BrowserHawk 9 by cyScape

Customize your Web visitor's site experience

By Nicholas Tunney

I have been developing Web applications for years, and have been using random JavaScript snippets gleaned from the Web to test a user's browser and configured properties. Since this script would be run client side, it required the user to have JavaScript enabled and didn't always work in all browsers.

I had always wished for a quick and easy server-side solution to handle simple browser and plug-in checking, but had never even fathomed having access to the amount of information that is made available using BrowserHawk from cyScape. If you think this is just another browser detection script, you could not be more wrong. Not only does BrowserHawk detect basic browser settings, it also detects disabled plug-ins, blocked pop-ups, AJAX support, blocked ports, estimated download time, WAP settings, and so much more! BrowserHawk Enterprise can actually detect over 125 properties and settings of your visitor's browser and connection .

Installation

I downloaded and installed BrowserHawk 9.0.0.21 Enterprise edition from the cyScape Web site. You can choose from either an FTP or HTTP download. The download was small and quick, even using my hotel's wireless connection. The version that works with ColdFusion is written in Java, and I installed and tested this on the CF 7.0.1 standalone server. As a side note, BrowserHawk is also available for ActiveX and .NET.

There is surprisingly quite a bit of documentation that comes with BrowserHawk; however, some of the initial installation instructions might be a bit complicated for beginners. Unfortunately, some links in the documentation are broken, and the online documentation does not seem to cover the Java installation; however, scrolling down through the documentation, you will find instructions for several different configurations that are much clearer than the initial documentation. There currently is no installer for the Java version, but the rumor at cyScape is that the installer is an important addition that they are including in the next version. It seems that ColdFusion is a big priority on their list. They have also hinted at some additional exciting ColdFusion-specific features, but you'll have to wait to hear about that from them.

Since this is a Java install, the server needs to be restarted at the end of the installation process, but if you followed the instructions correctly, you will be able to test BrowserHawk immediately with the detailed example files that are included in the Zip file. The demo files are all linked through a single index.html page, which makes it very easy to navigate and test with no additional setup.

Usage

Initially, as I am like most developers and just dive right in, I began using the JavaBean immediately instead of reading the help files. It was very straightforward to initialize by looking through the sample code, and after dumping the object and viewing what functions and values are available, I was able to detect some pretty neat settings. I then read through the readme file a bit and found that cyScape has included a ColdFusion custom tag that makes it very simple to use most functionality in BrowserHawk. This tag acts as a wrapper for the BrowserHawk JavaBean and will be a great help for ColdFusion beginners and for new users learning BrowserHawk. The custom tag does not immediately accept all of the properties available, but the document states that it does return results for the most popular BrowserHawk tests including detecting browser type, version, platform, broadband vs. dialup connections, Flash and Acrobat plug-ins, disabled

PRODUCT FEATURE	STANDARD	PROFESSIONAL	ENTERPRISE
Detect all IE, Netscape, and Mozilla browsers	✓	✓	✓
Detect hundreds of other browsers including WebTV, Opera, Gecko based browsers, and AOL	✓	✓	✓
Detect hundreds of search engines and crawlers	✓	✓	✓
Detect installed Microsoft .NET CLR and version	✓	✓	✓
GUI based Editor for viewing/customizing browser definitions	✓	✓	✓
Integration with Microsoft InterDev and other IDEs	✓	✓	✓
Detect 80+ properties including platform, DHTML, XML, StyleSheets, FileUpload, and more	✓	✓	✓
Reverse DNS lookups	✓	✓	✓
Detect WAP and PDA devices	✓	✓	✓
Detect SSL key size (i.e. 40 Vs. 128 bit) from HTTPS pages	✓	✓	✓
Integration with CountryHawk (requires CountryHawk, available separately)	✓	✓	✓
Detect disabled cookies		✓	✓
Detect disabled images		✓	✓
Detect when IE is run in High Security mode		✓	✓
Automatic browser definition updates		✓	✓
Detect disabled JavaScript and disabled Java applets		✓	✓
Detect Flash, Shockwave, MediaPlayer, RealPlayer, Acrobat, Quicktime, Adobe SVG, and Authorware plug-ins		✓	✓
Detect screen size, browser window size and color depth		✓	✓
Detect broadband Vs. dial-up connections		✓	✓
Detect user connection speed throughput in bits per second		✓	✓
Detect browser local time and time zone difference between client and server		✓	✓
Detect language of user and OS		✓	✓
Easily generate XML representation of BH results		✓	✓
Detect Font Smoothing setting in control panel		✓	✓
DashCache for maximum performance		✓	✓
Automatic caching and retrieval of BH results to the user's session (Automatic Session Caching)		✓	✓
Real-time, unique browser statistics not available with any other web reporting software			✓
Automatic logging of all statistics to your database with no programming required!			✓
Detect blocked popups!			✓
Detect installed fonts			✓
Detect disabled ActiveX controls and disabled VBScript			✓
Detect disabled/blocked SSL			✓
Detect JVM version and Java vendor			✓
Detect build number of the installed Microsoft JVM dll			✓
Detect service pack (i.e. ";SP2;Q271292") and browser build (i.e. 6,0,2462,0)			✓
Detect detailed operating system version information, including Mac OS X versions			✓
Enhanced connection speed testing to finely control the balance between testing time and accuracy of results			✓
Download time estimator automatically calculates the download time for a specified file based on user's connection speed			✓
Detect JavaScript and VBScript build numbers (i.e. 5.6.6012)			✓
Detect SSL key size without requiring a separate HTTPS page for testing			✓
Detect firewalls, proxy settings, and blocked ports			✓
Detect iPIX, Crystal Reports, Citrix ICA, Viewpoint, MapGuide, and Java plug-ins			✓
Detect custom plug-ins			✓
Detect View->Text Size setting in IE 5+			✓
Detect minimum Windows Installer version			✓
Detect Microsoft XML parser version			✓
Detect Microsoft NetMeeting build number			✓
Real-time monitoring of internal DashCache parameters for optimizing component speed			✓

