CommandName And CommandArgument

Data controllers of applications created with Data Aquarium Framework define a state machine of action. There are standard actions, such as Edit, *Update*, *New*, *ExportRss*, that are invoking execution of specific functionality supported by the framework's JavaScript runtime classes. You can define a collection of your own custom commands and supply these commands with arguments specific to your requirements.

Let's consider the following example.

Generate a Data Aquarium project from *Northwind* database. Open *~/Controllers/Employees.xml* data controller descriptor and modify the sample custom action with header *My Command* as shown in the snippet below.

```
<action commandName="Custom" commandArgument="ExportXls,1,abc"
    headerText="My Command" description="Execute my custom command" />
```

Create the business rules class *Class1* as shown at http://blog.codeontime.com/2009/02/business-rules-rowbuilder-attribute.html. Make sure to link the class to *Employees* data controller via *handler* attribute. Modify the class to include *MyCommand* method.

C#:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using MyCompany.Data;

public class Class1: BusinessRules
```

```
{
    [ControllerAction("Employees", "grid1", "Custom", ActionPhase.Execute)]
    protected void MyCommand(int employeeId)
    {
        string[] args = Arguments.CommandArgument.Split(',');
        if (employeeId <= 4)
            Result.NavigateUrl = String.Format(
                "~/Default.aspx?EmployeeID=" + args[1]);
        else
            Result.ShowAlert(Arguments.CommandArgument);
    }
}
```

VB:

