Displaying Detail Information in Arbitrary Part of the Page

Aquarium Express and Data Aquarium Framework offer excellent support for master-detail pages. See a live demo of three level master-detail page.

Master-detail support has been further extended with the latest release. Now you can link master and detail *DataViewExtender* components by any matching field.

Previously a detail *DataViewExtender* was expected to specify filter fields that are matched to the primary key fields of the master. The updated version will also try to set a link to primary key fields by name. If a primary key field has not been matched to a field specified in *FilterFields* property of the detail *DataViewExtender* then the entire set of fields is being searched. This allows creating additional master-detail *AJAX* views that can serve as informational panels to any selected records as long as the field names of master-detail link are matched.

Another enhancement in master-detail support simplifies cross-container links that can see "through" the templates. Previous releases of the framework were relying on *$find* method to locate a client master component specified by property *FilterSource*. It works great if all of your components are placed in the same naming container. This isn't so when a *DataViewExtender* is placed in a template. The new enhancement allows master-detail links between components that are not in the same naming container.

Consider the following example, which is designed to work with Aquarium Express or Data Aquarium Framework project created from *Northwind* database.

In a new web form based on *MasterPage.master* enter the following markup.

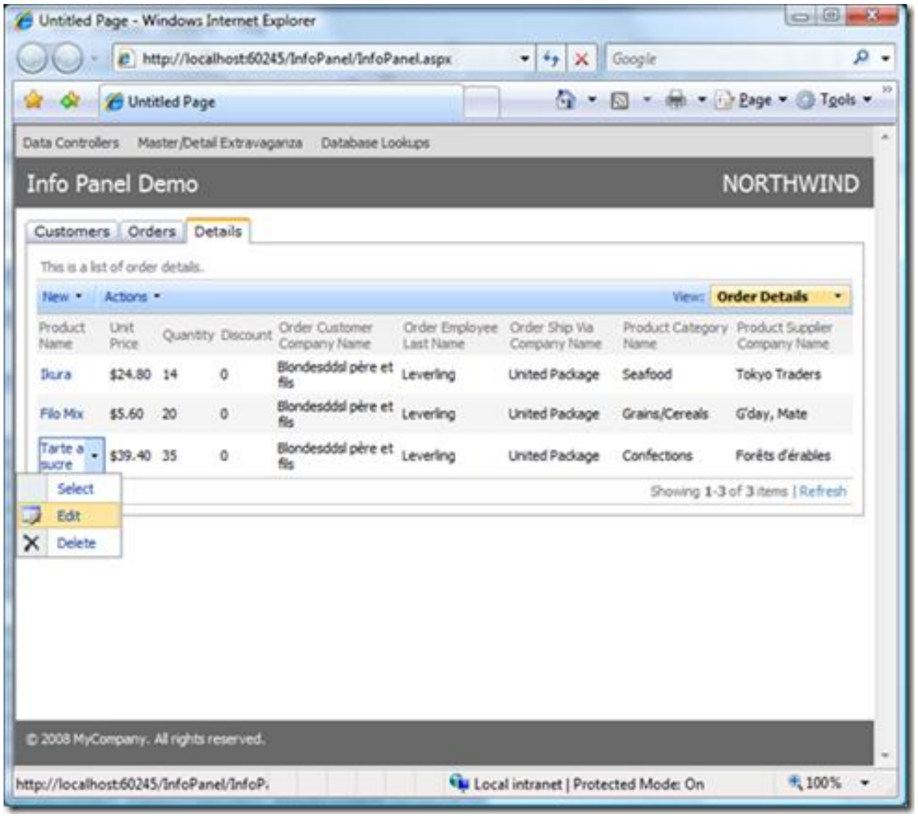
```
<%@ Page Language="C#" MasterPageFile="~/MasterPage.master"
AutoEventWireup="true"
    CodeFile="InfoPanel.aspx.cs" Inherits="InfoPanel" Title="Untitled Page"
%>

<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="Server">
```

```
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="Header1Placeholder"
runat="Server">
    Info Panel Demo
</asp:Content>
<asp:Content ID="Content3" ContentPlaceHolderID="Header2Placeholder"
runat="Server">
    Northwind
</asp:Content>
<asp:Content ID="Content4" ContentPlaceHolderID="BodyPlaceholder"
runat="Server">
    <act:TabContainer ID="OrderManager" runat="server">
        <act:TabPanel ID="CustomersTab" runat="server"
HeaderText="Customers">
            <ContentTemplate>
                <div id="CustomerList" runat="server" />
                <aquarium:DataViewExtender ID="CustomersExtender"
runat="server"
                    Controller="Customers" TargetControlID="CustomerList" />
            </ContentTemplate>
        </act:TabPanel>
        <act:TabPanel ID="OrdersTab" runat="server" HeaderText="Orders">
            <ContentTemplate>
                <div id="OrderList" runat="server" />
                <aquarium:DataViewExtender ID="OrdersExtender" runat="server"
                    Controller="Orders" FilterFields="CustomerID"
                    FilterSource="CustomersExtender"
TargetControlID="OrderList" />
            </ContentTemplate>
        </act:TabPanel>
        <act:TabPanel ID="DetailsTab" runat="server" HeaderText="Details">
            <ContentTemplate>
                <div id="DetailsList" runat="server" />
        <aquarium:DataViewExtender ID="DetailsExtender"
runat="server"
          Controller="OrderDetails" FilterFields="OrderID"
          FilterSource="OrdersExtender"
TargetControlID="DetailsList" />
      </ContentTemplate>
    </act:TabPanel>
  </act:TabContainer>
</asp:Content>
```

