖ Sorting
- ✖ Grouping
- ✖ Filtering
- ✖ Summary
- ✖ Editing
- ✖ Focus, Selection, Navigation
- ✖ Master-Detail
- ✖ Appearance
- ✖ Visual Elements
- ✖ Behavior
- ✖ End-user Actions
- ✖ Printing Settings

General

General Info

Availability:  
☐ `OptionsView.ShowPreview` property.

Size:  
`PreviewLineCount`,  
☐ `OptionsView.AutoCalcPreviewLineCount` properties.

Content:  
`PreviewFieldName` property,  
`CalcPreviewText` event.

OptionsView

AutoCalcPreview	False
ShowPreview	False
PreviewFieldName	
PreviewLineCount	-1

Settings related to the selected feature

Sample View Your View (gridView1)

Drag a column header here to group by that column

Product Name	Category	Unit Price	Discontinued
▶ Tofu	Produce	\$23.25	<input checked="" type="checkbox"/>
Gorgonzola Telino	Dairy Products	\$9.50	<input type="checkbox"/>
Mascarpone Fabioli	Dairy Products	\$32.00	<input checked="" type="checkbox"/>
Geitost	Dairy Products	\$2.50	<input checked="" type="checkbox"/>
Manjimp Dried Apples	Produce	\$53.00	<input type="checkbox"/>

Preview



# Thiết kế Grid Control

## ■ Main :

Loads data from the XML file

Grid Preview

Load Data from XML

Load XML File...

C:\Database\Cars.xml: 15 Row(s)

Customer		Location
Company ...	Contact Title	Address
Contact Name		
+ Alfreds Futt...	Sales Represent...	Obere Str.
Maria Anders		
030-0074321		
+ Ana Trujillo ...	Owner	Avda. de la
Ana Trujillo		
(5) 555-4729		
+ Antonio Mor...	Owner	Mataderos
Antonio Moreno		
(5) 555-3932		

A↓  
Z↓

Z↓  
A↓

Sort Ascending

Sort Descending

Group By This Field

Group By Box

Runtime Column Customization

Best Fit

Can Filter

Clear Filter

- Sort Ascending
- Sort Descending
- Group By This Field
- Group By Box
- Runtime Column Customization
- Best Fit
- Can Filter
- Clear Filter



# Thiết kế Grid Control

- **Group Summary Items** : cung cấp tính năng quản lý Group Summary

Buttons used to add and remove the summary items

Property Editor

Selected View : advBandedGridView1

Main

Views

Columns

Bands

Feature Browser

Layout

Group Summary Items

Group Summary Items

Add Remove

Summary Items (2)

Summary Item - Index 0

Summary Item - Index 1

DisplayFormat

FieldName City

ShowInGroupColumnFooter (Show in GroupRow)

SummaryType Count

Tag <Null>

The selected item's properties

Add, remove or modify the summary items responsible for calculating summary values when grouping is performed.

