Using <base href/> with Anchors

By Roger Keays, 26 June 2007

A <base href="homepage-url"/> tag in the header of the pages in your site is enormously convient for building sites which can be moved from one domain or location to another. Unfortunately, there is one downside - it breaks anchor links. In this blog I explain the whole problem with the base tag and show you how you get around the problem with broken anchor links.

The purpose of the <base/> tag is to specify the base location for resolving relative urls. It was only ever meant to be used for viewing a page where the document root is not available (for example, from an email) and should technically point to the actual document location, rather than the homepage. However, there are two significant advantages to the latter:

1. Your site can be easily ported to a new location; and
2. Your web applications can be built without any reference to the location they are installed.

Any HTML purist and they'll tell you that using <base href="homepage-url"/> to artificially rewrite all your urls relative to your homepage or application context is abusing the intended use of the tag. Well, okay, so that's not what it was designed for, but I'm fairly certain HTML wasn't design to build applications like Google Maps either, but people did it anyway.

The problem

The Achille's Heel of the base href tag is that anchor links will all resolve to the homepage unless you include the relative path of the document also. For example, if the base href was http://www.example.com, notice how the following urls are resolved:

	Relative URL	***Absolute URL***
Broken:	*#anchor*	*http://www.example.com/app#anchor*
Corrected:	*page#anchor*	*http://www.example.com/app/page#anchor*

This doesn't cause a problem if you are happy to manually include the page location in each anchor link. For our CMS however, we wanted the editor to do this work for us and there are two problems with making this transparent to the user:

1. When new pages are created they don't yet have a URL, and
2. If the user changes the url of a page, the links need to be updated also.

The solution

To solve this problem we turned to our temperamental friend, Javascript. Javascript can be used to fetch the absolute location of a document, and then just add the anchor on the end. All that we needed was to program the editor to insert anchor links to look like this:

```
<a href="javascript:;" onclick="document.location.hash='anchor';">Anchor</a>
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These links downgrade gracefully when javascript is not available and simply do nothing when they are clicked.

View a demonstration of the javascript anchors.

About Roger Keays

Roger Keays is an artist, an engineer, and a student of life. He has no fixed addressand has leftfootprints on 40-something different countries around the world. Roger is addicted to surfing. His other interests are music, psychology, languages, the proper use of semicolons, and finding good food.