This markup defines a *TabContainer* from *Ajax Control Toolkit* with three level arrangement of *Customers*, *Orders*, and *Order Details*, linked in a master-detail relationship. *DataViewExtender* components and corresponding placeholder *div* elements are placed on an individual tab of the container

Run this page to see the "cross container" master-detail links in action. This was not possible with the previous releases of the framework.


Untitled Page - Windows Internet Explorer
http://localhost:60245/InfoPanel/InfoPanel.aspx
Google
Untitled Page
Page
Tools
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Master/Detail Extravaganza
Database Lookups
Info Panel Demo
NORTHWIND
Customers
Orders
Details
New
Actions
View:
Order Details
Select
Edit
Delete
http://localhost:60245/InfoPanel/InfoP...
Local intranet | Protected Mode: On
100%

This is a list of order details.

Product Name	Unit Price	Quantity	Discount	Order Customer Company Name	Order Employee Last Name	Order Ship Via Company Name	Product Category Name	Product Supplier Company Name
Ikura	$24.80	14	0	Blondesddsl père et fils	Leverling	United Package	Seafood	Tokyo Traders
Filo Mix	$5.60	20	0	Blondesddsl père et fils	Leverling	United Package	Grains/Cereals	G'day, Mate
Tarte a sucre	$39.40	35	0	Blondesddsl père et fils	Leverling	United Package	Confections	Forêts d'érables

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This form will benefit if we display a customer information summary somewhere on the page. The natural location is the top of the screen but that may differ from one application to another.

Open *~/Controllers/Customers.xml* data controller descriptor and create an exact copy of *editForm1*. Name this copy *infoForm1*. We need this extra view since we don't want *editForm1* of *Customers* controller on *Customers* tab to be affected when we finish customization.

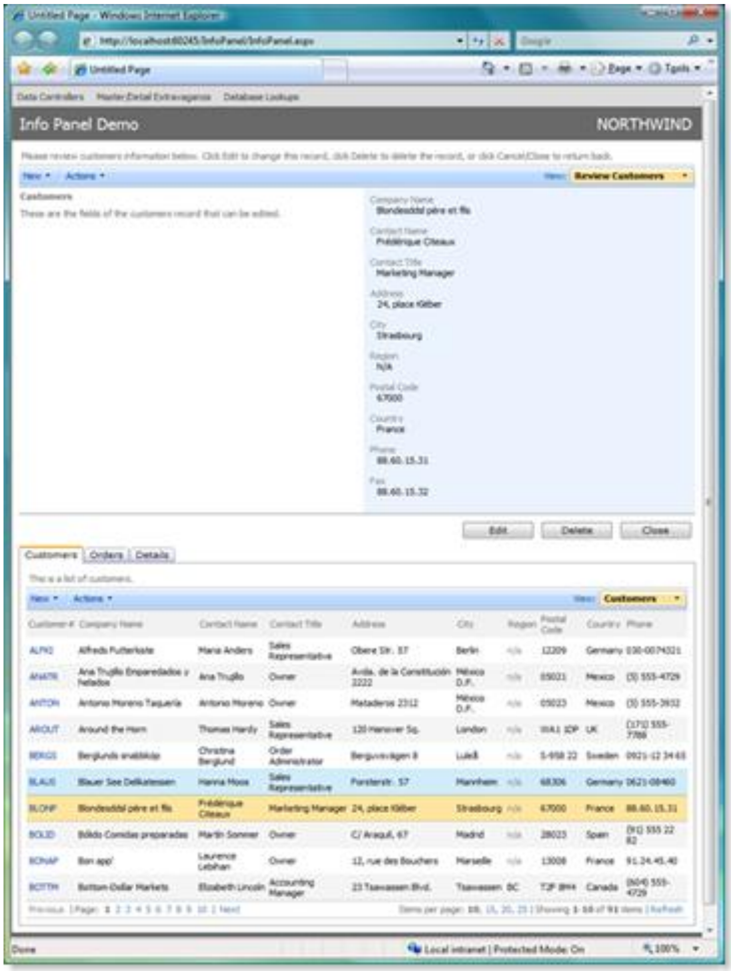
Insert the following *div* element above the *TabContainer*.

```
<div id="CustomerInfo" runat="server" />
```