DevExpress.XtraGrid3.Design, Version=2.9.9.0

Explorer style

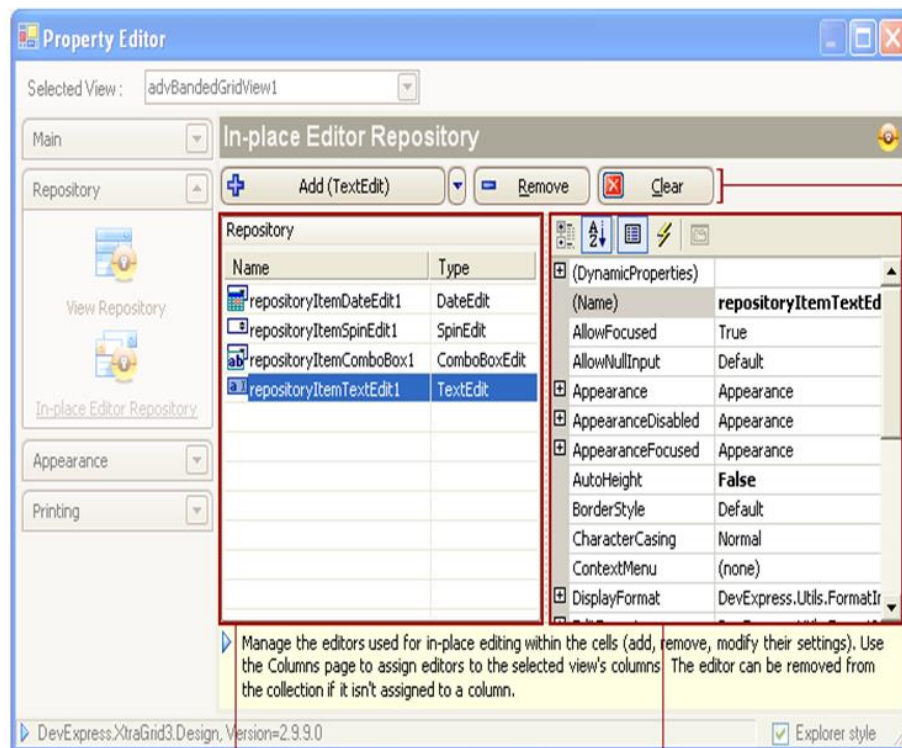
Lists the available summary items



# Thiết kế Grid Control

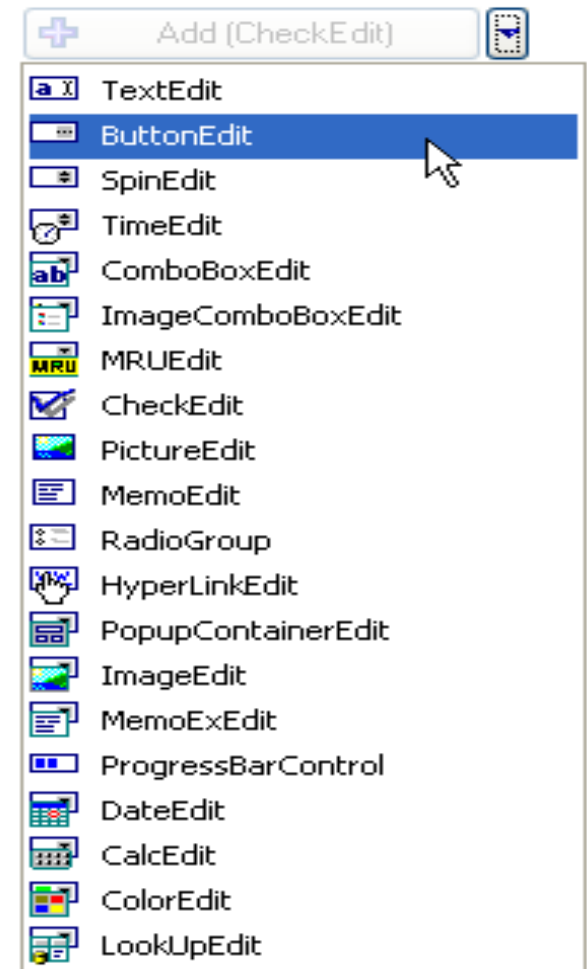
## ■ Repository :

- In-place Editor Repository : cho phép tạo và tùy chỉnh các dạng edit



Lists the available repository items

The selected repository item's properties and events





# Thiết kế Grid Control

## ■ Repository :

- View Repository : cho phép tạo và tùy chỉnh các View

The screenshot shows the 'Property Editor' window with the 'View Repository' tab selected. The 'Selected View' dropdown is set to 'advBandedGridView1'. The 'View Repository' section contains a table listing available views:

Name	Type
advBandedGridView1	AdvBandedGridView
cardView1	CardView
gridView1	GridView

Below the table are buttons for 'Add (GridView)' and 'Remove'. To the right of the repository is a detailed view of the properties for the selected 'gridView1'. The properties include:

- (DynamicProperties) (Name) gridView1
- ActiveFilterEnabled True
- Appearance DevExpress.XtraGrid
- AppearancePrint DevExpress.XtraGrid
- BestFitMaxRowCount -1
- BorderStyle Default
- ChildGridLevelName
- ColumnPanelRowHeight -1
- DefaultRelationIndex 0
- DetailHeight 350
- DetailTabHeaderLocation Top
- FixedLineWidth 2

Red annotations highlight specific parts of the interface:

- A red box around the 'Add (GridView)' and 'Remove' buttons is labeled: "Buttons used to add or remove the veivs".
- A red box around the repository table is labeled: "Lists the available views".
- A red box around the properties list is labeled: "The selected view's properties and events".

At the bottom of the window, there is a status bar with the text: "Manage the views in the grid's repository (add, remove, modify settings)." and "DevExpress.XtraGrid3.Design, Version=2.9.9.0".



# Thiết kế Grid Control

## ■ Appearance :

- Appearances : cung cấp các thiết lập sử dụng để vẽ các thành phần của View

Appearances

Load Appearance Layout... Save Appearance Layout...

Appearances:

Group Mode Table Mode

BandPanel  
BandPanelBackground  
ColumnFilterButton  
ColumnFilterButtonActiv  
DetailTip  
Empty  
EvenRow  
FilterCloseButton  
FilterPanel  
FixedLine  
FocusedCell  
FocusedRow  
FooterPanel  
GroupButton  
GroupFooter  
GroupPanel  
GroupRow  
HeaderPanel  
HeaderPanelBackground  
HideSelectionRow

Preview:

Category Δ

Product	Others
Product Name	Unit Price
Click here to add a new row	
Category: Dairy Products	
Mascarpone Fabioli	\$32.00
Raclette Courdavault	\$55.00
The preview text... The second line of the preview text.	
Camembert Pierrot	\$34.00
AVR=\$40.33	
Category: Grains/Cereals	
Category: Produce	
7	\$226.95

Properties

BackColor 223, 230, 195  
BackColor2  
BorderColor 223, 230, 195  
Font Tahoma, 8pt, style=Bol  
ForeColor Black  
GradientMode Horizontal  
Image (none)  
Options  
TextOptions

Paint Style

Paint Style: MixedXP

Enable Appearance Even Row  
Enable Appearance Odd Row

Appearance Preview:

Appearance Object Preview

Appearances:

