



SUNBELT SOFTWARE

Hotbar

(Software Review)

Sunbelt Software
Research Center

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Overview

The Hotbar Web Tools package (often referred to simply as "Hotbar") is a collection of browser and system enhancements that is installed from Hotbar.com, ShopperReports.com, and Wowpapers.com. At the heart of this collection of add-ons and utilities is the Hotbar toolbar, which is a skinnable browser toolbar for Internet Explorer. Also installed with the Hotbar toolbar, however, are several other programs including:

- AccuWeather: a local weather program
- WOWPapers: a desktop wallpaper utility
- Outlook Tools: add-ons for Microsoft's Outlook and Outlook Express email programs
- ShopperReports: an Internet Explorer add-on that pops out sideseach bar advertising

The Hotbar Web Tools package displays several forms of advertising on users' desktops.

Distribution & Installation

Hotbar is distributed primarily at three web sites:

- Hotbar.com
- Wowpapers.com
- ShopperReports.com (shopperreports.pricetool.com)

Researcher Andrew Clover claims that Hotbar was "previously bundled with iMesh and other free software, and promoted through misleading junk e-mail" (<http://www.doxdesk.com/parasite/Hotbar.html>), though these installation and distribution practices have apparently stopped, and Sunbelt has found no evidence of their still continuing.

The program can be installed either via a traditional setup executable (Hotbar.exe or hbtools.exe) that users must download to their desktops and run or via an automated ActiveX installation process (using Hotbar.cab or hbtools.cab) initiated at a landing page at Hotbar.com.

While many users might directly visit the Hotbar.com, ShopperReports.com, or Wowpapers.com web sites and affirmatively click through an installation link to request the software, many other users might encounter the Hotbar ActiveX installation process in confusing circumstances, because Hotbar actively advertises via banner ads and pop-ups at third-party web sites. Users who click the banner ads or pop-ups might not be aware that they are in fact initiating the installation of the Hotbar software, for clicking the pop-ups or banner ads opens the landing page (<http://hotbar.com/installation/Browsing/install.aspx?>) at Hotbar.com which immediately begins the ActiveX installation process.

Two examples illustrate the problems with Hotbar's advertising at third-party web sites. First, users who visit the "Innovators of Wrestling" web site (iowrestling.com) could encounter a pop-

up offering a "FREE local weather indicator" which can be added to the System Tray (<http://net-offers.net/popups/ashtm/HotbarNetworkUSPU.html>):



Figure 1: Free weather program pop-up ad

Nothing in this pop-up clearly identifies the program to be installed as the Hotbar Web Tools collection (which does include the AccuWeather tray program), nor is there any indication that the software will display advertising on users' desktops. The only program disclosed in any way is the weather program. This pop-up includes no "Cancel" or "no" button to allow the user to refuse the offer, only an "OK" button. In fact, clicking anywhere in this pop-up effectively means "ok," as the entire GIF image used for this pop-up is hyperlinked to an installation page at Hotbar.com.

Users who click through the pop-up are taken to a landing page at Hotbar.com that immediately begins the ActiveX installation process for the Hotbar Web Tools package (see Figure 2 below):



Figure 2: Weather program installation landing page

Many users will likely find this a confusing experience, as there is no indication in the original pop-up, which suddenly appeared at an unrelated third-party web site, that merely clicking the pop-up would start the installation of software. Moreover, the landing page has the effect of preserving the mistaken impression that only weather software is being installed ("Adding weather Indicator to your system tray"), and there is no indication that the software to be installed includes advertising programs as well as several Internet Explorer browser enhancements. And nothing in what is affirmatively presented to the user discloses any of the other key functionality of the software (data collection/transmission, auto-updating, etc.).

While users can click the hyperlinked text in the ActiveX "Security Warning" box to read the Hotbar EULA (End User License Agreement, <http://hotbar.com/Legal/hotbar/license.htm>), few will know that they can do that, and even fewer will be inclined to do so, given that the software appears to be an innocuous weather program. The small number of users who do click to read the EULA will encounter a dense, difficult-to-read 4500 word legal document in which key terms are buried far down in the text. Users are never affirmatively presented with the Hotbar Privacy Policy -- only a link to it (<http://hotbar.com/Legal/hotbar/privacy.htm>) is provided almost towards the end of the EULA text, ensuring that most users will never see the key terms disclosed in that document (which itself contains yet another 3400 words of dense legalese).

Users who encounter this confusing weather pop-up at "Innovators of Wrestling" or any other third-party web site could very well unwittingly "consent" to the installation of software that they do not fully understand and may mistakenly believe is only a local weather program, when in fact they are consenting to the installation of advertising software.

Second, however, Hotbar is also known to display banner ads at third-party web sites including, disturbingly enough, web sites targeted at children, who are less capable of making good decisions about software installations on the PCs they are using. Researcher Ben Edelman has

thoroughly documented one such banner ad for "FREE Emoticon Icons!" displayed at TheKidzPage.com, a web site that is explicitly designed for and targeted at children (<http://www.benedelman.org/spyware/installations/kidzpage-hotbar/>).



Figure 3: TheKidzPage.com w/ "FREE Emoticon Icons!" Hotbar banner ad

As with the weather program pop-up, the software being plugged in this banner ad ("Free Emoticon Icons") has no apparent connection with the advertising software to be installed on users' PCs.

And as was the case with the weather program pop-up, clicking the banner ad takes users to a landing page that immediately initiates the installation of software whose true functionality and key terms are nowhere properly disclosed in any text or graphics presented to users (see Figure 4 below):



Figure 4: Free Emoticons installation landing page

As Edelman notes, the intended audience for TheKidzPage.com makes this banner ad especially inappropriate:

What's the big deal about offering software via methods that tend to reach children? For one, children generally cannot enter into contracts -- so even if a child clicks the "Yes" button Hotbar subsequently presents, Hotbar's license terms may not be binding. Also, children may be less able to assess the merits of an Hotbar offer -- less able to determine whether Hotbar software is a good value, less likely to realize the privacy and other consequences of installing such software, less inclined to examine a lengthy license agreement.

Neither the Hotbar installer screens nor the Hotbar license impose any restriction on the ages of users who may install or use Hotbar. The 30th on-screen page of Hotbar's 4,562-word license agreement offers a paragraph entitled "Children 13 and under." But that section makes no limitation on who can install Hotbar, instead merely encouraging parents of teenagers to determine whether the service is appropriate. Oddly, by issuing this special warning only to parents of teenagers, this clause also suggests that Hotbar is fine for toddlers but inappropriate for teens. The relevant language: "[P]arents or guardians of children over the age of thirteen should be aware that the Service is designed to appeal to a broad audience. Accordingly, it is your responsibility to determine whether any portion of the Service is inappropriate for your child." (emphasis added).

Typical users -- especially kids -- are unlikely to notice Hotbar's special kids provisions, when buried so far within a lengthy license that in turn is only shown if users specifically request it. Nothing within Hotbar's main installer screens in any way alerts users to special license provisions for kids or to the possibility that Hotbar is inappropriate for the very users who visit the sites that advertise Hotbar.

