



WHITE PAPER



PRIVACY UTILITIES

Effects of Spyware/Adware on SiteCatalyst Data Collection

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Version 2.0



1 Spyware/Adware Utilities



TIP: Most of the information in this white paper does not apply if first-party cookies are deployed instead of third-party cookies.

A variety of utilities have been published to fight “spyware” and “adware.” Although web analytics providers should not be classified as spyware or adware, some of the authors of these utilities have grouped them in with these invasive applications. Because SiteCatalyst is not spyware/adware, most of these utilities do not affect SiteCatalyst’s browser-based data collection in any way. In fact, a good number of these utilities provide little benefit to consumers. Some of these utilities even have questionable origins or alliances, providing “protection” against one form of invasion – such as hacking – while providing surreptitious functionality such as Internet monitoring or ad serving.

These utilities are described in detail below, along with any effect that may result on SiteCatalyst data collection or reporting. Any effect noted herein must be compared to the inaccuracies of other data collection methods, such as the inaccuracy of web server logs (including caching, inclusion of web bots, spiders, and other automated traffic, inclusion of web monitoring such as Keynote, and other causes of inaccuracy).



NOTE: In practical experience, Omniture is able to achieve data accuracy to within 1-2 percentage points based on a comparison of purchase events compared to our customers’ order records. This indicates that the overall effect of privacy utilities, IE’s built-in privacy management functions, and other contributors such as Internet latency and packet loss, contribute only 1-2 percent of inaccuracy combined.

A few key points regarding all the products that we have reviewed:

- **Accurate Metrics.** Most of the utilities do not interfere with the accurate transmission of data from the user’s browser to SiteCatalyst data collection servers.
- **Cookie Deletions.** Utilities that delete cookies merely “reset” a visitor to “new” for the web site. Current technology only provides for two methods of identifying visitors: IP address and browser cookies. Since IP addresses can change dynamically and at any time, even with the drawback of occasionally resetting cookies, it is still a much more accurate method of uniquely identifying visitors.
- **Consumer Perception.** None of the utilities create a perception of Omniture or SiteCatalyst in respect to any activity other than “data mining” or “tracking”.

Webroot Window Washer

Webroot Window Washer version 5.5 is available from Webroot Software, the developers and publishers of Spy Sweeper. The product targets “spyware” and “adware”. Window Washer is an application that is downloaded and installed on user machines, and supports Microsoft® Windows® 98 SE/ME/2000 and XP (it does not support NT, Mac OS, or Unix/Linux). The product is available in a trial version that will scan a user’s drive and list all “offending” files such as cookies. In a trial on Windows XP, we encountered several programming bugs that crashed the program.

A review of the traffic analysis for Webroot (includes all their products) can be found on Alexa’s website at this URL: http://www.alexa.com/data/details/traffic_details?q=&url=webroot.com. Note that Webroot’s Internet “reach” is rated by Alexa as 175 visitors per 1,000,000, or about 0.0175% of all Internet traffic. If every visitor to Webroot’s site downloaded and installed either the Window Washer or the Spy Sweeper utility, the maximum number of visitors affected would be significantly less than one percent.

Effects

Removes browser cookies. The user is allowed to remove all except for specific cookies or all cookies on specific domains. The effect on SiteCatalyst data collection is that the visitor will be counted as a “new visitor” during the next visit to any Omniture client site (the cookie will be rewritten to the hard drive at the next visit). The utility does not

prevent data collection or cause any other effect on SiteCatalyst metrics. Window Washer may be set to automatically remove or purge cookies on a scheduled basis.

Webroot Spy Sweeper

Webroot Spy Sweeper version 3.0 is available from Webroot Software. The product targets "spyware" and "adware". Spy Sweeper is an application that is downloaded and installed on user machines, and supports Microsoft® Windows® 98/ME/2000 and XP (it does not support NT, Mac OS, or Unix/Linux). The product is available in a 30-day trial version.

Spy Sweeper acts as both a "shield" and a "scanner", allowing a user to prevent third-party cookies from being set, or by removing cookies that have already been set. Spy Sweeper does not list the "spyware" sites, cookies, or definitions on which it is based.

A review of the traffic analysis for Webroot (includes all their products) can be found on Alexa's website at this URL: http://www.alexa.com/data/details/traffic_details?q=&url=webroot.com. Note that Webroot's Internet "reach" is rated by Alexa as 175 visitors per 1,000,000, or about 0.0175% of all Internet traffic. If every visitor to Webroot's site downloaded and installed either the Spy Sweeper or the Window Washer utility, the maximum number of visitors affected would be significantly less than one percent.