FixedLine  
HeaderPanel  
HeaderPanelBackground

Preview:

Group Mode Table Mode

Category Δ

Product	Others
Product Name	Unit Price
Click here to add a new row	
Category: Dairy Products	
Mascarpone Fabioli	\$32.00
Raclette Courdavault	\$55.00
The preview text... The second line of the preview text.	
Camembert Pierrot	\$34.00
AVR=\$40.33	
Category: Grains/Cereals	
Category: Produce	
7	\$226.95

Properties

Paint Style

Paint Style: MixedXP

Enable Appearance Even Row  
Enable Appearance Odd Row

Appearance Preview:

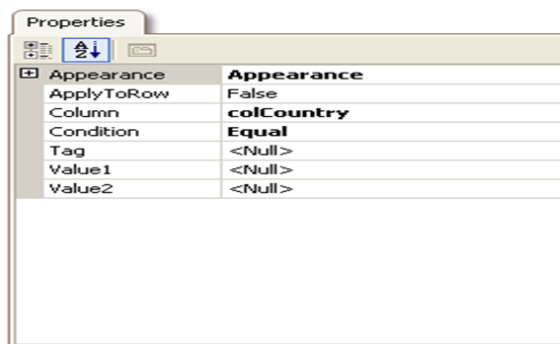
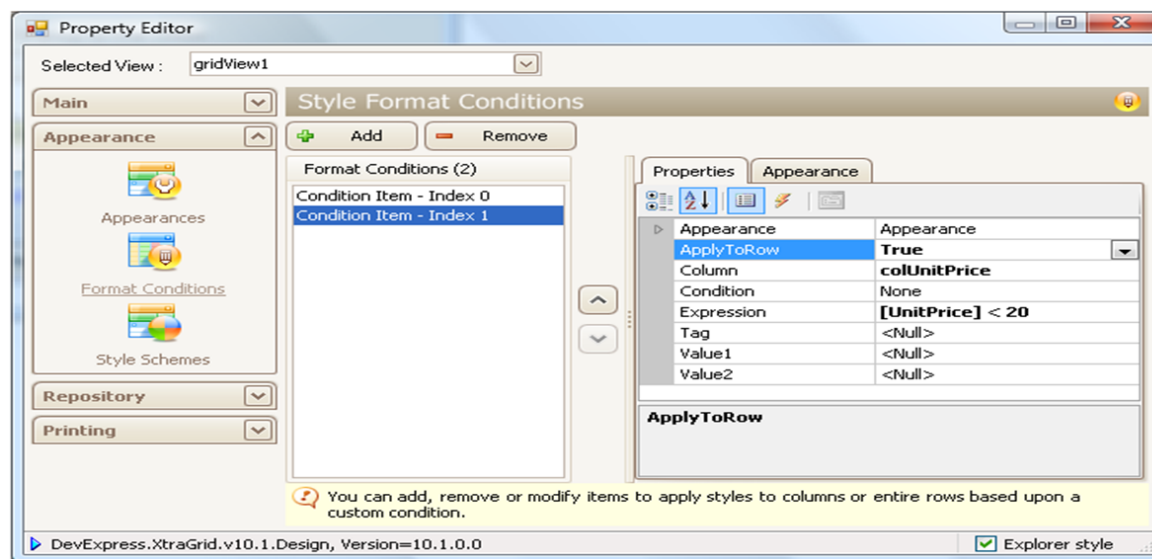
Appearance Object Preview