Given the poor disclosure as well as the attempts to avoid giving any visible indication that the software to be installed contains advertising functionality as well as several Internet Explorer browser enhancements, parents of children who visit TheKidzPage.com could very well find Hotbar's software on their families' PCs after their children "consent" to the installation of

software those children did not fully understand and that merely appeared enticing and exciting to children's sensibilities.

Although both of these example installations are technically performed on the Hotbar.com web site itself, the circumstances in which users are persuaded to click through these banner ads and pop-ups, combined with the fact the landing page immediately initiates an ActiveX installation process that many users will find confusing, make these installations problematic. Indeed, in both cases the installation process is arguably started at a third-party web site. In no way can users who click such banner ads and pop-ups be said to have explicitly requested the installation of Hotbar's software because nothing in that advertising indicates that merely clicking the banner ad or pop-up will initiate the installation of software -- at best users can be said to have requested more information.

Even installations started and performed entirely at Hotbar's own web sites suffer from problems with context, notice, and disclosure. For example, the Wowpapers.com web site invites users to download software that is by all appearances merely a program for changing the desktop wallpaper:

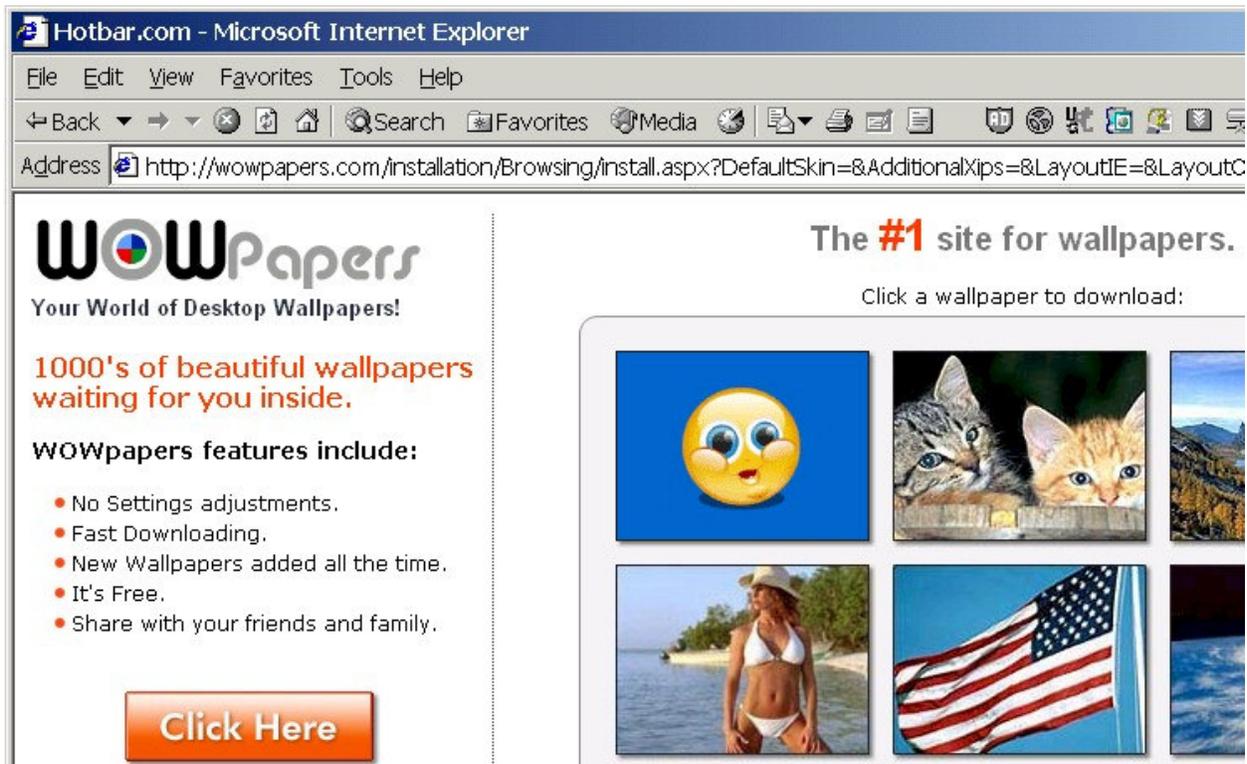


Figure 5: WOWpapers.com home page

Clicking the download link takes users to a landing page that starts the download of a traditional setup executable, which users will then have to run on their local machines (see Figure 6 below):



Figure 6: WOWPapers installation landing page

In fact, what users are downloading is the full Hotbar Web Tools package, which includes advertising programs and browser enhancements along with the desktop wallpaper program (WOWPapers) users were actually seeking. Although this landing page does not initiate an automated ActiveX installation process, it still fails to give any indication that the software to be installed is anything other than a desktop wallpaper program.

In sum, while many users will explicitly seek out the Hotbar Web Tools package for its skinnable toolbar and deliberately install it, many other users may unwittingly install this software package after it is presented to them in confusing and arguably misleading circumstances.

Advertising

The Hotbar Web Tools package installs software that displays at least three types of advertising on users' desktops:

1) Pop-up advertising

The Hotbar program does open contextual pop-up advertising on the desktop based on users' web browsing. Though this advertising does include some fine-print text in the footer to indicate its origin, it could be more clearly and conspicuously labeled -- especially the title bar text which fails to include the name "Hotbar" at all (see Figure 7 below):



Figure 7: Hotbar desktop pop-up ad

2) Toolbar advertising

The Hotbar toolbar creates toolbar buttons on-the-fly with links to competitive offers in response to users' web surfing:



Figure 8a: Hotbar toolbar ad buttons

These hyperlinked buttons are occasionally enhanced with animated Flash advertising.



Figure 8b: Hotbar toolbar ad buttons w/ Flash graphics

3) Sideseach bar advertising

Installed along with the Hotbar toolbar is an advertising program (ShopperReports) that opens sideseach bar results with competitive offers in Internet Explorer:



Figure 9: Sideseach bar advertising (ShopperReports)

This advertising is not as clearly distinguishable as advertising, given that users will likely have encountered the sideseach bar before and may not recognize that these search results are being generated by locally installed software. Moreover, this sideseach bar opens on its own in response to users' web surfing, not at the specific request of users, unlike most other sideseach bars.

As noted earlier, this advertising functionality is often not clearly disclosed to users during installation of the Hotbar Web Tools package. In fact, the most explicit disclosures of this advertising functionality occur only far down in the EULA text (<http://hotbar.com/Legal/hotbar/license.htm>), which many users will never see:

(b) Licensee shall receive, and desires to so receive, various products/services, marketing ads, and campaigns of third parties through the appearance of links, menus, pop-ups, and other methods on and/or in connection with the Service and the Software (all of the foregoing "Third Party Promotions"). Go to <http://www.hotbar.com/legal/hotbar/popup.htm> Click here to view samples of the Third Party Promotions.

It should be noted that the link offered to view samples of the Hotbar's advertising is, at the time of this writing, broken.

Still further down in the EULA is a separate license agreement, apparently for the Shopper-Reports advertising software:

HOTBAR'S COMPARATIVE SHOPPING ADDITIONAL TERMS OF USE AND END USER LICENSE AGREEMENT

[...]