Append this *DataViewExtender* right after the *TabContainer*.

```
<aquarium:DataViewExtender ID="CustomerInfoExtender" runat="server"
    Controller="Customers" View="infoForm1" FilterFields="CustomerID"
    FilterSource="CustomersExtender" TargetControlID="CustomerInfo" />
```

The location of *CustomerInfo* div is irrelevant but the detail extender component must be defined below the master component specified by *FilterSource* property when a component container tree is created by *ASP.NET* page parser. Run this page and make sure that whenever you select a customer record on *Customer* tab the corresponding *CustomerInfo div* at the top is refreshed with the matching record.



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

Customers

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

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

This is a list of customers.

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

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As you can see the top of the page is completely occupied by editable customer view, which is not what we want. Let's change this view to display just a few of the fields and hide the view description, action bar and action buttons.

We accomplish this by adding *class* attribute to *CustomerInfo* div. We also define a custom form template *Customers_infoForm1*. Then we insert a few *CSS* definitions in *Content1* placeholder, which will end up embedded in the *head* element of the *HTML* form. All this techniques will alter the appearance of the page and are described in details in a post dedicated to custom form templates.

Here is a complete text of the web form.

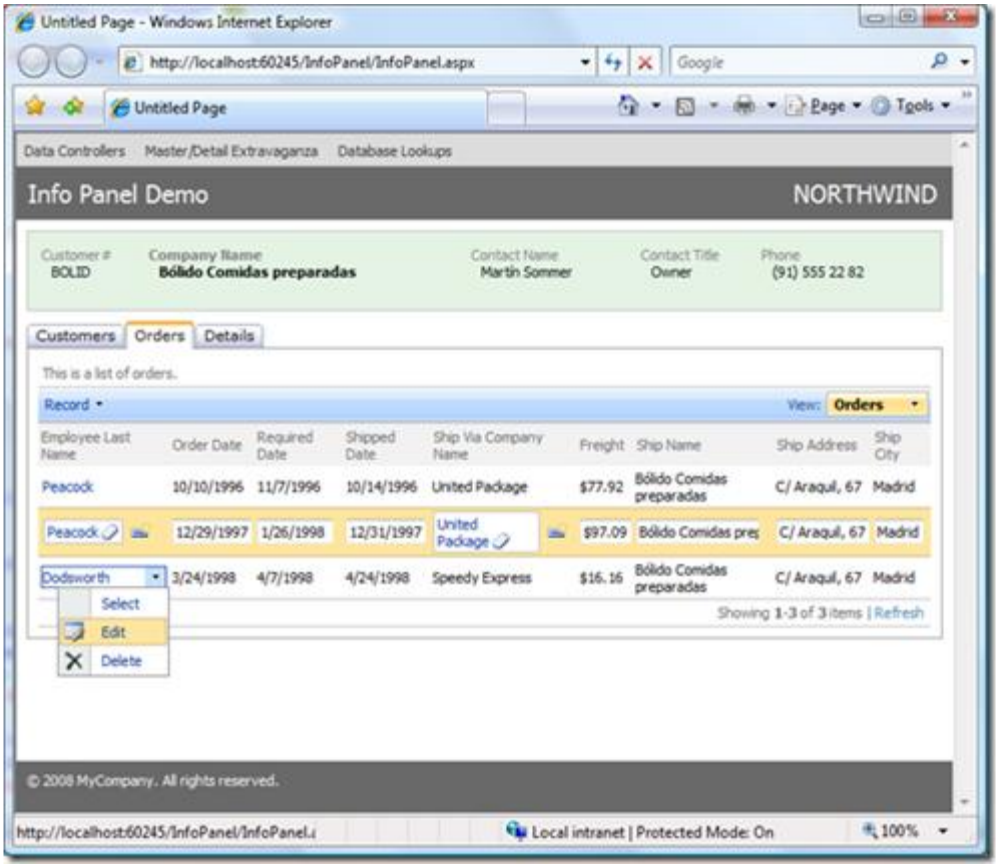
```
<%@ Page Language="C#" MasterPageFile="~/MasterPage.master"
AutoEventWireup="true"
```

```
    CodeFile="InfoPanel.aspx.cs" Inherits="InfoPanel" Title="Untitled Page"
%>

<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="Server">
    <style type="text/css">
        .CustomerInfo
        {
            padding: 0px;
            margin-bottom: 8px;
            background-color: White;
        }
        .CustomerInfo table.DataView tr.CategoryRow td.Fields
        {
            border: solid 1px silver;
            background-color: #E4F3E4;
        }
        .CustomerInfo .HeaderTextRow, .CustomerInfo .ActionRow,
        .CustomerInfo .ActionButtonsRow
        {
            display: none;
        }
    </style>
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="Header1Placeholder"
runat="Server">
    Info Panel Demo
</asp:Content>
<asp:Content ID="Content3" ContentPlaceHolderID="Header2Placeholder"
runat="Server">
    Northwind
</asp:Content>
<asp:Content ID="Content4" ContentPlaceHolderID="BodyPlaceholder"
runat="Server">
```

```
    <div id="CustomerInfo" runat="server" class="CustomerInfo" />
    <act:TabContainer ID="OrderManager" runat="server">
        <act:TabPanel ID="CustomersTab" runat="server" 
HeaderText="Customers">
            <ContentTemplate>
                <div id="CustomerList" runat="server" />
                <aquarium:DataViewExtender ID="CustomersExtender" 
runat="server"
                    Controller="Customers" TargetControlID="CustomerList" />
            </ContentTemplate>
        </act:TabPanel>
        <act:TabPanel ID="OrdersTab" runat="server" HeaderText="Orders">
            <ContentTemplate>
                <div id="OrderList" runat="server" />
                <aquarium:DataViewExtender ID="OrdersExtender" runat="server"
                    Controller="Orders" FilterFields="CustomerID" 
                    FilterSource="CustomersExtender" 
TargetControlID="OrderList" />
            </ContentTemplate>
        </act:TabPanel>
        <act:TabPanel ID="DetailsTab" runat="server" HeaderText="Details">
            <ContentTemplate>
                <div id="DetailsList" runat="server" />
                <aquarium:DataViewExtender ID="DetailsExtender" 
runat="server"
                    Controller="OrderDetails" FilterFields="OrderID" 
                    FilterSource="OrdersExtender" 
TargetControlID="DetailsList" />
            </ContentTemplate>
        </act:TabPanel>
    </act:TabContainer>
    <aquarium:DataViewExtender ID="CustomerInfoExtender" runat="server"
        Controller="Customers" View="infoForm1" FilterFields="CustomerID"
        FilterSource="CustomersExtender" TargetControlID="CustomerInfo" />
    <div id="Customers_infoForm1" style="display: none">
        <table style="width: 100%">
            <tr>
                <td>
                    {CustomerID}
                </td>
                <td style="font-weight: bold;">
                    {CompanyName}
                </td>
                <td>
                    {ContactName}
                </td>
                <td>
                    {ContactTitle}
                </td>
                <td>
                    {Phone}
                </td>
            </tr>
        </table>
    </div>
</asp:Content>
```

