

Dynamic Dueling: Grappling with Java-Based Site Maps

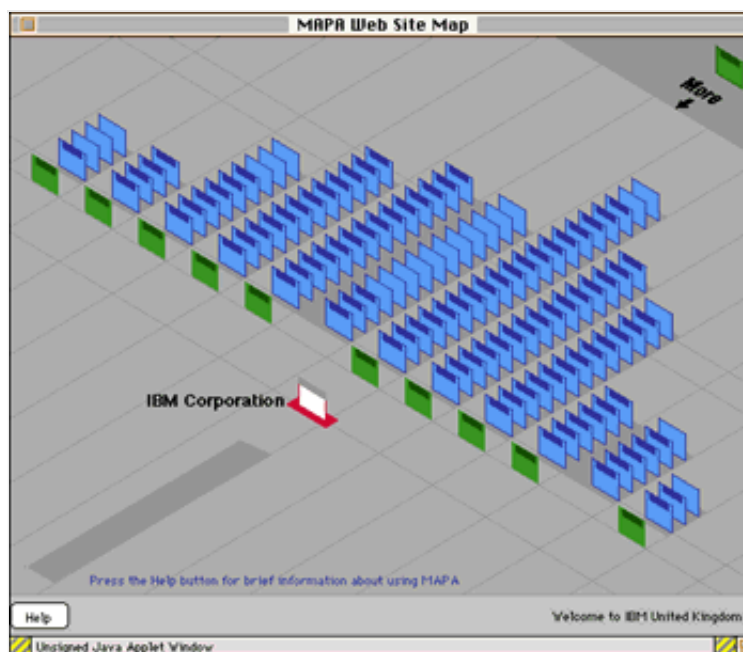
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People keep telling me to check out the dynamic Java-based site map on the **IBM** Web site. They tell me it's a major step forward in site navigation. They tell me it automates the Web site indexing process. They tell me it's really cool.



How do I find IBM's site map? What is the map? Click on the link to IBM's site in the first paragraph and select the "Map" button at the top of the IBM main page. Then select "Draw Map" from the pop-up window to activate the Java-based map.



A map of the entire IBM site is then created when you click on the "Draw Map" button. The map is an interactive map of the site hierarchy that represents individual pages as colored boxes.

In fact, I discovered this "powerful new way to visualize and better understand your Web site's organization, content, and scale" several months ago. I popped up the applet, waved my cursor over the colorful boxes a few times, and dismissed the tool as an attractive curiosity without much practical value.

But I continued to receive messages telling me about this great new application. Finally, it became obvious that these dynamic diagrams weren't going away without a fight. Unchecked, they could set off a global epidemic of frame-like proportions.

Understanding the Enemy

I think it was Sun Tzu, author of "The Art of War," who said that before you can defeat your enemy, you must first understand them. With this in mind, I decided to find out more about these mischievous maps.

When you first bring up the map, you're presented with several columns of colored boxes. The help system explains that each box represents a page on the Web site. The white box with a red base shows your current location. Green boxes show pages one link away and blue boxes show pages two or more links away. Dark shading at the top of a box signifies a "major" page. When you run your cursor over a box, the title and URL are displayed. If you click on a box, the diagram rearranges itself with the page in question as your current location. If you double-click, that page is opened in your Web browser.

I pursued my investigation further, finding that the "MAPA" application is brought to us by a company named **Dynamic Diagrams**. Judging by their excellent **white paper**, these folks really do understand the problems of navigation in the online environment. Unfortunately, their solution just doesn't seem to work.

The Frontal Assault

My frontal assault begins with the usability of these maps. The major problem is that

they severely limit the amount of information displayed at any one time. The colorful array of boxes provides a sense of the shape of the Web site, but that's not what users want from a navigation tool. They want to find information quickly.

To find information with MAPA, I must carefully position the cursor over box after box, reading the titles and URLs of each page to find my way. A typical search requires first scanning the green *top of the hierarchy* boxes, which are frequently spread over two or more MAPA screens, before honing in on a particular branch of the hierarchy. Note that these branches may include dozens of blue boxes.

For example, the "IBM Planetwide" branch has 47 boxes, each representing the main page of an IBM location. Because the indexing was done automatically, these pages are in no recognizable order, so if you're looking for IBM in Aruba it will literally take you over a minute. I timed it. Compare that to the two seconds it takes to choose Aruba from the pull-down menu on the main page.

When I compare the usability of this highly graphical map with that of a more traditional text-based **table of contents**, the traditional approach wins hands-down. You can scan the contents much faster and you don't need a fast connection or a Java-enabled browser.

The Flank Attack

Call me a Luddite, but I can't let Dynamic Diagrams' claim to automagical site mapping stand without firing a few volleys in their general direction. Their product description states:

"MAPA automatically creates hierarchical relationships between pages in your site, then visualizes those relationships as an animated three-dimensional site map and as a page title list. With MAPA, your Web site can create its own site map that's always up-to-date."

First of all, it's the information architect (i.e., a human being) who assigns titles to pages and creates the hierarchical relationships between these pages. MAPA simply provides an alternative means of visualizing the relationships. That's an important distinction.

The usability of the Web site and its map is directly dependent upon the quality of this human-designed information architecture.

Second, these maps are not "always up-to-date." The map for the IBM site includes references at the main page level to old news stories, long since removed from the main page. While this is probably an easy problem to fix, it does raise the question of map management. Obviously someone needs to keep an eye on these things.

Third, few Web sites are purely hierarchical in nature. Web sites are filled with hypertextual relationships and often provide multiple paths to the same information. This presents a problem for automated site mapping approaches.

For example, the main page of the IBM site does have several primary links such as products, support and research which lead to major areas of the site. However, the main page also has a number of news-oriented links which appear in other places on the site and really don't merit the same prominence on the map as the major categories.

Dynamic Diagrams does have a solution. MAPA comes with a "Structure Editor" that allows the site designer to "edit the site's hierarchical structure to better reflect the authors' intentions." This is an intelligent solution to the problem, but it's not automated. Not only does an information architect need to be involved in the original creation of the site's structure, but he or she also needs to shape the map itself.

Who'll Win the War?

Like I said, people keep telling me to check out these cool new maps with their enhanced utility and automated indexing. In light of the recent Frame and Java epidemics, I'm sure Dynamic Diagrams will win a few battles as people fall prey to the pretty pictures and the promises of automation. However, I really don't think this tool helps people to navigate Web sites, and I can't see Dynamic Diagrams winning the war.