(a) Description of Service

Hotbar's comparative shopping service improves the online shopping experience by enabling users to find the best prices, a variety of product and service options, and the convenience of one-stop online shopping. Hotbar's comparative shopping service (the "Comparative Service") automatically searches numerous Internet web sites to help you find alternative products or services, or alternative providers or deals. The Software sends a query to the Hotbar servers when you search on certain web sites. The Comparative Service then connects to third party providers of products or services ("Providers") with your query and provides you (in a separate window) with alternative purchasing options. The searches are conducted by the Providers, and the alternatives are either provided by other third parties or the Providers themselves. If one of the alternative options displayed by the Comparative Service fits your shopping needs, and you select it, you will be transferred to an external site hosted by either the Provider or by Hotbar ("External Site"). On the External Site, you can shop for products, make travel arrangements or sign up for a service. In addition, you can use the Comparative Service to search for deals on the Internet and to find or view related deals on certain websites. Hotbar receives a small agreed upon commission or fee from the Providers for referring you to them. This enables Hotbar to provide you the Comparative Service free of charge. [...]

(c) Affiliation with Alternative Sites and Providers

The Comparative Service may occasionally open a browser window or other form of display for you while you browse the Internet for various products or services. This may cause your original browser window to resize. Hotbar may then provide you with alternative options for such products or services from various Providers, and with links to such Providers' sites.

In its cease and desist letter to Sunbelt software, Hotbar appears to suggest that its Shopper-Reports software (referred to as SmartShopper in Hotbar's letter) is not "adware":

Moreover, among others, you also detect SmartShopper (the proprietary comparative shopping tool of Hotbar, which doesn't serve any popups) as spyware/adware.

The ShopperReports/SmartShopper software qualifies as "adware" because it is advertising software that displays commercial sales content paid for by advertisers. The fact that the ShopperReports/ SmartShopper software does not display pop-up advertising does not change the nature of the software itself, which is advertising software or "adware." Sunbelt defines "adware" as "software that displays advertisements" (http://research.sunbelt-software.com/threat_library_browse.cfm?Adware) -- a definition that clearly fits Hotbar's SmartShopper/ ShopperReports software.

Elsewhere in its letter Hotbar appears to suggest that all of Hotbar's advertising functionality can be disabled by the user:

Moreover, should a user choose to use the free ad-supported version of Hotbar's Software and, thereafter, wishes to stop receiving pop-ups, he/she can easily disable the display of pop-ups on his computer from the Hotbar preferences within the Hotbar browser toolbar.

Although, the user can in fact disable the pop-up advertising from the "Hotbar Preferences" menu, doing so does not disable the two other forms of advertising, including the sidesearch bar advertising from the ShopperReports software program.

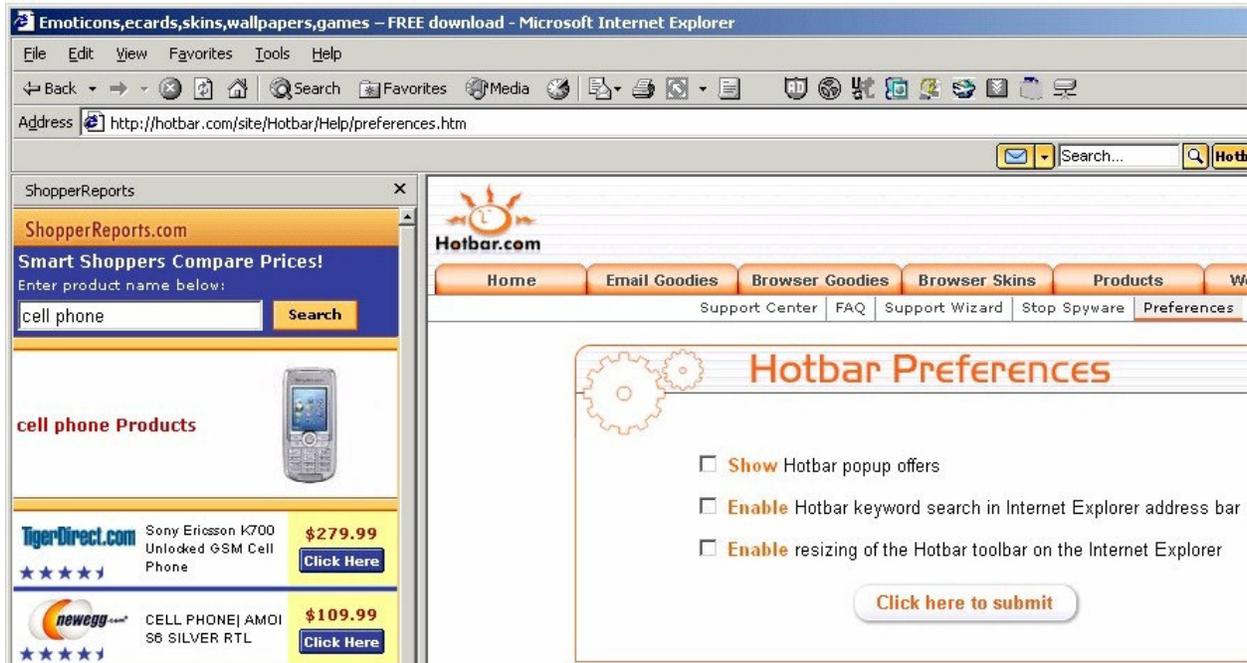


Figure 10: Hotbar Preferences w/ sidesearch bar ads

Hotbar's Web tools software package is saturated with advertising functionality, and many users will not be fully and properly aware of this functionality before they install Hotbar's software.

System Reconfiguration

The Hotbar Web Tools software package makes a number of changes to users' PCs, not all of which users will have anticipated, depending on the web site they were visiting and the way the software package was presented to them. The Hotbar Web Tools package makes the following changes to the user's PC:

- adds a skinnable browser toolbar with advertising functionality to Internet Explorer
- adds a toolbar and other features to the Outlook and/or Outlook Express email programs
- installs an advertising program that opens advertising in the Internet Explorer sideseach bar
- installs a desktop wallpaper utility
- installs a weather program to the System Tray
- configures several advertising programs to start or load automatically with Windows
- configures the Internet Explorer SearchAssistant to use:
<http://resultsmaster.com/SmartOffers/Services/resultsmaster/ResultsMasterHomeLeftPane.htm>

While users may find some of these changes and additions to be innocuous, the advertising-related changes and additions are not clearly and conspicuously disclosed to users during installation. Moreover, some users might find even the innocuous changes and additions to be unwelcome. For example, a user clicking through the install link at Wowpapers.com might be unpleasantly surprised to find that the Hotbar browser toolbar, Outlook Tools, AccuWeather, and ShopperReports programs had come along for the ride.

Also of concern is the fact that Hotbar's software includes an auto-update function that users cannot control and which can arbitrarily install software with no notice whatsoever to users. This auto-update function is disclosed only in the Privacy Policy, which most users will never see (<http://hotbar.com/Legal/hotbar/privacy.htm>):

SOFTWARE UPDATE

The Software is designed to check for the availability of software updates to ensure that you enjoy the latest improvements of the Software. When the Software checks for the availability of software update, anonymous information about the Software version and installed components are sent to our Web server. The information is used to determine whether new free Software is available for download and is not associated with your personally identifiable information.

