

The AdRotator Control

The AdRotator randomly selects banner graphics from a list that's specified in an external XML schedule file.

Before creating the control, it makes sense to define the XML schedule file. Here's an example:

```
<Advertisements>
<Ad>
<ImageUrl>hdr_logo.gif</ImageUrl>
<NavigateUrl>http://www.apress.com</NavigateUrl>
<AlternateText>Apress - The Author's Press</AlternateText>
<Impressions>20</Impressions>
<Keyword>books</Keyword>
</Ad>
<Ad>
<ImageUrl>techEd.jpg</ImageUrl>
<NavigateUrl> http://www.microsoft.com/events/teched2008</NavigateUrl>
<AlternateText>TechEd from Microsoft</AlternateText>
<Impressions>20</Impressions>
<Keyword>Java</Keyword>
</Ad>
<!-- More ads can go here. -->
</Advertisements>
```

Each <Ad> element has a number of other important properties that configure the link, the image, and the frequency, as described in Table 4-21.

Table 4-21. Advertisement File Elements

Element	Description
ImageUrl	The image that will be displayed. This can be a relative link (a file in the current directory) or a fully qualified Internet URL.
NavigateUrl	The link that will be followed if the user clicks the banner.
AlternateText	The text that will be displayed instead of the picture if it cannot be displayed. This text will also be used as a tooltip in some newer browsers.

Impressions	A number that sets how often an advertisement will appear. This number is relative to the numbers specified for other ads. For example, a banner with the value 10 will be shown twice as often as a banner with the value 5.
Keyword	A keyword that identifies a group of advertisements. This can be used for filtering. For example, you could create ten advertisements and give half of them the keyword Retail and the other half the keyword Computer. The web page can then choose to filter the possible advertisements to include only one of these groups.

The actual AdRotator class provides a limited set of properties. You specify both the appropriate advertisement file in the AdvertisementFile property and the type of window that the link should follow in the Target property. You can also set the KeywordFilter property so that the banner will be chosen from entries that have a specific keyword.

Here's an example that opens the link for an advertisement in a new window:

```
<asp:AdRotator          runat="server"          AdvertisementFile="Ads.xml"
Target="_blank" />
```

Figure 4-15 shows the AdRotator control. Try refreshing the page. When you do, you'll see that a new advertisement is randomly selected each time.



Figure 4-15. The AdRotator control

Additionally, you can react to the `AdRotator.AdCreated` event. This occurs when the page is being created and an image is randomly chosen from the file. This event provides you with information about the image that you can use to customize the rest of your page.

The event-handling code for this example simply configures a `HyperLink` control so that it corresponds with the randomly selected advertisement in the `AdRotator`:

```
protected void Ads_AdCreated(Object sender, AdCreatedEventArgs e)
{
    // Synchronize a Hyperlink control elsewhere on the page.
    InkBanner.NavigateUrl = e.NavigateUrl;
    // Synchronize the text of the link.
    InkBanner.Text = "Click here for information about our sponsor: ";
    InkBanner.Text += e.AlternateText;
}
```