# Thiết kế Grid Control

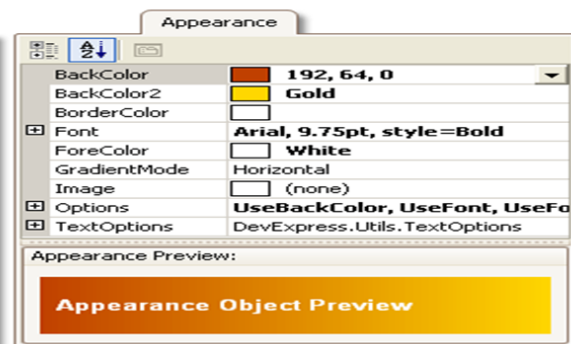
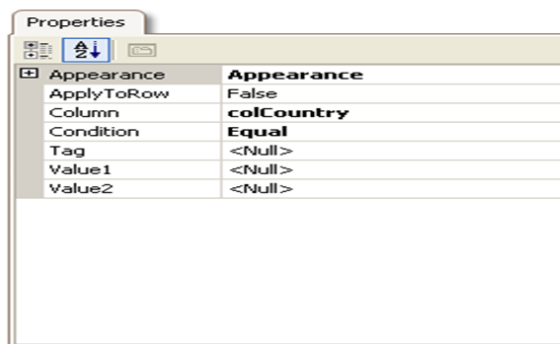
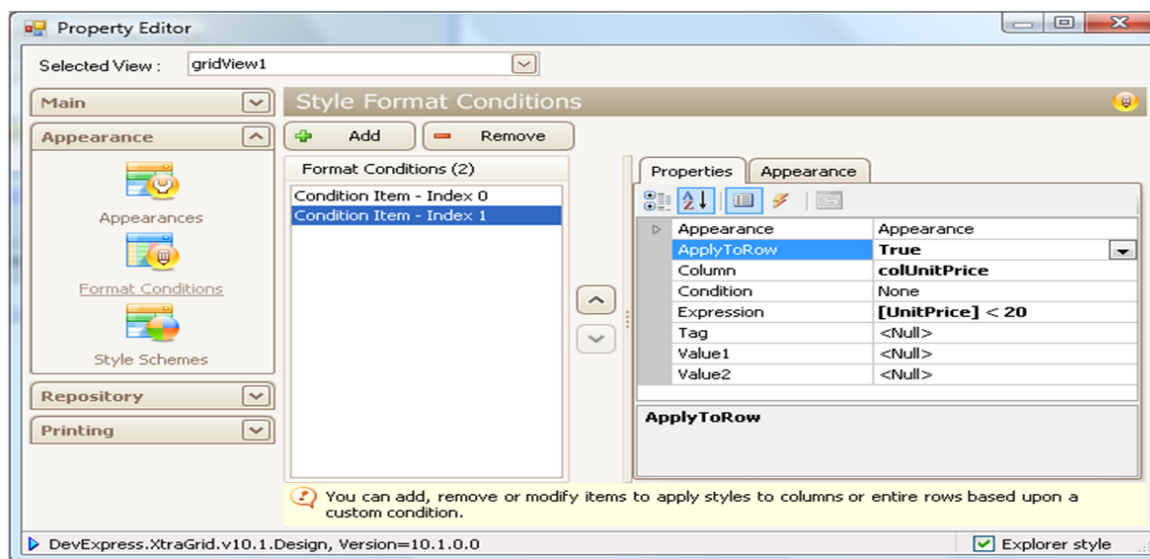
- Appearance :
- Format Conditions :





# Thiết kế Grid Control

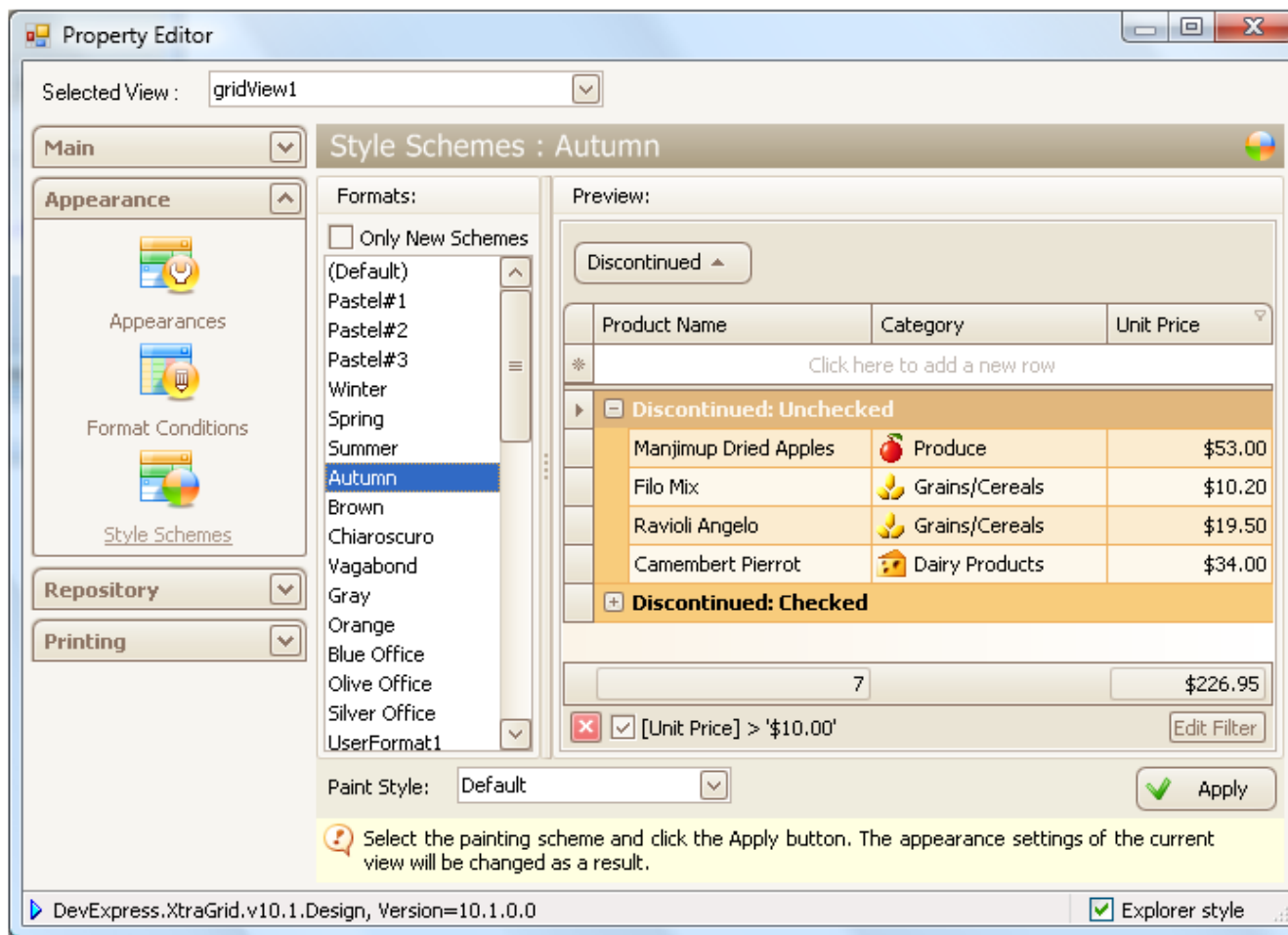
- Appearance :
- Format Conditions :





