UpdatePanel.UpdateMode Property

Reference

Definition

Namespace: System.Web.UI

Assembly: System.Web.Extensions.dll

Gets or sets a value that indicates when an UpdatePanel control's content is updated.

C#

```
public System.Web.UI.UpdatePanelUpdateMode UpdateMode { get; set; }
```

Property Value

UpdatePanelUpdateMode

One of the UpdatePanelUpdateMode values. The default is Always.

Exceptions

ArgumentOutOfRangeException

The specified type is not one of the UpdatePanelUpdateMode values.

Examples

The following example declares two UpdatePanel controls. In the first panel, the UpdateMode property is set to Conditional. In the second panel, UpdateMode is set to Always. A button outside both panels is registered as an asynchronous postback control by calling the RegisterAsyncPostBackControl method of the ScriptManager control. In the button's `Click` event handler, the Update method of the first panel is called if more than five seconds have elapsed since its last update. In this scenario, the panel's content is updated only if the last panel refresh was more than five seconds ago. The content of the second panel is always updated.

ASP.NET (C#)

```
<%@ Page Language="C#" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<script runat="server">
    protected DateTime LastUpdate
    {
        get
        {
            return (DateTime)(ViewState["LastUpdate"] ?? DateTime.Now);
        }
        set
        {
            ViewState["LastUpdate"] = value;
        }
    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        if (LastUpdate.AddSeconds(5.0) < DateTime.Now)
        {
            UpdatePanel1.Update();
            LastUpdate = DateTime.Now;
        }
    }

    protected void Page_Load(object sender, EventArgs e)
    {

        ScriptManager1.RegisterAsyncPostBackControl(Button1);
        if (!IsPostBack)
        {
            LastUpdate = DateTime.Now;
        }
    }
</script>

<html xmlns="http://www.w3.org/1999/xhtml">
<head id="Head1" runat="server">
    <title>UpdatePanelUpdateMode Example</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:ScriptManager ID="ScriptManager1"
                               runat="server" />
            <asp:Panel ID="Panel1"
                       GroupingText="UpdatePanel1"
                       runat="server">
                <asp:UpdatePanel ID="UpdatePanel1"
                                 UpdateMode="Conditional"
                                 runat="server">
                    <ContentTemplate>
                        <p>
                            The content in this UpdatePanel only refreshes if
five or more
                            seconds have passed since the last refresh and the
button in
                            UpdatePanel2 was clicked. The time is checked
                            server-side and the UpdatePanel.Update() method is
called. Last
                            updated: <strong>
                                <%= LastUpdate.ToString() %>
                            </strong>
                        </p>
                    </ContentTemplate>
                </asp:UpdatePanel>
            </asp:Panel>
            <asp:Panel ID="Panel2"
                       GroupingText="UpdatePanel2"
                       runat="server">
                <asp:UpdatePanel ID="UpdatePanel2"
                                 runat="server">
                    <ContentTemplate>
                        <p>
                            This UpdatePanel always refreshes if the button is
clicked.
                            Last updated: <strong>
                                <%= DateTime.Now.ToString() %>
                            </strong>
                        </p>
                    </ContentTemplate>
                </asp:UpdatePanel>
            </asp:Panel>
            <asp:Button ID="Button1" Text="Button1" runat="server"
OnClick="Button1_Click" />
        </div>
    </form>
</body>
</html>
```

Remarks

When an UpdatePanel control is not inside another UpdatePanel control, the panel is updated as determined by the settings of the UpdateMode and ChildrenAsTriggers properties, together with the collection of triggers. When an UpdatePanel control is inside another UpdatePanel control, the child panel is automatically updated when the parent panel is updated.

The content of an UpdatePanel control is updated in the following circumstances:

- If the UpdateMode property is set to Always, the UpdatePanel control's content is updated on every postback that originates from anywhere on the page. This includes asynchronous postbacks from controls inside other UpdatePanel controls and postbacks from controls that are not inside UpdatePanel controls.
- If the UpdatePanel control is nested inside another UpdatePanel control and the parent update panel is updated.
- If the UpdateMode property is set to Conditional, and one of the following conditions occurs:
    - You call the Update method of the UpdatePanel control explicitly.
    - The postback is caused by a control defined as a trigger by using the Triggers property of the UpdatePanel control. In this scenario, the control explicitly triggers an update of the panel content. The control can be either inside or outside the UpdatePanel control that defines the trigger.
    - The ChildrenAsTriggers property is set to `true` and a child control of the UpdatePanel control causes a postback. A child control of a nested UpdatePanel control does not cause an update to the outer UpdatePanel control unless it is explicitly defined as a trigger.

Applies to

Product	Versions
.NET Framework	3.5, 4.0, 4.5, 4.5.1, 4.5.2, 4.6, 4.6.1, 4.6.2, 4.7, 4.7.1, 4.7.2, 4.8, 4.8.1

See also

- UpdatePanelUpdateMode
- Update()
- ChildrenAsTriggers

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