Dynamically Populating a Control Using JavaScript Code

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Overview

The **DynamicPopulate** control in the ASP.NET AJAX Control Toolkit calls a web service (or page method) and fills the resulting value into a target control on the page, without a page refresh. It is also possible to trigger the population using custom client-side JavaScript code.

Steps

First of all, you need an ASP.NET Web Service which implements the method to be called by the **DynamicPopulateExtender** control. The web service implements the method **getDate()** that expects one argument of type string, called **contextKey**, since the **DynamicPopulate** control sends one piece of context information with each web service call. Here is the code (file **DynamicPopulate.vb.asmx**) which retrieves the current date in one of three formats:

```
<%@ WebService Language="VB" Class="DynamicPopulate" %>

Imports System.Web
Imports System.Web.Services
Imports System.Web.Services.Protocols
Imports System.Web.Script.Services

<ScriptService()> _
Public Class DynamicPopulate
  Inherits System.Web.Services.WebService

  <WebMethod()> _
    Public Function getDate(ByVal contextKey As String) As String
    Dim myDate As String = ""
    Select Case contextKey
      Case "format1"
        myDate = String.Format("{0:MM}-{0:dd}-{0:yyyy}",
   DateTime.Now)
      Case "format2"
        myDate = String.Format("{0:dd}.{0:MM}.{0:yyyy}",
   DateTime.Now)
      Case "format3"
        myDate = String.Format("{0:yyyy}/{0:MM}/{0:dd}",
   DateTime.Now)
     End Select
    Return myDate
  End Function

End Class
```

In the next step, create a new ASP.NET site and start with the ASP.NET AJAX ScriptManager control:

```
<asp:ScriptManager ID="asm" runat="server" />
```

Then, add a label control (for instance using the HTML control of the same name, or the **<asp:Label />** web control) which will later show the result of the web service call.

```
<label id="myDate" runat="server" />
```

Next, include a **DynamicPopulateExtender** control and provide web service information, target control, but not the name of the control which triggers the population—this will be done later on, using custom JavaScript!

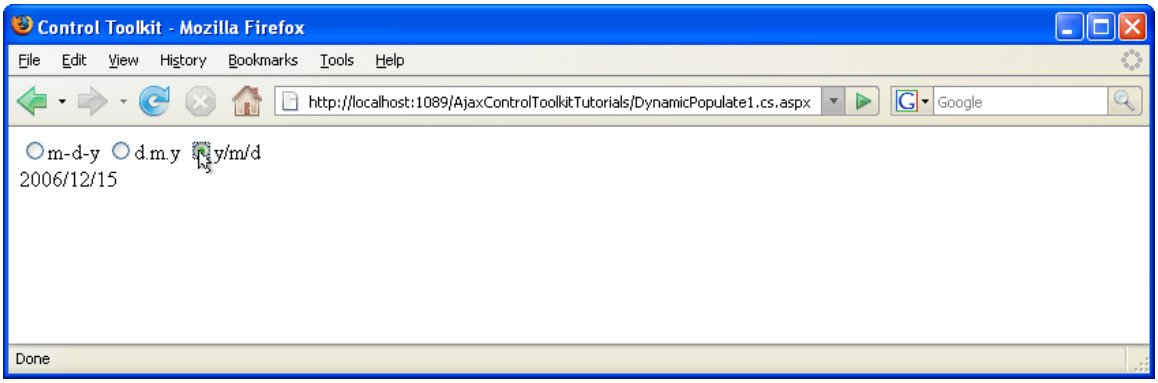
```
<ajaxToolkit:DynamicPopulateExtender ID="dpe1" runat="server"
   ClearContentsDuringUpdate="true"
  TargetControlID="myDate" ServicePath="DynamicPopulate.vb.asmx"
   ServiceMethod="getDate" />
```

Now to the JavaScript part. The **$find()** function, defined by the ASP.NET AJAX library, returns a reference to server-side objects of the ASP.NET AJAX Control Toolkit such as **DynamicPopulateExtender**. In the current file, **$find("dpe")** returns a reference to the one **DynamicPopulateExtender** control in the page. It exposes a method called **populate()** which triggers the dynamic population process. The **populate()** method requires one argument: the context key which will serve as argument to the **getDate()** web method. So for instance, **$find("dpe").populate("format1")** would populate the label with the current date in month-day-year format.

In order to make the sample a bit more flexible, the user may now choose between several date formats. For each one of them, a radio button is displayed. Once the user clicks on a radio button, JavaScript code dynamically populates the label with the selected date format. Here are those radio buttons:

```
<asp:Panel ID="panel1" runat="server">
  <input type="radio" id="rb1" name="format" value="format1"
   runat="server"
    onclick="$find('dpe1').populate(this.value);" />m-d-y
  <input type="radio" id="rb2" name="format" value="format2"
   runat="server"
    onclick="$find('dpe1').populate(this.value);" />d.m.y
  <input type="radio" id="rb3" name="format" value="format3"
   runat="server"
    onclick="$find('dpe1').populate(this.value);" />y/m/d
</asp:Panel>
```

Note that within the context of a radio button, the JavaScript expression **this.value** refers to the value of the current button, which happens to be exactly the same information the **getDate()** method can work with.



A click on the button retrieves the date from the server, in the format specified