

ost people I know choose their Web browser based on which one crashes less often. Invariably, either Netscape Navigator or Microsoft Internet Explorer is ridiculously unstable, so they choose the other. Sad, but true. If you're lucky, the browser you prefer actually works reliably on your system.

Enter iCab, a new browser built by a small German company. (See <http://www.atpm.com/5.03/icab.shtml> and <http://www.icab.de> for more information.) iCab has been getting a lot of press lately, but opinions are divided. About half the people I've talked to think iCab is terrific. The other half seem to have no idea why people rave about it. This column will focus on answering that question.

I do not know of anyone who finds iCab unstable, even in its present preview state. It has never crashed or unexpectedly quit on me. I wish I could say that about the Big Two, which are significantly larger than iCab in both company size and disk usage. Netscape Communicator 4.5 takes up more than 20 MB on my system. Granted, it does a lot more than browse the Web, but that's all I use it for. Internet Explorer 4.5's folder uses about 5 MB, and it also puts several files in the System Folder (there are some code sharing reasons for this, but overall I think it's a bad idea). Further, IE 5.0 (for Windows) weighs in at 110 MB; we can only hope that they have better plans for the Mac version (which, apparently, is delayed until fall).

iCab 1.3 Preview uses a mere 2 MB. Both Netscape and IE require installers, although IE's is self-running. iCab needs only one file (the iCab application) to run. Back in 1984 people took this stuff for granted. Today it is a feature.

Is your Web browser a memory hog? Netscape Communicator uses about 8 MB of RAM. IE uses 4 MB in the Get Info window, but it also gobbles up your system's temporary memory. Although Microsoft has commented that IE releases memory when other applications need it, that has not been my experience. After a hour or so of surfing graphics-heavy Web sites in multiple windows, IE gobbles up more than 100 MB of RAM on my system, and I am forced to quit it.

What about iCab? It uses only 1400K of memory.

Even better, iCab is very fast at rendering pages. It's not fast enough to make one forget how slow Web browsers always seem to be, but it feels much faster than Netscape and IE, especially when rendering local files. This may change in the coming months as iCab Company adds support for Cascading Style Sheets and Netscape's display engine is replaced with the new Gecko, however at present iCab is the speed champ in my book.

## Features You've Come To Expect

Of course, speed and stability are worthless if the browser is missing features you have grown accustomed to. iCab does not disappoint. It has a nice download manager that is very similar to IE's, supports the command-click shortcut for opening a link in a new window that I have been unable to live without since IE 3, has the usual support for bookmarks (called the Hotlist), and so on.

Like IE, iCab lets you download an entire Web site, however iCab gives you more options than IE, which only lets you limit the link depth; and unlike IE, iCab does not store the downloaded site in a proprietary format. iCab even has some of the new features from IE 4.5, namely support for auto-filling forms. However, it does not have the latter's Page Holder or Print Preview.

## Innovation

Maybe disk and memory usage don't concern you, and your current Web browser runs fast and stable. In that case, iCab would not be worth a look if it did not offer any extras. Luckily, it does.

iCab has great support for Web developers. Unlike Netscape and IE, if you save an HTML source file (in BBEdit, say) the open copy in iCab will automatically update without the need to click the Refresh button. The browser window includes a little face icon that smiles or frowns depending on the correctness of the page's HTML. Clicking on the face summons a list of HTML errors. You can even choose which HTML specification iCab uses to validate pages. Even though HTML authoring tools like BBEdit and Adobe GoLive have syntax checkers, Web developers will find iCab's validator useful because it can check the page after server-side includes have been inserted. Normal Web surfers can in turn see how the HTML of their favorite sites stacks up. I think they will be surprised at how bad some of it is. If iCab ever gains a significant market share, it may provide some incentive for Web developers to fix up their HTML. A rather humorous preference lets you control whether iCab simulates rendering bugs in Netscape and IE, in order to display certain pages "correctly."

robably iCab's most controversial feature is its filtering. Like the WebFree control panel that has been around for a few years, iCab can filter which images are downloaded based on their URLs. It can also filter out images with certain dimensions. iCab comes pre-configured (but with filtering disabled) to block many advertisement banners. Since many sites (ATPM included) depend on advertisement revenue to provide their services, I'd prefer people didn't use this feature. Nevertheless, I have personally found it very helpful at speeding downloads when I'm on the road accessing the Internet through a modem. I doubt Microsoft or Netscape would ever include such functionality in their browsers.