```
<ControllerAction("Employees", "grid1", "Custom", _
    ActionPhase.Execute)> _
Protected Sub MyCommand(ByVal employeeId As Integer)
    Dim args As String() = Arguments.CommandArgument.Split(",")
    If (employeeId <= 4) Then
        Result.NavigateUrl = String.Format( _
            "~/Default.aspx?EmployeeID=" & CType(args(1), String))
    Else
        Result.ShowAlert(Arguments.CommandArgument)
    End If
End Sub
```

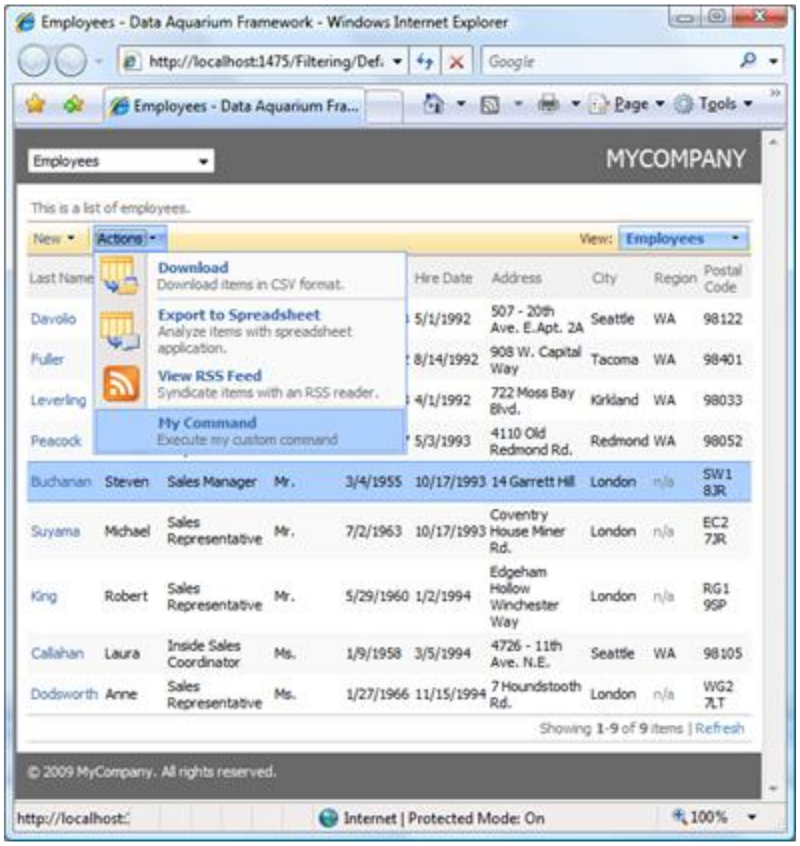
The method is designed to be invoked when any *Custom* action is requested from *grid1* view. The parameter *employeeId* will indicate the currently selected employee.

Property *Arguments* provides access to all information that the framework has to offer about the requested action.

We will split the argument by comma and will request the JavaScript class *Web.DataView* of the framework to navigate to the requested page and have an employee with ID specified in the second segment of the argument to be displayed on the default page. This will happen only if the selected *EmployeeID* is less than or equal to 4. Otherwise a simple alert will display the value of the command argument.

Notice that no actual JavaScript code is written here. The framework methods are encapsulating the calls to the client-side library. If you are familiar with JavaScript then use *Result.ExecuteOnClient* to send custom scripts to the client.

Open the default page of the web site in a browser and select the fifth employee in the list. Request action *My Command* from the action bar.


Employees - Data Aquarium Framework - Windows Internet Explorer
http://localhost:1475/Filtering/Def.
Google
Employees - Data Aquarium Fra...
Page
Tools
Employees
MYCOMPANY
New
Actions
View: Employees
Download
Download items in CSV format.
Export to Spreadsheet
Analyze items with spreadsheet application.
View RSS Feed
Syndicate items with an RSS reader.
My Command
Execute my custom command
http://localhost:
Internet | Protected Mode: On
100%

This is a list of employees.

Last Name					Hire Date	Address	City	Region	Postal Code
Davolio					5/1/1992	507 - 20th Ave. E.Apt. 2A	Seattle	WA	98122
Fuller					8/14/1992	908 W. Capital Way	Tacoma	WA	98401
Leverling					4/1/1992	722 Moss Bay Blvd.	Kirkland	WA	98033
Peacock					5/3/1993	4110 Old Redmond Rd.	Redmond	WA	98052
Buchanan	Steven	Sales Manager	Mr.	3/4/1955	10/17/1993	14 Garrett Hill	London	n/a	SW1 8JR
Suyama	Michael	Sales Representative	Mr.	7/2/1963	10/17/1993	Coventry House Miner Rd.	London	n/a	EC2 7JR