Table 1:

cookies/JavaScript, and much more. Also, it seems very simple to configure the custom tag to use the remainder of the BrowserHawk methods.

The custom tag simply takes a comma-delimited list of the properties you want to test for and returns a structure of name/value pairs.

Example

```
<cfmodule template="BrowserHawk4J.
cfm" propstotest="Browser, Platform"
bhvarname="myResults" />

<cfoutput>
    #myResults.Browser#, #myResults.Platform#
</cfoutput>
```

On my system, this returned "FireFox, WinXP". The process is also very fast, and auto-caching is an available feature in BrowserHawk. This seems to be especially useful if you are performing some of the more complex tests like client port detection (that's right, client port detection! I told you this package is powerful).

In Table 1 I have included the features comparison across the three available versions of BrowserHawk. This grid will show you the unbelievable power possible in this package. You can quickly see this is so much more than those old JavaScripts we have become accustomed to.

Reporting

BrowserHawk also allows you to store detected settings in a database and generate reports. I know this is something many of my clients have requested over the years, and BrowserHawk makes it simple. The reporting package includes SQL scripts to create the necessary table for persisting this information in Microsoft SQL, DB2, MySQL, Oracle, and Apache Derby. I did not test the reporting feature on my server as I did not have enough data to make it interesting, but I have included a sample screenshot (see Figure 1). From the demo it seems as though by default you can report on about 50 different statistics.

Issues

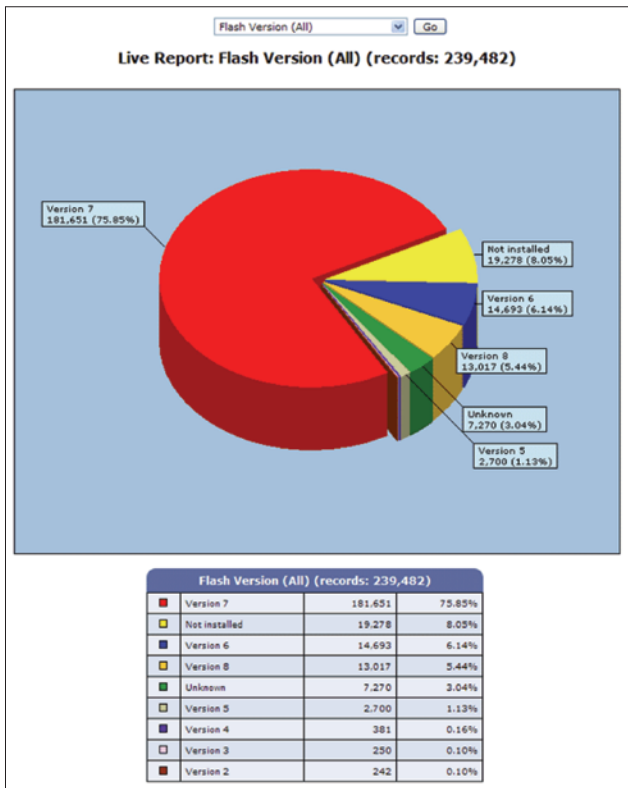One thing I was disappointed with is that the online demo of BrowserHawk (located at http://www.cyscape.com/

Figure 1

showbrow.aspx?bhcp=1) shows the visitor's country as an accessible setting; however, Enterprise edition of BrowserHawk does not include this feature. You need to take a look at CountryHawk for that awesome functionality, although the Enterprise edition does include many other location specific values. Also, I could not find a list of all possible properties I could return. The readme file includes two links that apparently list all properties, but the links are dead. I'm sure cyScape will get these links up and working soon.

Conclusion

I personally think that we will be hearing more about this powerful product. It is definitely the software to use for customizing your Web visitor's site experience. I definitely will be using BrowserHawk in the future. While you may not need all of the functionality of the Enterprise edition, they have a fair pricing structure that will allow you to purchase only the functionality you need. BrowserHawk is already being used by many high profile companies such as Verizon, Intel and even Adobe. Go download the demo at www.cyscape.com today.

About the Author

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