As noted earlier, many users might actually desire the Hotbar browser toolbar or one of the other software programs included in the Hotbar Web Tools package, but many users will not be aware at the time of installation of the full range of changes and additions that will be made to their systems. And they almost certainly won't be aware of the auto-update functionality embedded in this software.

Data Collection, Transmission, & Sharing

The Hotbar software does monitor users' web surfing habits, collect data about that web surfing in order to target advertising, and upload that data to Hotbar itself, though Hotbar claims that users' surfing history is not tied to a unique profile of users. Still further, Hotbar claims not to surreptitiously collect Personally Identifiable Information (PII) or tie users' surfing habits to that PII. According to the Hotbar EULA (<http://hotbar.com/Legal/hotbar/license.htm>):

HOTBAR DOES NOT STORE ANY INFORMATION ABOUT SPECIFIC USERS' SURFING HABITS OR THE SITES THAT THEY VISIT. HOTBAR DOES AGGREGATE ANONYMOUS USAGE INFORMATION ACROSS ITS USER BASE FOR IMPROVING OUR PRODUCT AND THE OFFERS SHOWN TO THE USERS.

HOTBAR COLLECTS AND STORES AGGREGATED INFORMATION ABOUT THE WEB SITES ITS USERS VIEW AND THE DATA THEY ENTER IN SEARCH ENGINE SEARCH FIELDS WHILE USING THE SOFTWARE. HOTBAR USES THIS INFORMATION TO DETERMINE WHICH ADS AND BUTTONS TO DISPLAY ON YOUR HOTBAR TOOLBARS AND WHICH ADS TO SHOW YOUR BROWSER. HOWEVER, HOTBAR DOES NOT (A) ASSOCIATE OR STORE SUCH WEB USAGE DATA OR SEARCH INFORMATION WITH ANY PERSONALLY IDENTIFIABLE INFORMATION INCLUDING BUT NOT LIMITED TO YOUR NAME, EMAIL ADDRESS AND OTHER CONTACT INFORMATION OR (B) ANALYZE SUCH WEB USAGE DATA OR SEARCH INFORMATION TO DETERMINE THE IDENTITY OF ANY HOTBAR USER. SOME INFORMATION COLLECTED BY THE HOTBAR SOFTWARE IS PERSONALLY IDENTIFIABLE, SUCH AS NAME AND EMAIL ADDRESS. THIS PERSONALLY IDENTIFIABLE INFORMATION IS STORED SEPARATELY FROM THE INFORMATION ABOUT THE WEB SITES YOU VIEW AND THE DATA YOU ENTER IN SEARCH ENGINE SEARCH FIELDS AND THE TWO TYPES OF INFORMATION CANNOT BE CORRELATED OR LINKED. FURTHERMORE, HOTBAR DOES NOT AND CANNOT USE THIS PERSONALLY IDENTIFIABLE INFORMATION TO DETERMINE WHICH ADS AND BUTTONS TO DISPLAY ON YOUR HOTBAR TOOLBARS OR WHICH ADS TO SHOW YOUR BROWSER. PLEASE READ THE FOLLOWING AGREEMENT AND PRIVACY POLICY CAREFULLY BEFORE DOWNLOADING AND USING THIS SOFTWARE. IF YOU DOWNLOAD AND USE THIS SOFTWARE, YOU WILL BE BOUND BY THE TERMS OF THIS AGREEMENT, INCLUDING THE PRIVACY POLICY.

Still further down in the "Comparative Shopping" EULA tacked on to the bottom of the main EULA, though, Hotbar does disclose that users' "shopping queries" may be shared with third-party "participating Providers" for analysis:

(a) Description of Service

[...]

(b) Performance of the Comparative Service

If you elect to install the Software on your computer and use the Comparative Service, you hereby expressly authorize Hotbar and any of the participating Providers to: (i) analyze your shopping queries on certain sites in order to perform relevant shopping searches for you, (ii) contact aggregators of alternative products and services, options or deals that might be relevant to your shopping query; (iii) serve as your shopping aggregator across numerous shopping related sites in order to compile data relevant to your search queries (iv) open a new browser window, frame or other form of display on your computer (resizing any open browser windows that might be necessary to resize); (v) display

deals, offers and other search results based on your search queries, within the used form of display; (vi) collect basic information about any financial transactions performed via or facilitated through the Comparative Service in order for Hotbar to receive its referral fee from Providers; (vii) take all actions that Hotbar and any of the Providers determine necessary in connection with the items described above; and (viii) retain full authority and discretion to do everything possible to complete these activities, as you would individually.

Hotbar's data collection and transmission practices are described more exhaustively in the Hotbar Privacy Policy (<http://hotbar.com/Legal/hotbar/privacy.htm>), though it is likely that few users will ever see these terms:

HOTBAR DOES NOT STORE ANY INFORMATION ABOUT SPECIFIC USERS' SURFING HABITS OR THE SITES THAT THEY VISIT. HOTBAR DOES AGGREGATE ANONYMOUS USAGE INFORMATION ACROSS ITS USER BASE FOR IMPROVING OUR PRODUCT AND THE OFFERS SHOWN TO THE USERS.

HOTBAR COLLECTS AND STORES AGGREGATED INFORMATION ABOUT THE WEB SITES ITS USERS VIEW AND THE DATA THEY ENTER IN SEARCH ENGINE SEARCH FIELDS WHILE USING THE SOFTWARE. HOTBAR USES THIS INFORMATION TO DETERMINE WHICH ADS AND BUTTONS TO DISPLAY ON YOUR HOTBAR TOOLBARS AND WHICH ADS TO SHOW YOUR BROWSER. HOWEVER, HOTBAR DOES NOT (A) ASSOCIATE OR STORE SUCH WEB USAGE DATA OR SEARCH INFORMATION WITH ANY PERSONALLY IDENTIFIABLE INFORMATION SUCH AS NAME OR EMAIL ADDRESS OR (B) ANALYZE SUCH WEB USAGE DATA OR SEARCH INFORMATION TO DETERMINE THE IDENTITY OF ANY HOTBAR USER. SOME INFORMATION COLLECTED BY THE HOTBAR SOFTWARE IS PERSONALLY IDENTIFIABLE, SUCH AS NAME AND EMAIL ADDRESS. THIS PERSONALLY IDENTIFIABLE INFORMATION IS STORED SEPARATELY FROM THE INFORMATION ABOUT THE WEB SITES YOU VIEW AND THE DATA YOU ENTER IN SEARCH ENGINE SEARCH FIELDS AND THE TWO TYPES OF INFORMATION ARE NOT CORRELATED OR LINKED. FURTHERMORE, HOTBAR DOES NOT AND CANNOT USE THIS PERSONALLY IDENTIFIABLE INFORMATION TO DETERMINE WHICH ADS AND BUTTONS TO DISPLAY ON YOUR HOTBAR TOOLBARS OR WHICH ADS TO SHOW YOUR BROWSER.

[...]