My favorite innovative feature in iCab is the navigation toolbar beneath the URL box. This bar contains a slew of icons that provide access to meta information embedded in the <LINK REL> tags of certain Web pages. This information can include links to the next or previous page, the home page, the copyright notice, the "parent" page, and more. If every browser and Web developer supported this meta information, a good portion of the buttons and text links on Web pages could be eliminated. Instead of having to scroll and decipher cryptic image maps, users would always have quick access to the essentials of navigation on the navigation bar. The same buttons would work for every page, making the Web much simpler to navigate. The Web pages, meanwhile, would be free to devote a higher percentage of their space to actual content. Although these tags have been official since 1997 and were around long before that, they are not widely used because neither of the Big Two implemented support for them. If they ever become widely used, they will be a boon for users and may make possible a new generation of intelligent software agents that understand the link structure of pages.

## Usability Improvements

In many ways, iCab works a lot like Netscape or IE, yet it manages to improve on them. You can set your preferred fonts for viewing pages in, and you can also set a preferred language and different fonts for headings and body text. Not only can you quickly increase or decrease the size of the display font from the toolbar, but you can also set its exact size without going to the preferences. The standard array of commands is available through contextual menus, however iCab also offers submenus listing links from the current page and subsections of the current page. The History works much like IE's, and iCab also uses a different icon to show which history pages currently reside in the download cache.

There is full support for accepting and rejecting cookies, as well as blanket rejection for whole domains. You can choose how iCab identifies itself to Web servers, masquerading as a different browser for compatibility if necessary.

A neat feature lets you save logs of communication with Web servers. I imagine this feature was probably used internally by iCab Company for debugging, but Web developers may find

it useful for testing out their servers.

iCab has the usual controls for managing its disk cache, however, it also lets you manage separate caches for Web pages and for images. Personally, I like to cache images, which rarely change, rather than HTML, which is often updated between my visits to pages.

As usual, you can view the source of an HTML page color-coded for readability. In addition, you can customize the colors of the different HTML elements, and edit the HTML in-place from within iCab. Alternatively, you can set iCab to always view the source in a helper application like BBEdit.

Whereas IE and Netscape have rudimentary support for finding text on a Web page, iCab also lets you search whole folders of local HTML files (useful for searching the HTML-formatted help files that many programs now provide) as well as simultaneously searching a collection of Web search sites, à la Sherlock. In addition to searching for strings of text, you can exclude or require certain words.

My favorite: iCab actually supports drag and drop in a sensible way. A much-touted feature of IE 4.5 is the ability to drag a translucent copy of an image to the Finder to save it to disk. But have you ever tried that with a large image? That can cause even a G3 to freeze for a second when you first start dragging, and the whole process feels incredibly slow. iCab simply displays an outline while you are dragging: less flashy but it works better. Similarly, it lets you drag text to the desktop (IE doesn't!), and when you drag a link to the desktop it makes an OS 8.5 URL clipping (usually what I want) instead of downloading the link to disk. Just about any text you see in iCab—even HTML errors—is draggable. Use it too much and IE (which is already the smoother of the Big Two, in my opinion) starts to feel downright clunky.

## So What's the Catch

Whether iCab can replace your current Web browser depends on whether you require Cascading Style Sheets, JavaScript, Netscape Plug-Ins, or security certificates. As far as I know, none of these is currently supported (although CSS support is definitely on the way). The only other catch is that iCab will eventually cost about \$25; however I think that is a small price to pay for one of the most important applications on your hard disk. I see it as a way I can vote for a standards-based Macintosh product, in the face of less-inspired loss leaders from the corporate giants. Although it is far from perfect, iCab is the first Web browser since Cyberdog that I actually like.

Shortly after writing a piece lamenting the lack of competition in the Macintosh software market, I am very encouraged by the scope and quality of work put into iCab. Perhaps it is still possible for two guys in a garage to overthrow entrenched standards. At the very least, we now have evidence that speed and stability are not the only areas where Netscape and IE can improve.

"The Personal Computing Paradigm" is copyright © 1999 by Michael Tsai, <[mtsai@atpm.com](mailto:mtsai@atpm.com)>. Support for iCab's navigation bar is coming to an ATPM Web site near you. Look for a review of iCab when the final version is released.