Effects

Removes Browser Cookies. The user is allowed to remove all except for specific cookies or all cookies on specific domains. The effect on SiteCatalyst data collection is that the visitor will be counted as a "new visitor" during the next visit to any Omniture client site (the cookie will be rewritten to the hard drive at the next visit). If the "IE tracking cookies shield" is enabled, the SiteCatalyst cookie will not be set at all, and the user tracked by the combination of IP address and user agent string instead. The utility does not prevent data collection or cause any other effect on SiteCatalyst metrics. Spy Sweeper may be set to automatically remove or purge cookies on a scheduled basis.

Ad-aware (Lavasoft)

Ad-Aware 6.1 is available from Lavasoft Sweden (<http://www.lavasoftusa.com/>), and targets "datamining, aggressive advertising, and tracking components". Ad-aware is an application that is downloaded and installed on user machines, and supports Microsoft® Windows® 98/Me/NT/2000 and XP Home and Professional (it does not support Mac OS or Unix/Linux). The product is available in a Freeware version that will scan a user's drive and list all "offending" files and Windows Registry entries.

A review of the traffic analysis for Lavasoft can be found on Alexa's website at this URL: http://www.alexa.com/data/details/traffic_details?q=&url=lavasoft.de. Note that Lavasoft's Internet "reach" is rated by Alexa as 375 visitors per 1,000,000, or about 0.0375% of all Internet traffic. If every visitor to Lavasoft's site downloaded and installed the Ad-aware utility, the maximum number of visitors affected would be significantly less than one percent.

Ad-aware will identify cookies on a client machine that are placed by "dataminers". Among these cookies, the SiteCatalyst cookie will be identified. The user may then choose to remove (quarantine) these cookies to avoid tracking. Note that the Freeware version does not have a scheduling feature, so that it must be run by the user periodically. As a result of the inability to schedule the application to run periodically, most users will use the application only infrequently.

Note that Ad-aware also erroneously identifies the Start Up Page of Internet Explorer (if set to "about:blank") as a "Possible Browser Hijack attempt".

Among other identified "dataminers" or "tracking components" are: Doubleclick, Kazaa, Windows Media Player, Custhelp.com (RightNow.com), MediaPlex, WebTrends, HitBox, BlueStreak, Red Sheriff, Coremetrics, Centrport, Advertising.com, ValueClick, and Atlas DMT.

Effects

Removes Browser Cookies. The user is allowed to quarantine identified cookies, and thus remove the cookies from their machine. The effect on SiteCatalyst data collection is that the visitor will be counted as a "new visitor" during the next visit to any Omniture client site (the cookie will be rewritten to the hard drive at the next visit). The utility does not prevent data collection or cause any other effect on SiteCatalyst metrics.

Anonymizer PrivateSurfing 2.1 (Anonymizer, Inc.)

Anonymizer PrivateSurfing 2.1 is an Internet Explorer browser plug-in that allows users to surf the web anonymously. The utility works by requesting a web page from Anonymizer servers, which load the page on behalf of the user, filter the pages for unwanted content, and return the page to the user. In the Custom Settings mode, cookies may also be disabled.

To quantify the potential distribution for Anonymizer, we referred to the traffic analysis for Anonymizer, which can be found on Alexa's website at this URL: http://www.alexa.com/data/details/traffic_details?q=&url=anonymizer.com.



NOTE: Anonymizer's Internet "reach" is rated by Alexa as 303 visitors per 1,000,000, or about 0.0303% of all Internet traffic. The effect on web statistics, therefore, can be projected as minimal at best (well below one percent). Additionally, Anonymizer "broke" the checkout process at Walmart.com, and we did not receive the confirmation page for our order (nor did we receive a confirmation email for our order). We got as far as "Authorizing Your Credit Card", but the order number and summary was never displayed.

Effects

Refuses Cookies. PrivateSurfing may be set to refuse third-party cookies when visiting web sites. SiteCatalyst uses a cookie to uniquely identify a visitor, and measure unique new and repeat visitors across time. If a cookie is refused, all metrics are still collected accurately, except that the visitor is tracked by IP address, which may change on subsequent visits. However, the number of visits and visitors is still accurately reported by SiteCatalyst. Metrics for conversion and campaign variables will also be affected by the failure to set a cookie in the visitor's browser.

Anonymous Surfing. PrivateSurfing also rewrites the HTML of the pages that are visited, which prevents the user from being tracked (the utility comments out the SiteCatalyst JavaScript code). We believe, however, that because the feature causes web sites to function incorrectly, most users will quickly abandon PrivateSurfing for day-to-day browsing. This particularly applies to conversion visitors.

SpyBlast (Advertising.com)

SpyBlast is an intrusion detection utility that is provided by Advertising.com (previously available on the site <http://www.spyblast.com/>).



