SearchEnterpriseDesktop.com E-Guide

Executive's Guide to Evaluating, Securing, and Deciding on Microsoft Internet Explorer 8

Selecting a web browser option that satisfies end users while meeting IT department security requirements is not always an easy task. In this expert E-Guide, brought to you by SearchEnterpriseDesktop.com, gain insight into new features offered with Internet Explorer 8 that will help ease security concerns for IT staff members. Plus learn how new cross-browser compatibility capabilities will make it easier for IE8 to adhere to Web standards.

Sponsored By: Microsoft®

SearchEnterpriseDesktop.com E-Guide

Executive's Guide to Evaluating, Securing, and Deciding on Microsoft Internet Explorer 8

Table of Contents:

IE8 kicks Web browser security up a notch, eases burden on IT

SearchCIO-Midmarket.com Staff

Web browser security is an important part of any IT security plan. While the market has some strong browser contenders from Google and Mozilla, experts suggest that the newest version of Internet Explorer may be the best bet for smaller organizations.

New features and updates in IE8 take Web browser security up a notch over some of the competition. Tack on the widely publicized corporate attacks stemming from vulnerabilities in IE6 and targeting companies such as Adobe Systems Inc. and Google Inc., and it comes as no surprise that IE8 recently surpassed earlier versions of Internet Explorer as the most popular Web browser in the world.

According to security experts, IE6 has many flaws and compatibility issues that make it significantly more vulnerable to attacks than IE7 or IE8. Recently, hackers exploited a new Internet Explorer zero-day flaw -- breaching network security and comprising intellectual property and data. Although attacks of this nature are not new, they stand as a reminder that companies should take an in-depth approach to security and not just rely on a specific security technology. Still, part of that overall security approach should be an upgrade from IE6, experts said.

Microsoft has added some features to IE8 that not only provide a higher level of protection, but also ease some of the administrative burden on IT. The SmartScreen Filter, for example, blocks sites that are identified as malicious and provides warnings when someone attempts to download a file from a suspicious or malicious website. That could be helpful for small and medium-sized businesses without dedicated IT or information security professionals.

And while IE is a popular target for attacks, other well-known Web browsers have also had their share of vulnerabilities recently. Popular browsers Mozilla Firefox (with 44 vulnerabilities reported in 2009) and Apple Safari (with six vulnerabilities) made an annual list of highly used, high-risk software in 2009, despite vendor efforts to improve security patching times and deployments. Part of the problem, according to some experts, is that some user interaction is necessary to deploy Web browser security updates -- and IT is usually kept out of the process. Some browsers, such as Google's Chrome, automatically update to reduce user disruption and patch deployment times. This feature minimizes the length of time that users run unpatched versions of the browser, thus reducing vulnerabilities. Internet Explorer, on the other hand, can be centrally updated by IT administrators.

IE8 brings focus to cross-browser compatibility and Web standards

Brien M. Posey, MCSE

In its last few releases, Internet Explorer (IE) has focused primarily on addressing the various security issues that have plagued it for years. But IE8 promises to be different. In IE8, the majority of new features will take aim at cross-browser compatibility and at improving Internet Explorer's adherence to Web standards. Although IE8 is still in beta testing, some of these changes may pose compatibility problems with a shop's existing Web applications.

The source of these compatibility issues: numerous standards that are supposed to be supported uniformly by all Web browsers but that no one enforces. As a result, two different browsers might render the same Web page in two different ways because the creators of these browsers apply standards as they see fit rather than following standards to the letter.

Not following a standard doesn't always mean that important parts of a standard are omitted, however. In many cases, the standards may be augmented so that a browser will support commands in ways in which they were never intended to be used (at least not according to the standards).

Internet Explorer 8 will be the first version of Internet Explorer with a strict standpoint on Web standards compliance. So, for example, if an existing Web application was designed to rely on features or "quirks" of Internet Explorer that are not part of the underlying Web standards, it's likely that the Web application won't work correctly.

This raises two questions: Which Internet Explorer features will be affected by this new standardization, and second, what happens if a Web application depends heavily on something that is no longer going to be supported?

To answer the first question, according to the Microsoft website, the browser inconsistencies addressed so far include separate URL handling for attributes and the Get, Set and Remove attribute implementations, which have been made compatible with other browsers. Further, IE8 supports default HTML attributes so that HTML attributes always exist, even if they are not applied explicitly to an element.

To answer the second question, IE8 remains in beta testing, and even when it is finally released, it will probably take some time for it to become widely adopted. So you've still got time to modify your Web application.

Also, although IE8 will run in Standards mode by default, it can also run in a couple of backward-compatibility modes to display otherwise incompatible Web pages. One is Strict mode, which is designed to make IE8 behave like IE7. The other is Quirks mode, and it can be used to make IE8 support the same kinds of features as IE5 and other legacy browsers.

I believe that it is a huge mistake to leave incompatible Web applications in their current form and expect site visitors to work in Strict mode. For one, many of the site's visitors probably won't know how to use Strict mode or won't want to be bothered with switching browser modes. Another reason for adapting your site now is that while IE8 will include a feature that makes it backward-compatible with IE7, IE9 may not include this feature.

Resources from Microsoft

Microsoft®

Windows Internet Explorer 8 Technology Overview for Enterprise and IT Pros

Internet Explorer 8 Desktop Security Guide

Part 1: Can Mozilla Support Claims of Firefox Being the Most Secure Browser?

About Microsoft

Microsoft products include operating systems for personal computers, server applications for client/server environments, business and consumer productivity applications, and interactive media programs, and Internet platform and development tools. Microsoft also offers online services, sells personal computer books and input devices, and researches and develops advanced technology software products. Microsoft products, available in more than 30 languages and sold in more than 50 countries, are available for most PCs, including Intel microprocessor-based computers and Apple computers.