King	Robert	Sales Representative	Mr.	5/29/1960	1/2/1994	Edgeham Hollow Winchester Way	London	n/a	RG1 9SP
Callahan	Laura	Inside Sales Coordinator	Ms.	1/9/1958	3/5/1994	4726 - 11th Ave. N.E.	Seattle	WA	98105
Dodsworth	Anne	Sales Representative	Ms.	1/27/1966	11/15/1994	7 Houndstooth Rd.	London	n/a	WG2 7LT

Showing 1-9 of 9 items | Refresh

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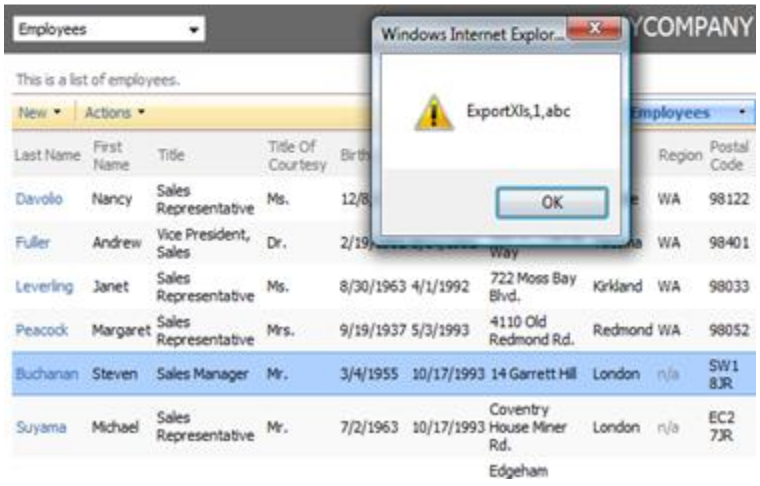
As expected, our method *MyCommand* will be invoked, which will result in alert displayed to a user. This happens since the fifth employee has ID equal to 5.



Employees

Windows Internet Explor...

ExportXls,1,abc

OK

YCOMPANY

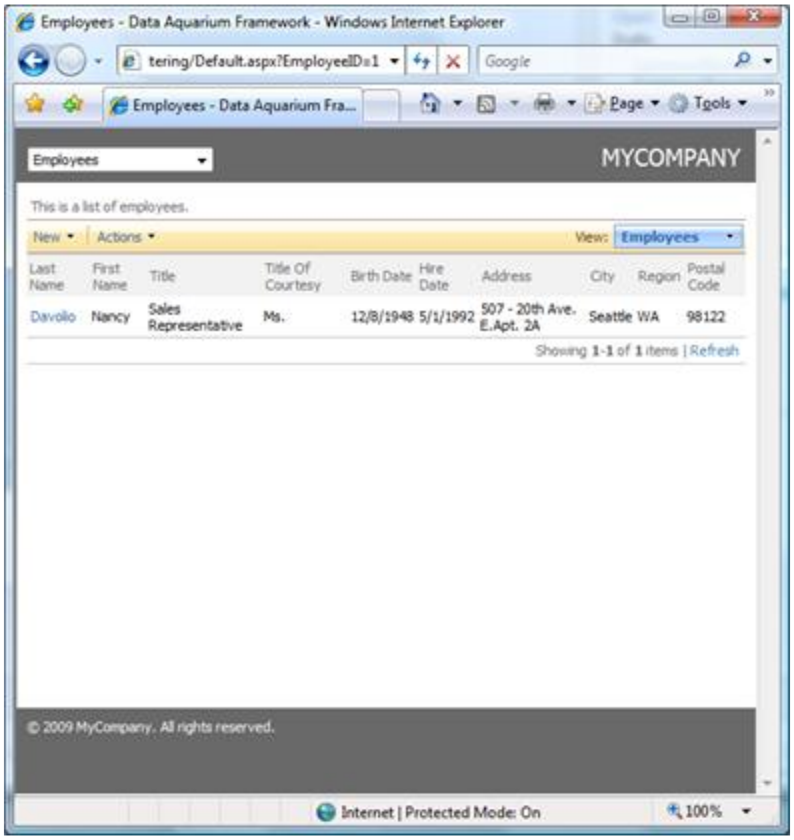
This is a list of employees.

New · Actions · Employees

Last Name	First Name	Title	Title Of Courtesy	Birth				Region	Postal Code
Davolio	Nancy	Sales Representative	Ms.	12/8				WA	98122
Fuller	Andrew	Vice President, Sales	Dr.	2/19		Way		WA	98401
Leverling	Janet	Sales Representative	Ms.	8/30/1963	4/1/1992	722 Moss Bay Blvd.	Kirkland	WA	98033
Peacock	Margaret	Sales Representative	Mrs.	9/19/1937	5/3/1993	4110 Old Redmond Rd.	Redmond	WA	98052
Buchanan	Steven	Sales Manager	Mr.	3/4/1955	10/17/1993	14 Garrett Hill	London	n/a	SW1 8JR
Suyama	Michael	Sales Representative	Mr.	7/2/1963	10/17/1993	Coventry House Miner Rd.	London	n/a	EC2 7JR
						Edgeham			

You can see that the argument is the one specified in the data controller descriptor.

Now, select any employee record above the one in the picture and invoke the same command on the action bar again.



Employees - Data Aquarium Framework - Windows Internet Explorer

tering/Default.aspx?EmployeeID=1

Employees - Data Aquarium Fra...

Employees

MYCOMPANY

This is a list of employees.

New · Actions · View: Employees

Last Name	First Name	Title	Title Of Courtesy	Birth Date	Hire Date	Address	City	Region	Postal Code
Davolio	Nancy	Sales Representative	Ms.	12/8/1948	5/1/1992	507 - 20th Ave. E.Apt. 2A	Seattle	WA	98122

Showing 1-1 of 1 items | Refresh

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Internet | Protected Mode: On

100%

This time the navigation has been performed and employee with ID equal to 1 is filtered. You can find more information about navigational filtering at http://blog.codeontime.com/2009/04/present-what-you-want.html.

The *NavigateUrl* can point to any page or generic handler in your application. The handler may render a report or respond in some other way to the requested action.

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