# Thiết kế Grid Control

- **Appearance :**
  - **Style Schemes :** cho phép xác định style của một View





# Thiết kế Grid Control

## ■ Printing:

- **Print Appearances : thiết lập giao diện in GridControl**

Buttons used to load and save the appearance layout

Resets the properties of the selected appearance(s) to their default values

Selects all the appearances

Property Editor

Selected View : advBandedGridView1

Main

Repository

Appearance

Printing

Print Appearances

Load Appearance Layout...

Save Appearance Layout...

Appearances:

- BandPanel
- EvenRow
- FilterPanel
- FooterPanel
- GroupFooter
- GroupRow
- HeaderPanel
- Lines
- OddRow
- Preview
- Row

Properties

BackColor CadetBlue

BackColor2 192, 255, 192

BorderColor

Font Tahoma, 8.25pt

ForeColor

GradientMode Horizontal

Image (none)

Options UseBackColor

TextOptions DevExpress.Utils.TextOptions

Appearance Preview:

Appearance Object Preview

Preview

Select one or more of the Appearance objects to customize the printing appearances of the corresponding visual elements.

DevExpress.XtraGrid3.Design, Version=2.9.9.0

Explorer style

Lists the available appearances



# Thiết kế Grid Control

## ■ Printing:

- Printing Settings : cung cấp các cài đặt in của View

Print options

Preview

Property Editor

Selected View : advBandedGridView1

Main

Repository

Appearance

Printing

Print Appearances

Printing Settings

Print Settings (Banded View)

Options

Behavior

Print

- ☒ BandHeader
- ☒ Header
- ☐ Preview
- ☒ Footer
- ☒ GroupFooter
- ☒ HorzLines
- ☒ VertLines
- ☐ FilterInfo
- ☐ Details
- ☐ EvenRow
- ☐ OddRow

Preview:

Product	Category	Unit Price	Discontinued
<strong>Discontinued: Unchecked</strong>			
Gorgonzola Te...	Dairy Prod...	\$9.50	<input type="checkbox"/>
Manjimup Drie...	Produce	\$53.00	<input type="checkbox"/>
Filo Mix	Grains/Cer...	\$10.20	<input type="checkbox"/>
Ravioli Angelo	Grains/Cer...	\$19.50	<input type="checkbox"/>
Camembert Pi...	Dairy Prod...	\$34.00	<input type="checkbox"/>
5		ax = \$53.00	
<strong>Discontinued: Checked</strong>			
Tofu	Produce	\$23.25	<input checked="" type="checkbox"/>
		\$238.95	

Set up various printing options for the current view.

DevExpress.XtraGrid3.Design, Version=2.9.9.0

Explorer style

Options

Print

- ☒ BandHeader
- ☒ Header
- ☐ Preview
- ☒ Footer
- ☒ GroupFooter
- ☒ HorzLines
- ☒ VertLines
- ☐ FilterInfo
- ☐ Details
- ☐ EvenRow
- ☐ OddRow

Behavior

Width

- ☒ AutoWidth

Expand

- ☐ All Details
- ☒ All Groups

Use Styles

- ☒ PrintStyles



# Các tính năng cơ bản của GridControl

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- **Instant Feedback UI:**
  - Demo



# Các tính năng cơ bản của GridControl

- Master – Detail Data:

Icon	Main	Address Details	
	Department	City	Address
	Budget	Country	Phone
	Headquarters	San Francisco	59 Maiden Lane
	\$200,000.00	USA	(555)123-12-12
	Internal Software	San Francisco	512 17th Avenue
	\$300,000.00	USA	(555)123-12-12

Persons				
Customize				
Alex Jackson				
Title: President				
Photo:				
E-Mail: alexj@company.com				
Norman Wells				
James Taylor				
Chris Williams				
Title: Vice President				
Photo:				
E-Mail: chrisw@company.com				

Persons				
Title				
First Name	Last Name	Birth Date	E-Mail	
Titles: Developer (Count = 2)				
Steve	Thomas	6/12/1972	sthevt@company.com	
Andy	Montgomery	11/1/1971	andym@company.com	
Titles: Product Manager (Count = 1)				
Chuck	Dorn	2/15/1970	chuckd@company.com	
(((Title = 'Developer' OR Title = 'Product Manager'))				