Here is an example of this form running in a web browser when user has selected a customer record and switched to *Orders* tab.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Info Panel Demo
NORTHWIND
Customers
Orders
Details
Record
View:
Orders
Select
Edit
Delete
Refresh
http://localhost:60245/InfoPanel/InfoPanel.a
Local intranet | Protected Mode: On
100%

Customer #	Company Name	Contact Name	Contact Title	Phone
BOLID	**Bólido Comidas preparadas**	Martín Sommer	Owner	(91) 555 22 82

This is a list of orders.

Employee Last Name	Order Date	Required Date	Shipped Date	Ship Via Company Name	Freight	Ship Name	Ship Address	Ship City
Peacock	10/10/1996	11/7/1996	10/14/1996	United Package	$77.92	Bólido Comidas preparadas	C/ Araquil, 67	Madrid
Peacock	12/29/1997	1/26/1998	12/31/1997	United Package	$97.09	Bólido Comidas pre	C/ Araquil, 67	Madrid
Dodsworth	3/24/1998	4/7/1998	4/24/1998	Speedy Express	$16.16	Bólido Comidas preparadas	C/ Araquil, 67	Madrid

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The green information panel at the top is automatically refreshed if you select a customer. The detail extender component is linked to a primary key field of a master record.

You can also link the same *CustomerInfoExtender* to a matching field of *OrdersExtender* component. The data controller of this component has *CustomerID* field, which is a foreign key that points to *Customers* table. The new feature of Data Aquarium Framework will kick in to make such link work. Just change *CustomerInfoExtender.FilterSource* to *OrdersExtender*. The behavior of the screen will change. You have to select an order to get the green panel at the of the screen to refresh itself.

In a more realistic example you would like to have *Employee* information panel connected to *OrdersExtender* to provide details about employee who has placed the order. We leave this task up to you.