When you visit Web sites with the Software installed (the "Service"), we collect information about the Web sites you visit. This information allows us to display toolbar buttons that are related to the Web site you are currently visiting. For every Web site you view while using the Service, the Hotbar software transmits and stores the following information from your computer to Hotbar: Your IP Address, which may include a domain name; the full domain name of the Web site you are visiting; general information about your browser; general information about your computer's operating system; your Hotbar unique ID (and through registry) and the date and time the above information is logged. When you type search terms into a search engine site while using the Service, the search term you entered together with any other parameters that may be included in the URL ("Search Term") are transmitted from your computer and stored by Hotbar. This allows us to display buttons on the Hotbar toolbar that are related to the search term you entered. We also collect and store the following Hotbar Toolbar usage statistics: what Toolbar buttons you click on; what links within the Toolbar buttons you click on; the amount of time you have used the Software during each session; what browser skins you have downloaded during any given session.

When using the Service, other information collected includes your selection, your Hotbar unique ID, IP address and the specific type of any background image (including those known as a "skins"), business card(s) and related images and content including any updates thereof and changes thereto, and other images whether specific or for background purposes (all of the foregoing shall hereinafter be

referred to as "Images and Content"), whether any of the foregoing are used in an application for your browser or within an outgoing e-mail. The personally identifiable information collected when creating a business card account is explained further below. When Images and Content are selected, the applicable information (in the form of a zipped file that contains an HTML code and, in some cases, a preview of an image) is downloaded onto your hard drive. When an e-mail, containing Images and Content, is received, the recipient receives the e-mail which includes HTML format comprised of HTML code which allows for the presentation of the selected Images and Content to such recipient directly from our servers. Such HTML code of the e-mail may also retrieve information from our servers (such as text and/or banner promotions) which will, in such case, also appear in the e-mail sent and be viewed by the recipient in question. If you downloaded the Software after February 6, 2005, these functionalities of the e-mail signature shall apply to all outgoing e-mails you send.

While Hotbar's data collection and transmission practices generally do not involve collection of Personally Identifiable Information or the profiling of users' surfing habits, some users will be concerned about this monitoring of their surfing behavior and "shopping queries." As such, these practices should be clearly and conspicuously disclosed outside of the EULA and Privacy Policy during installation. In most installation scenarios, though, users will not be aware of these practices before "consenting" to the installation of Hotbar's Web Tools software package.

Uninstallation

Hotbar's Web Tools software package can be uninstalled via the "Add/Remove Programs" Control Panel applet, though users will need to locate and use three different uninstaller entries (where the software installed as a single package):

- "Hotbar Web Tools"
- "Hotbar Outlook Tools"
- "ShopperReports by Hotbar"

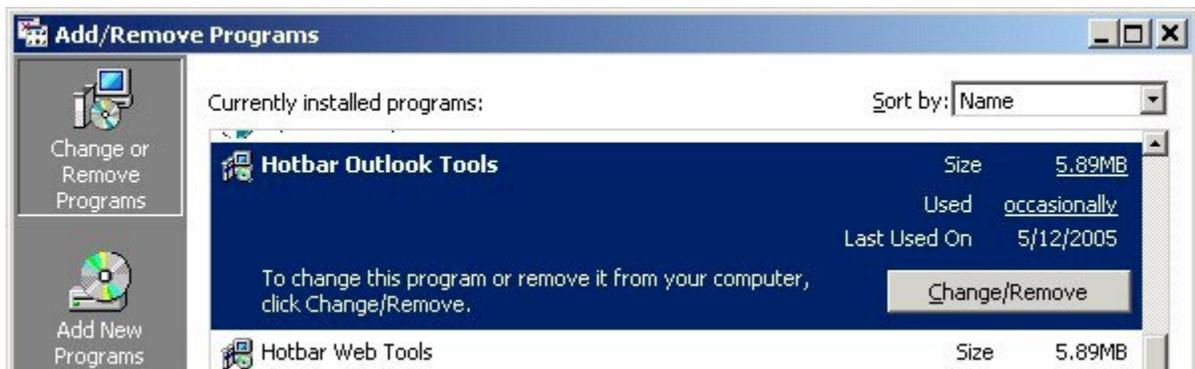


Figure 11: Add/Remove Programs

The three Hotbar uninstallers do perform a reasonably complete and clean removal of Hotbar's software.

Of more concern, though, is the randomly named resuscitator executable that is dropped in the Windows SYSTEM32 directory, where most users will never find it, and configured to start

automatically with Windows from the HKEY_LOCAL_MACHINE\.\Run Registry key. This program, which is clearly designed to thwart uninstallation of Hotbar by anti-spyware utilities, monitors Hotbar's installed software and prompts the user to reinstall it should it be removed:



Figure 12: Resuscitator re-install prompt

Such a resuscitator program is not consistent with a completely transparent software application.

Malware (Viruses, Trojans, Worms, Backdoors, Rootkits, Malicious Bots)

The Hotbar Web Tools software package is not malware itself, does not install malware, and is not known to be installed by malware.

Notice, Disclosure, Choice, & Consent

Hotbar's notice, disclosure, choice, and consent practices are a mixed bag.

On the one hand, many users will deliberately seek out Hotbar's software -- especially the skinnable Hotbar browser toolbar -- and install it. Even in cases where users had the software sprung on them via the pop-ups and banner ads described earlier, there is very little chance that users will not at least be aware that Hotbar's software is being installed on their systems.

On the other hand, the notice and disclosure provided during installation is generally poor. Key terms and functionality related to advertising, system reconfiguration, and data collection/transmission practices are not disclosed outside of the EULA and Privacy Policy, ensuring that few users will be fully aware of this critical information before "consenting" to the installation of Hotbar's software. That the software is often presented to users as a limited piece of software (*e.g.*, a weather program or a desktop wallpaper program) when in fact the complete software package includes a much wider range of functionality, including the display of advertising, only compounds Hotbar's problems with notice and disclosure.

In its cease and desist letter to Sunbelt, Hotbar appears to claim that its disclosure of the software's advertising functionality is clear and conspicuous during installation:

Hotbar also provides its users with explicit explanations on the services offered by the Hotbar software and the methods of data collection conducted by Hotbar, which enable it to provide its contextual

related services. For that end, unlike other companies, in addition to detailed explanations on Hotbar's software in Hotbar's Privacy Policy and EULA, during the installation process Hotbar also dedicates a special screen which explains to the users about its software and allows the user to choose between the ad-free premium version of Hotbar's Software and the free ad-supported version. Accordingly, the user provides a full conscious consent to each and every aspect of Hotbar Software.

Setting aside Hotbar's claims for its EULA and Privacy Policy -- which few users will ever see or even be inclined to look at, given Hotbar's occasionally confusing and arguably misleading installation practices -- Hotbar's insistence that its special notice and disclosure screen ensures that Hotbar always gains the "full conscious consent to each and every aspect of Hotbar Software" is problematic. There are at least two, interrelated problems with this special notice and disclosure screen:

First, the notice and disclosure screen offers no means for users to cancel the installation (see Figure 13 below). The only choices available are to select the "Free ad-supported version" of Hotbar's software and the "Paid version" -- both choices continue the installation of Hotbar's software.