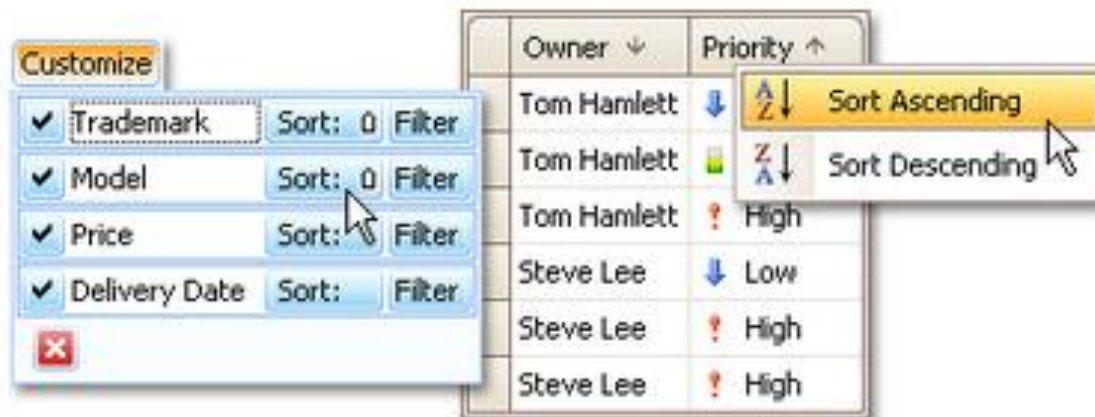


# Các tính năng cơ bản của GridControl

## ■ Data Sorting:

XtraGrid hỗ trợ các tính năng sắp xếp dữ liệu :

- ❑ Sorting Against Unlimited Number of Fields
- ❑ Sorting by Cell Display Values
- ❑ Custom Sorting Algorithms
- ❑ Immediate or On-Demand Row Position Update







# Các tính năng cơ bản của GridControl

## ■ Data Grouping :

**GridView hỗ trợ các tính năng sắp**

- ❑ **Grouping Against an Unlimited**
- ❑ **Joined Group Panel**
- ❑ **Multiple Predefined Grouping I**
- ❑ **Microsoft Outlook Style Group**
- ❑ **Images in Grouped Rows**
- ❑ **Custom Grouping Algorithms**
- ❑ **Automatic Group Expansion**
- ❑ **Maintain Expansion State after**

The screenshot displays a GridControl window with a hierarchical data structure. At the top, there are filters for 'MainView: Country' and 'Region'. Below these, there's an 'Orders' section with a 'Ship Via' filter. The main data area is organized into nested groups. The first group is 'Country: Argentina', which contains a 'Region' group. The 'Region' group contains two rows: 'Cactus Comidas para llevar' (Sales Agent, Patricio Simpson) and 'Océano Atlántico Ltda.' (Sales Agent, Yvonne Moncada). The 'Océano Atlántico Ltda.' row is expanded to show an 'Orders' sub-table. This sub-table has columns for 'Ship Name', 'Shipped Date', and 'Freight'. It contains two rows for 'Ship Via: Speedy Express': 'Océano Atlántico Ltda.' (Shipped Date: 2/14/1995, Freight: \$29.83) and 'Océano Atlántico Ltda.' (Shipped Date: 6/19/1995, Freight: \$8.12). Below this, there's a collapsed group for 'Ship Via: United Package'.

Company Name	Contact Name	Contact Title
Country: Argentina		
Region:		
Cactus Comidas para llevar	Patricio Simpson	Sales Agent
Océano Atlántico Ltda.	Yvonne Moncada	Sales Agent
Orders		
Ship Name	Shipped Date	Freight
Ship Via: Speedy Express		
Océano Atlántico Ltda.	2/14/1995	\$29.83
Océano Atlántico Ltda.	6/19/1995	\$8.12
> Ship Via: United Package		



# Các tính năng cơ bản của GridControl

## ■ Total and Group Summaries:

GridView hỗ trợ các tính năng tính toán dữ liệu:

- Total Summaries
- Group Summaries (in grouped rows and grc
- Five Built-in Functions
- Custom Aggregate Functions
- Sorting Against Group Summay Values
- Optional Automatic Total Summary Update

The screenshot shows a GridView control with columns: Order ID, Quantity, and Sub Total. The data is grouped by 'Unit Price'. The first group is 'Unit Price: \$16.00 (Count=3)' and the second is 'Unit Price: \$20.00 (Count=2)'. A context menu is open over the 'Sub Total' column, showing options: Sum, Min, Max, Count (highlighted), Average, and None.

Order ID	Quantity	Sub Total
Unit Price: \$16.00 (Count=3)		
10253	40	\$640.00
10456	21	\$285.60
10481	24	\$384.00
		MIN=21 SUM=\$1,309.60
Unit Price: \$20.00 (Count=2)		
10910	10	\$200.00
11039	60	\$1,200.00
		MIN=10 SUM=\$1,400.00
		SUM=\$2,709.60



# Các tính năng cơ bản của GridControl

## ■ Data Filtering:

GridView hỗ trợ các tính năng tính toán dữ liệu:

- ❑ Microsoft Excel Style Filter Dropdowns
- ❑ Microsoft Excel Style Filter Dialogs
- ❑ Windows Vista Style Filtering for Date-Time Columns
- ❑ Auto-Filter Row

The screenshot shows a data grid with columns 'Name', 'Received', and 'Subject'. The 'Received' column is selected, and a date filter dialog is open. The dialog has a calendar for February 2009 and a list of filter options: 'Show all', 'Filter by a specific date:', 'Today', 'Yesterday', 'Earlier this week', 'Last week', 'Earlier this month', and 'Earlier this year'. The 'Last week' option is selected. The grid shows a list of dates and times, with the 'Received' column highlighted.