NOTE: SpyBlast may not currently be downloaded. It appears that distribution of the product has been halted. SpyBlast is also not available on Download.com.

Effects

None. Omniture does not attempt to connect to a machine in any way that can be construed as an "intrusion." SiteCatalyst is unaffected by SpyBlast.

SpyHunter (Enigma Software)

SpyHunter is a downloadable utility by Enigma Software Group (<http://www.enigmasoftwaregroup.com/>) that is very similar to Ad-aware. The product is compatible with Windows 98, ME, 2000, or XP, and Internet Explorer 6.0 and greater. A free scanner is available, but the software costs \$29.99 if you wish to remove any cookies or "spyware".

A review of the traffic analysis and potential effect on the Internet population, for Enigma Software can be found on Alexa's website at this URL: [http://www.alexa.com/data/details/traffic_details? q=&url=enigmasoftwaregroup.com](http://www.alexa.com/data/details/traffic_details?q=&url=enigmasoftwaregroup.com). Note that Enigma's Internet "reach" is rated by Alexa as 138 visitors per 1,000,000, or about 0.0138% of all Internet traffic. This is less than 1/2 the effect of Lavasoft's Ad-aware.

Among identified "dataminers" or "tracking components" are Coremetrics, HitBox, Centrport, Atlas DMT, Doubleclick, MediaPlex, and others.

Effects

Omniture's cookie is not currently identified, flagged, or quarantined by SpyHunter at all.

ZoneAlarm Pro (Zone Labs)

Zone Labs (<http://www.zonelabs.com/>) is the creator of the software firewall product "ZoneAlarm Pro". The product is available in various versions. The company also produces a version that allows anonymous web surfing and one that provides web content filtering. The web content filtering is based on technology from Cerberian (<http://www.cerberian.com/>) that is embedded into ZoneAlarm Pro with Web Filtering. All versions allow the user to block pop-up browser windows and third-party cookies.

ZoneAlarm Pro does not prevent the SiteCatalyst JavaScript from executing, or the image request that transmits information to SiteCatalyst. Because the JavaScript executes and the image is created and populated with the data to be captured, all data is captured accurately.

Effects

Refuses Cookies. ZoneAlarm Pro may be set to refuse third-party cookies when visiting web sites. SiteCatalyst uses a cookie to uniquely identify a browser, and measure unique new and repeat visitors across time. If a cookie is refused, all metrics are still collected accurately, except that the visitor is tracked by IP address, which may change on subsequent visits. However, the number of visits and visitors is still accurately reported by SiteCatalyst. Metrics for conversion and campaign variables will also be affected by the failure to set a cookie in the visitor's browser.

AdSubtract/SpySubtract (interMute, Inc.)

AdSubtract and SpySubtract are utilities published by interMute, Inc. (<http://www.intermute.com/>). Both utilities support Windows 95/98/NT/2000/Me/XP, and cost \$29.99. Both have 30-day downloadable demo versions.

SpySubtract is a utility similar to Ad-aware, because its primary function is to scan a user's hard drive and find adware and "Internet Cookies." SpySubtract does not interfere with web browsing, cookies, or SiteCatalyst JavaScript. After scanning, it identified the following companies: Commission Junction, ValueClick, Mediaplex, HitBox, Advertising.com, and Centrport, among others.

AdSubtract filters pop-ups, ads, and allows a user to block cookies. AdSubtract can also be configured to hide referring URLs, and allow the user to disable both Java Applets and JavaScript. When the "Cookies" option is enabled, a stern warning is given the user that says "Most users do not disable all cookies", and asks if the user is sure they want to disable all cookies. The JavaScript and Java applet option does affect SiteCatalyst, but also renders many sites useless.

Effects

<p>Refuses Cookies</p>	<p>AdSubtract may be set to refuse third-party cookies when visiting web sites. SiteCatalyst uses a cookie to uniquely identify a browser, and measure unique new and repeat visitors across time. If a cookie is refused, all metrics are still collected accurately, except that the visitor is tracked by IP address, which may change on subsequent visits. However, the number of visits and visitors is still accurately reported by SiteCatalyst.</p>
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	Metrics for conversion and campaign variables will also be affected by the failure to set a cookie in the visitor's browser.
Disables JavaScript	With all JavaScript disabled, JavaScript is removed from the HTML page. With this setting, some sites will refuse to load or will work incorrectly. We do not believe that users will keep this setting beyond a few pages due to the limited functionality of the web with JavaScript disabled. For instance, without JavaScript, GM.com will not load at all and Dodge.com does not display the majority of home page graphics.
Disables Referrer	With the Referrer disabled, campaign and conversion variables will report "None" as the Referrer more often than normal when comparing Referrer or Referring Domain.



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