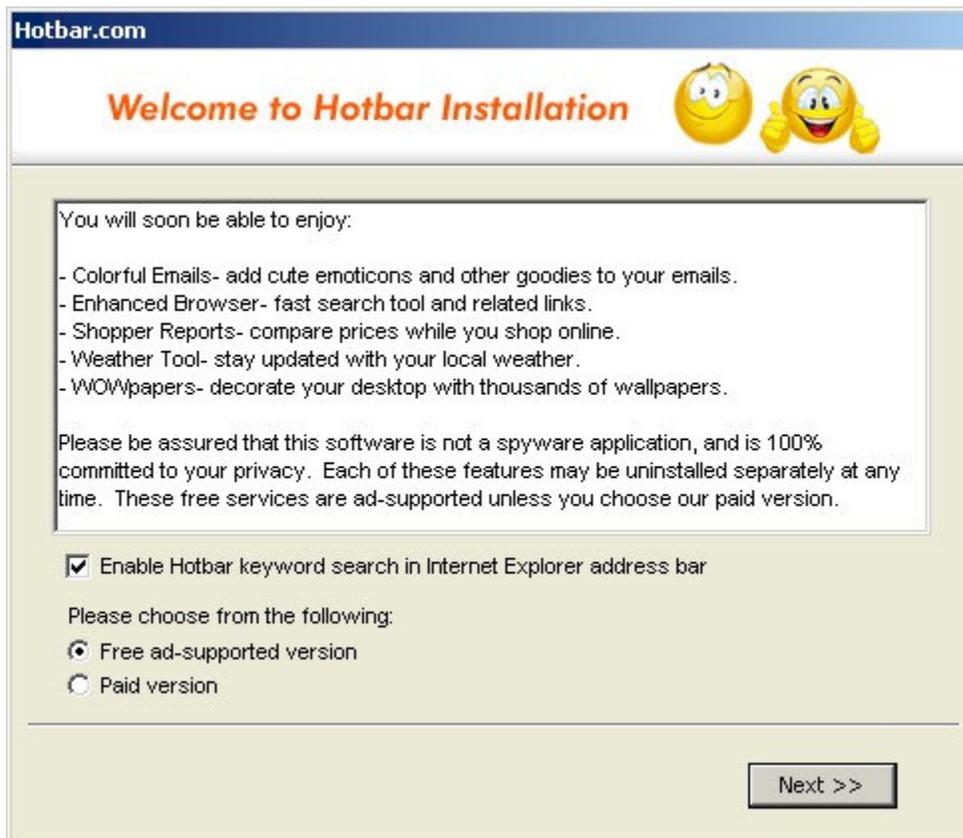


Figure 13: Hotbar notice & disclosure screen

Second, however, during online ActiveX installs of the software, this notice and disclosure screen appears only after users have clicked the "YES" button in the ActiveX "Security Warning" box, effectively consenting to the installation of the software. At the point users are

presented with this notice and disclosure screen, Hotbar's software is already partially installed to their systems.

As a result, this notice and disclosure screen comes too late in the installation process to be of any real use to the user. Moreover, the inability to cancel the installation entirely means that the choice offered to users is of limited value.

Still further, though, this notice and disclosure screen is not as explicit and forthright as Hotbar represents. The free version is described as "ad-supported," yet nowhere in that screen is the advertising functionality (the pop-ups, the sideseach ads, the toolbar ads, etc.) fully described. Nor is there any explicit discussion of the data collection and transmission practices of the software. Indeed, the scrollable text at the top of this screen (see below) expends more space describing alleged benefits to the users and disclaiming any connection with "spyware" than it does providing meaningful disclosure to users of terms and functionality that many would likely be concerned at:

You will soon be able to enjoy:

- Colorful Emails- add cute emoticons and other goodies to your emails.
- Enhanced Browser- fast search tool and related links.
- Shopper Reports- compare prices while you shop online.
- Weather Tool- stay updated with your local weather.
- WOWpapers- decorate your desktop with thousands of wallpapers.

Please be assured that this software is not a spyware application, and is 100% committed to your privacy. Each of these features may be uninstalled separately at any time. These free services are ad-supported.

Hotbar's use of the "Microsoft Certified Partner" logo and text as well as the TRUSTe privacy seal are problematic in that their use may lead users to falsely believe that the applications themselves have been endorsed by Microsoft and TRUSTe.

First, Hotbar prominently displays the "Microsoft Certified Partner" logo prominently on its several web sites and even the installation landing pages described earlier:



Figure 14: logos & seals from Hotbar installation landing page



Figure 15: logos & seals from Hotbar.com home page

Hotbar even describes itself as a "Microsoft Certified Partner" in the ActiveX "Security Warning" box displayed to users during automated online installation processes (see Figure 16 below):

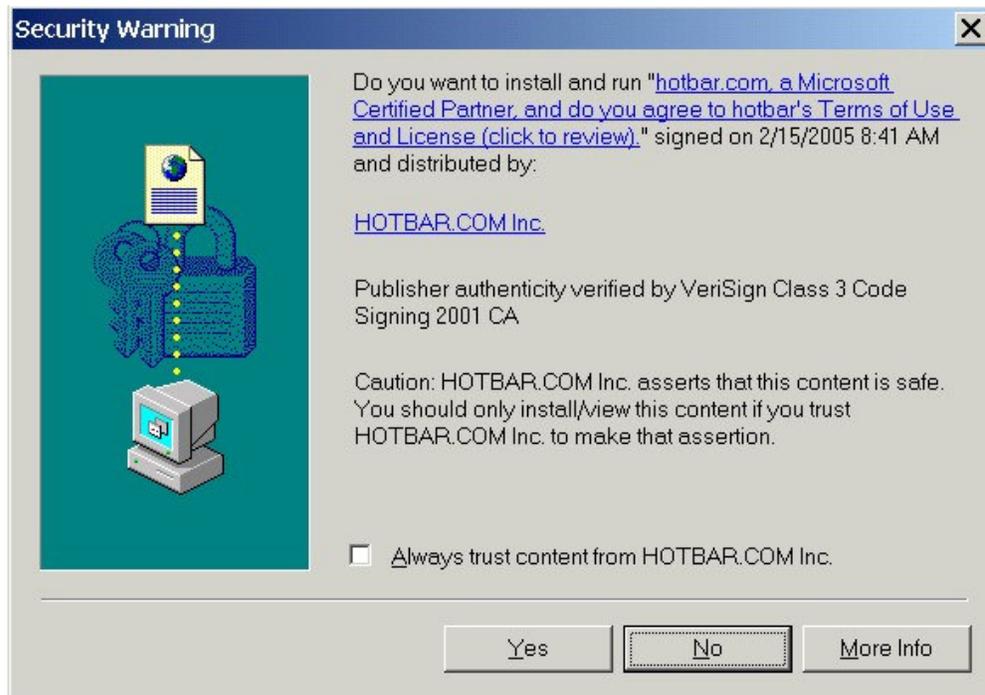


Figure 16: Hotbar ActiveX "Security Warning" box

These practices are likely to give users the impression that Hotbar's software, if not its privacy practices, have been reviewed, certified, or even endorsed by Microsoft. In fact, that Hotbar has earned the "Microsoft Certified Partner" logo says nothing of its software or privacy practices, as Microsoft itself clearly states on the "Partner Profile" page maintained at Microsoft.com (<http://directory.microsoft.com/mprd/PartnerProfile.aspx?RowKey=b0d237a7-3fc8-411f-862f-d8dd15dfb599&LanguageDropDown=173>):

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Though Hotbar prominently uses the "Microsoft Certified Partner" logo in contexts where it would be expected to lend the Hotbar software an aura of trustworthiness, Hotbar never links to that "Partner Profile" page with its telling disclaimer of any endorsement of Hotbar's software. In fact, as Microsoft itself explains on its "About Partners" page (<http://directory.microsoft.com/MPRD/support/AboutPartners.htm>), that logo speaks only to the "expertise" and "experience" of the company's staff, not the safety of its software or the trustworthiness of its privacy practices.