The 'Custom AutoFilter' dialog box is shown. It has a title bar with a close button. The main area is titled 'Show rows where:' and contains two filter conditions. The first condition is 'Created On' with a dropdown set to 'equals', a checked 'Field' checkbox, and a dropdown set to 'Fixed On'. The second condition is 'is greater than' with a dropdown set to 'Field' and a text box containing '8/9/2006'. There are radio buttons for 'And' and 'Or', with 'Or' selected. At the bottom are 'Ok' and 'Cancel' buttons.

The screenshot shows a data grid with columns 'Priority', 'Name', and 'Bug'. The first row is highlighted in blue and contains the text 'Medium', 've', and a green square. Below it are three rows with 'Medium' in the 'Priority' column, 'Vendor List', 'Vendor TAX IDs', and 'Vendor Name' in the 'Name' column, and checkboxes in the 'Bug' column. At the bottom, there is a filter bar with a green square, a checked checkbox, and the text '([Priority] = 'Medium') AND ([Name] ~ 've')'.



# Các tính năng cơ bản của GridControl

- Integrated Search Panel:

Order ID	Product	Unit Price	Quantity	Discount
Click here to add a new row				
10260	Outback Lager	\$12.00	21	25.00 %
10265	Outback Lager	\$12.00	20	0.00 %
10284	Laughing Lumberjack Lager	\$11.20	5	25.00 %
10299	Outback Lager	\$12.00	20	0.00 %
10308	Outback Lager	\$12.00	5	0.00 %
10315	Outback Lager	\$12.00	30	0.00 %
10380	Outback Lager	\$12.00	30	0.00 %



# Các tính năng cơ bản của GridControl

- **Cell Value Formatting:**
  - **Conditional Formatting**

Product	Price	Units
Boston Crab Meat	\$18.40	
Carnarvon Tigers	\$62.50	
Escargots de Bo...	\$13.25	
Gravad lax	\$26.00	
Ikura	\$12.00	
Inlagd Sill	\$19.00	

Type	Status	Owner
Request	New	Andrew Miller
Request	Fixed	Carl Lucas
Request	Rejected	Andrew Miller
Bug	New	Steve Lee
Bug	Fixed	Bert Parkins
Request	New	Bert Parkins

- **Embedded Cell Editors**

In Stock	Category
<input checked="" type="checkbox"/>	Beverages
<input checked="" type="checkbox"/>	Condiments
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Category	Product #1
Category	Condiments
Units in Stock	29
Discontinued	<input checked="" type="checkbox"/>
Last Order	12/14/2001
Relevance	70%

- **Display Text Formatting**

Location	Units
Date: March 2005	
New York	1,332,445
Chicago	
Date: April 2005	
New York	
San Francisco	
Las Vegas	490,756
Sum=4.28e+007	

Lexus / GS430  
Ship Date: Monday 14, October 02  
Price: \$41,242.00  
Hyperlink: <http://www.lexus.com>  
Is In Stock: ☒

- **Custom Painting**

Pause...			
	A	B	C
1	1,213.00	12,554.00	32,872.00
2	4,323.00	983.00	1,267.00
3	1,834.00	4,528.00	32,778.00
4	2,023.00	21,909.00	15,489.00
Sum for selected cells: 24,506.00			

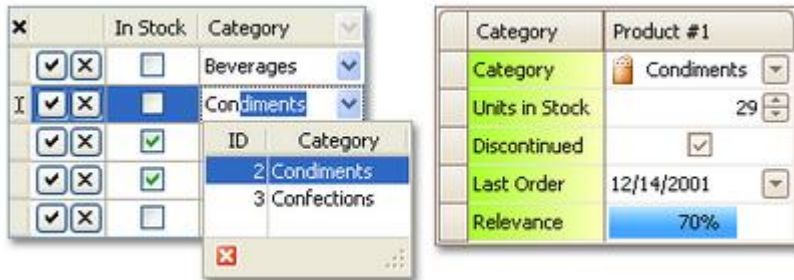




# Các tính năng cơ bản của GridControl

- Select Rows, Cards and Individual Cells

- Data Editing and Validation:
  - Embedded Cell Editors



- Integrated UI for Adding, Deleting, and Navigating Records



Order ID	Product	Discount	
10252	Sir Rodney's Marm...	5.00 %	
10252	Geitost	5.00 %	
102	1998	1999	2000
102	45 800	49 532	86 432
> 102	239 497	279 121	321 319
102	136 874	124 977	52 748
102	960 420	943 098	964 880
102	351 482	318 321	288 466
102	223 764	229 007	195 857