Hotbar's use of the TRUSTe seal is also problematic. Hotbar places the TRUSTe seal on installation landing pages (see above), which again is likely to give users the impression that TRUSTe has certified its software. In fact, the TRUSTe seal was given for the privacy practices associated with Hotbar's web site, not its software, and even then the certification speaks to a limited set of concerns, not the full range of the company's practices, as the "verification" page for Hotbar.com on the TRUSTe web site (which Hotbar fails to consistently link to from the TRUSTe "Click to Verify" seals on its web pages) makes clear (<http://www.truste.org/ivalidate.php?url=www.hotbar.com&sealid=101>). TRUSTe further clarifies the scope and meaning of its "seal" elsewhere on the TRUSTe web site (http://www.truste.org/consumers/seal_programs_overview.php):

The TRUSTe seal means that the company whose Web site you are visiting takes your privacy seriously.

Still further (http://www.truste.org/consumers/web_privacy_seal.php):

TRUSTe's Web Privacy Seal

The TRUSTe® Web Privacy Seal helps you make better choices and identify businesses with trustworthy online privacy policies.

The seal marks companies that adhere to TRUSTe's strict privacy principles, and comply with the TRUSTe Watchdog dispute resolution process. Principles include:

- * Creating a privacy policy that is reviewed by TRUSTe
- * Posting notice and disclosure that tells you how your personally identifiable information is collected and used
- * Giving you choice and consent over how your information is used and shared
- * Making sure there is a third party to mediate disputes relating to the use of your personally identifiable information

If you're releasing personal information, you deserve assurance that the company you're doing business with respects your privacy. Learn more about the specific requirements to which we hold our members. Look for the TRUSTe Web Privacy Seal.

In fact, TRUSTe has not certified Hotbar's software, though users may well come away with the mistaken impression that Hotbar's software has been certified by TRUSTe, due to the placement

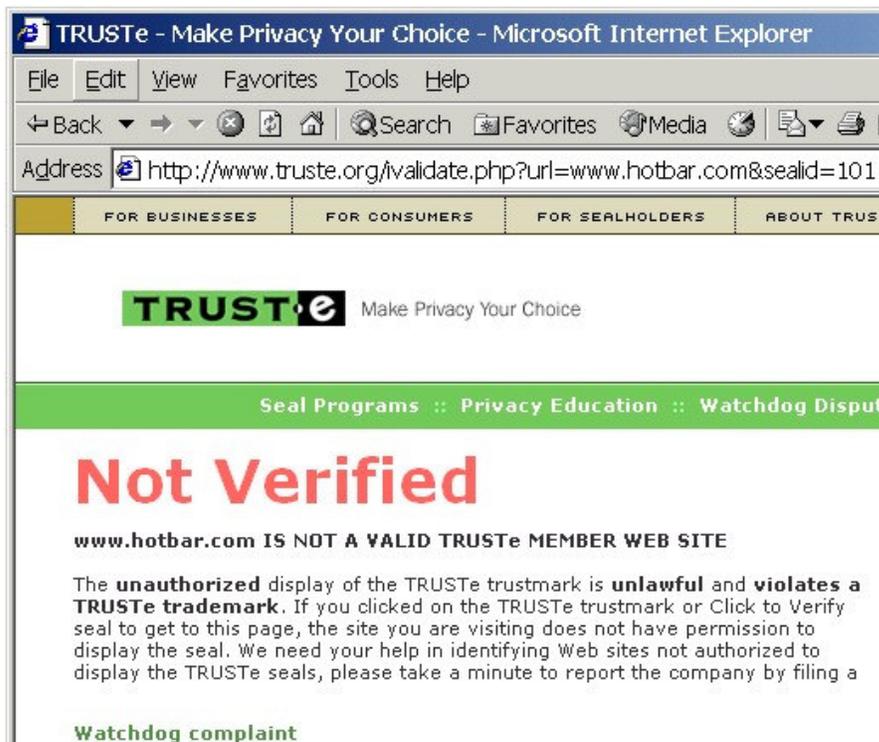
of the TRUSTe seal on its installation landing pages, where users will see it when deciding whether or not to click through the ActiveX "Security Warning" boxes sitting in front of them.

TRUSTe confirmed in a recent interview with *eWeek* that TRUSTe's logo does not cover the privacy practices of software and should not be displayed on download pages for software, as Hotbar does. According to a June 2 *eWeek* article by Paul Roberts (<http://www.eweek.com/article2/0,1759,1822683,00.asp>):

TRUSTe's list of trustworthy Web sites, which are allowed to display the TRUSTe seal, is a list of sites that adhere to that organization's strict information privacy practices. But the seal doesn't address the issue of software downloads, according to Fran Maier, executive director at TRUSTe. [...]

TRUSTe also forbids sites to display the organization's seal on pages that download the software, though that policy appears to have been broken, at least by HotBar.com, which clearly displays the TRUSTe logo on the installation page.

And in the wake of Ben Edelman's initial report of Hotbar's misuse of the TRUSTe seal on the Hotbar web site, TRUSTe deactivated the "Click-to-Verify" seal that points to a validation page on TRUSTe's site.



TRUSTe "Click-to-Verify" seal for Hotbar.com (4 June, 2005)

In sum, users who click through installation links to Hotbar's software will be aware of the installation of the software, but often not key terms and functionality that will likely be of concern to them.

Sunbelt's Listing Criteria

The Hotbar Web Tools software package trips a number of Sunbelt's "Listing Criteria" for "Potentially Unwanted Installations" (http://research.sunbelt-software.com/listing_criteria.cfm), including:

Distribution & Installation

- installs via automated installation processes (e.g., for ActiveX controls) initiated by or at third-party web sites when the software is not functionally required to view the content of those third-party sites and is not directly and specifically solicited by users
- is bundled with a functionally unrelated, separate host application actually sought by users (i.e., as an "adware" bundle) and installs without first providing sufficient notice and choice to users and without securing their full, meaningful, and informed consent
- uses false, misleading, confusing, deceptive, or coercive text or graphics to induce, compel, or cause users to install the software

Advertising

- displays third-party advertising in pop-ups and windows that the software opens on the users' desktops and which are not part of internet content that users directly choose to visit or view without first providing sufficient notice and choice to users and securing their full, meaningful, and informed consent, or without offering users a means for permanently removing or opting out of the advertising short of purchasing a "pro" version of the product and/or incurring a fee
- embeds third-party advertising banners or messages within itself or other programs or within elements of the operating system itself without first providing sufficient notice and choice to users and securing their full, meaningful, and informed consent, or without offering users a means for permanently removing or opting out of the advertising short of purchasing a "pro" version of the product and/or incurring a fee.