- Input Validation and Error Indication





# Các tính năng cơ bản của GridControl

- **Powerhouse Grid Lookup Control:**

Queso Cabrales

Find

	Product Name	Quantity Per Unit	Unit Price	Discontinued
	Queso Cabrales	1 kg pkg.	\$21.00	<input type="checkbox"/>
	Queso Mancheg...	10 - 500 g pkgs.	\$38.00	<input type="checkbox"/>
	Konbu	2 kg box	\$6.00	<input type="checkbox"/>
	Tofu	40 - 100 g pkgs.	\$23.25	<input type="checkbox"/>
	Genen Shouyu	24 - 250 ml bottles	\$15.50	<input type="checkbox"/>

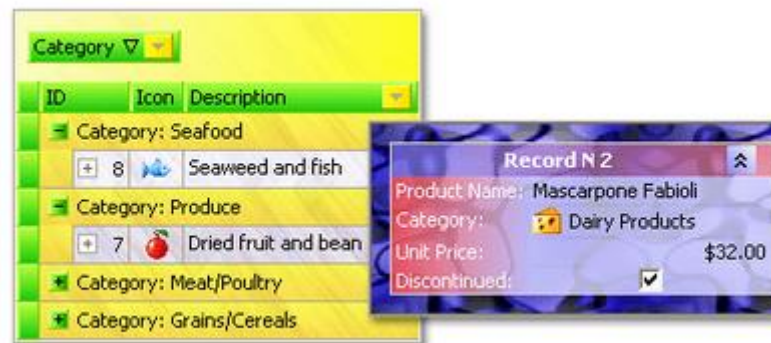
Clear



# Các tính năng cơ bản của GridControl

## ■ Appearance Customization:

### • Color Management, Styles and Alpha Blending



### • Conditional Formatting

Product	Price	Units
Boston Crab Meat	\$18.40	
Carnarvon Tigers	\$62.50	
Escargots de Bo...	\$13.25	
Gravad lax	\$26.00	
Ikura	\$12.00	
Inlagd Sill	\$19.00	

Type	Status	Owner
Request	New	Andrew Miller
Request	Fixed	Carl Lucas
Request	Rejected	Andrew Miller
Bug	New	Steve Lee
Bug	Fixed	Bert Parkins
Request	New	Bert Parkins

### • Custom Painting

Pause...			
	A	B	C
1	1,213.00	12,554.00	32,872.00
2	4,323.00	983.00	1,267.00
3	1,834.00	4,528.00	32,778.00
4	2,023.00	21,909.00	15,489.00
Sum for selected cells: 24,506.00			





# Các tính năng cơ bản của GridControl

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- **Split Presentation:**
  - Demo
- **Design-Time Experience**
  - XtraGrid hỗ trợ nhiều chế độ thiết kế , tùy chỉnh giao diện nhanh chóng và trực tiếp với đối tượng trong thời gian thiết kế



# Các tính năng cơ bản của GridControl

## ■ Data Binding and Unbound Columns

- Data Binding Options
- Expression Editor Dialog

ID	Picture	Category
1	binary data	Beverages
2	binary data	Condiments

Product Name	Unit Price
Vegie-spread	\$43.90
Sirop d'érable	\$28.50

## • Unbound Columns

Field List (5)	Columns (6)
ID	colID
FirstName	colFirstName
LastName	colLastName
Phone	colPhone
	colSync

Phone	Synchronize?
(231)155-18-19	<input checked="" type="checkbox"/>
(203)167-73-79	<input checked="" type="checkbox"/>
(555)626-96-16	<input type="checkbox"/>
(800)112-13-77	<input type="checkbox"/>
(555)344-56-56	<input checked="" type="checkbox"/>

Condition expression editor

[Unit Price] >= 30 And [Units On Order] > 15

+ - × ÷ % ( ) = ≠ < ≤ ≥ > ( ) ( ) ( )

Functions  
Operators  
Fields  
Constants

[gridColumn1]  
[Product ID]  
[Product Name]  
[Quantity Per Unit]  
[Reorder Level]  
[Supplier ID]  
[Unit Price]  
[Units In Stock]  
[Units On Order]

Field Information  
Caption: Units On Order  
The type of this field is:  
System.Int16

OK Cancel



# Các tính năng cơ bản của GridControl

## ■ Data Export and Printing

- GridControl hỗ trợ xuất và in file với nhiều tùy chọn định dạng như : PDF , HTML , MHT, RTF , XLS , XLSX , CSV , Text , Image
- Hỗ trợ một số tính năng như : tự động thay đổi kích thước để phù hợp toàn bộ trang , mở rộng in nhiều Views , tùy chỉnh hiển thị in ấn ...



ID	Category	
+	1	Beverages
-	2	Condiments
	Product	Price
	Vegie-spread	\$43.90
	Sirop d'érable	\$28.50
+	3	Confections

	A	B
1	Product	Price
2	Aniseed-Syrup	\$10.00
3	Chef Anton's Cajun Seasoning	\$22.00
4	Chef Anton's Gumbo Mix	\$21.35
5	Genen Shouyu	\$15.50



## Hỏi & Đáp

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