System Reconfiguration

- reconfigures the user's browser home page, search settings, or other user-selectable browser preferences without first providing sufficient notice and choice to users and without securing their full, meaningful, and informed consent
- configures advertising-related programs to start automatically with the operating system without first providing sufficient notice and choice to users and without securing their full, meaningful, and informed consent
- installs or uses an auto-updater or similar mechanism without providing a readily accessible means for users to configure or disable that auto-update mechanism

Data Collection, Transmission, & Sharing

- collects and transmits data regarding user's internet connection, viewing, and communication habits and behavior for the purposes of advertising and marketing without first providing sufficient notice and choice to users and without securing their full, meaningful, and informed consent

Uninstallation

- uses an uninstaller that badgers, coerces, or tricks the user into refusing or canceling the uninstallation
- incorporates, uses, and/or deploys functionality to evade, thwart, undermine, or prevent detection and/or removal by "anti-spyware" and "anti-malware" utilities

Notice, Disclosure, Choice, & Consent

- disregards, thwarts, blocks, or impedes users' choice to cancel or opt out of installation
- discloses key terms related to advertising, system reconfiguration, and data collection / transmission practices only in an End User License Agreement (EULA) or Privacy Policy or in locations and documents that users are not likely to read during the installation of the software
- discloses key license terms and software functionality in language that is not simple, plain, straightforward, direct, unvarnished, and free of euphemisms
- uses false, misleading, confusing, deceptive, or coercive text or graphics to induce, compel, or cause users to install the software

Recommendations

Hotbar's Web Tools software package exhibits a number of troublesome qualities. First, Hotbar's less-than-fully-transparent installation practices make it likely that the software could be installed without users' full, meaningful knowledge of and consent to the software's key terms and functionality. Moreover, although Hotbar's several types of advertising are labeled in some way, this labeling is not as clear and prominent as it ought to be. Finally, though the software can be uninstalled from the "Add/Remove Programs" Control Panel applet, Hotbar uses a randomly named resuscitator program to resist removal by anti-spyware software.

In light of these problematic practices, Sunbelt Software is entirely justified in offering Hotbar and its related programs as a detection to users. Until now, Sunbelt has classified this software as a "Low Risk Adware" program (http://research.sunbelt-software.com/threat_library_browse.cfm?Low Risk Adware). The practices and qualities described earlier in this review do not fit a "Low Risk Adware" program, though, especially given the misleading notice, disclosure, choice, and consent practices employed by Hotbar in several of its installations.

Thus, the Sunbelt Research Team recommends that Sunbelt Software reclassify Hotbar as an "Adware" program (http://research.sunbelt-software.com/threat_library_browse.cfm?Adware) and adjust the "Threat Level" and "Default Action" for this software accordingly.

1. Threat Type

Hotbar should be re-classified from "Low Risk Adware" to "Adware."

2. Threat Level

Hotbar's "Threat Level" should be changed from "Low Risk" (5) to "Moderate Risk" (4).

3. Default Action

The "Default Action" for Hotbar should be changed from "Ignore" to "Quarantine."

By making these changes, Sunbelt Software can more effectively alert its users and customers to the presence of software they may not fully understand and provide advice that more appropriately reflects Hotbar's several troubling practices.

Notes

1. Detection of Hotbar by other anti-spyware & anti-malware vendors

In its cease and desist letter to Sunbelt Software, Hotbar appears to claim that it is industry standard practice among anti-spyware and anti-malware vendors not to detect Hotbar as "spyware" or "adware":

Moreover, the most prestigious and popular anti-spyware programs in the industry do not detect Hotbar. Thus, for example, to name the leading programs, Microsoft AntiSpyware, Lavasoft's Ad-aware, Spyware Doctor, McAfee, Panda, and Fortinet do not detect it, and many others are also in the process of joining them.

While it is true that the listed programs may not detect Hotbar (and Hotbar's statement has not been fully verified by Sunbelt), many of leading anti-spyware and anti-malware programs (aside from Sunbelt's own CounterSpy) still do detect Hotbar, including:

- Webroot Spy Sweeper
- Spybot Search & Destroy (optional)
- Intermute SpySubtract
- CA Pest Patrol
- Norton AntiVirus
- TrendMicro PC-cillin

2. Revisions to Sunbelt's review of Hotbar

After sending Hotbar a response on May 26, 2005 to Hotbar's cease and desist letter, Sunbelt Software continued to investigate and assess Hotbar's installation, advertising, and notice/disclosure practices.

In particular, Sunbelt reviewed Microsoft's "Certified Partner Logo Usage Guidelines" document, which was not available at the time Sunbelt produced its initial review of Hotbar. Still further, TRUSTe itself confirmed that Hotbar was indeed misusing the TRUSTe seal on its web site, as noted earlier. Finally, Sunbelt had the opportunity to look more closely at the "Low Risk Adware" classification originally given Hotbar and evaluate that classification against the broad range of potentially unwanted installations that Sunbelt offers as detections to its users and customers.

After further review and consideration of Hotbar, Sunbelt decided to reclassify Hotbar as an "Adware" program with a "Threat Level" of "Moderate Risk" and a "Default Action" of "Quarantine." This reassessment of Hotbar is justified because the several practices and qualities of Hotbar's software that turned up in Sunbelt's initial review simply do not comport with the behavior expected from a "Low Risk Adware" program.

References

Ben Edelman - "Hotbar Installs via Banner Ads at Kids Sites"

<http://www.benedelman.org/spyware/installations/kidzpage-hotbar/>

Doxdesk.com - "Hotbar" (Andrew Clover)

<http://www.doxdesk.com/parasite/Hotbar.html>

Hotbar End User License Agreement

<http://hotbar.com/Legal/hotbar/license.htm>

Hotbar Privacy Policy

<http://hotbar.com/Legal/hotbar/privacy.htm>

Microsoft - "About Microsoft Certified Partners"

<http://directory.microsoft.com/MPRD/support/AboutPartners.htm>

Microsoft Certified Partner Profile (Hotbar)

<http://directory.microsoft.com/mprd/PartnerProfile.aspx?RowKey=b0d237a7-3fc8-411f-862f-d8dd15dfb599&LanguageDropDown=173>

"Researcher says Netscape 8 fails to tell users about spyware sites"

<http://www.eweek.com/article2/0,1759,1822683,00.asp>

Sunbelt Software - "Listing Criteria"

http://research.sunbelt-software.com/listing_criteria.cfm

TRUSTe - Hotbar Validation page

<http://www.truste.org/ivalidate.php?url=www.hotbar.com&sealid=101>

TRUSTe - Seal Programs

http://www.truste.org/consumers/seal_programs_overview.php

TRUSTe - "TRUSTe's Web Privacy Seal"

http://www.truste.org/consumers/web_privacy_seal.php

About Sunbelt Software

Headquartered in Tampa Bay (Clearwater), Fla., Sunbelt Software was founded in 1994 and offers products to protect and secure systems from costly inefficiencies including spam and spyware; as well as enterprise solutions to protect against system downtime and security vulnerabilities.

Sunbelt Software is part of the Sunbelt International Group, which includes Sunbelt Software, Inc. and Sunbelt System Software in Europe. The Sunbelt System Software group has offices in the UK, France, Netherlands, Sweden and Germany.

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