

EXHIBIT K

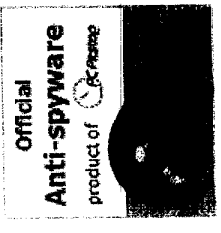


Test My PC
 Home Page
 Full Tests
 AntiVirus
 Internet Speed
 Gator Info
 Spyware Info
 Disk Health
 Check ActiveX
 XP Readiness

Tech Help!
 Free Online Help
 Frequent Questions
 I Can't Test!
 TechExpress

Forums
 Forums Home
 User to User Help
 Discuss Your Score
 Internet Tests
 Viruses & Spyware
 Site Feedback

About PC Pitstop
 Statistics
 Pitstop Store
 Advertise with Us
 Support Us
 Link to Us
 Our Technology



HBSRV.EXE

Important note: A file name alone may not be enough for positive identification. PC Pitstop's full tests and spyware scan use information such as the company name, product name, or install directory. If you are unable to identify a file, ask about it in our forums after running our full tests.

Our running programs database has the following information about this file name.

Description

HotBar adware

Identification

In addition to the file name, the following version information is used to identify the file. If the file does not match this information, it may be a different file.

Vendor contains: Hotbar

Product contains: Hotbar

To view version information with Windows Explorer, right-click the file and click Properties, Version.

Recommendation

Disable in most cases. Displays ads and/or tracks Internet activity.

PC Pitstop Database Comparisons

Every week, we update our information about the running programs identified during the previous week's testing. This program has been seen on **0.021 percent** of systems tested at PC Pitstop. As a point of comparison, it is rare for a particular malicious program (virus or spyware) to be seen on more than one or two percent of all systems tested.

The PCs that were running this program had a **very high average CPU load**. This particular program may not have been the cause of the CPU load, but it may be worth further

Spyware Resources

- Spyware Home
- Anti Spyware Blues
- Top 25 Spyware & Adware
- Read the EULA!
- Spyware and Your Kids
- Safe Surfing Habits
- The Spyware Name Game
- What is Spyware?
- WhenU Survey
- Dirty Spyware Tricks
- Our Spyware Forum
- Known Programs
- The Pit BLOG
- Quick Scan

Avoid Internet Danger!

Safe Surfing DVD Video

Recommended Download

Registry Mechanic

Download Now!

Hot Pick!

Spyware Doctor

5 Star Rated

Spyware Remover

Download Now!



GoToMyPC



Try it Free

click here

investigation.

Detailed Description and/or Removal Instructions

<http://www3.ca.com/securityadvisor/pest/pest.aspx?id=453075474>

More Information

Hotbar monitors all URLs you visit. It has a silent-update feature which may install software without your knowledge. For more information on Hotbar's installation practices, see [Ben Edelman's site](#).

Automatic removal and protection

For complete protection against viruses, we recommend [EZ Antivirus](#) from Computer Associates.

For easy removal and complete protection against spyware and other unwanted programs, we recommend [Pest Patrol](#) and [Spyware Doctor](#).

Manual removal

If specific instructions were given above, use those instructions. Most legitimate applications can be removed through Control Panel, Add/Remove Programs. For programs without an Add/Remove entry, you can usually disable and/or remove them through [MSConfig](#), [Task Manager](#), or [Windows Services](#) depending on the type of program.

[Pest Patrol](#) maintains a [pest information database](#) that contains manual removal instructions for many types of viruses and spyware.

You can also check out our [discussion forums](#) for more removal tools and techniques.

Other Resources

- [How to disable programs \(MSConfig, Task Manager, Services\)](#)
- [PC Pitstop Forums](#)
- [Pest Patrol Research Center](#)
- [HBSRV.EXE](#)

These sites also have good information about specific running programs and what they do:

- http://www.pacs-portal.co.uk/startup_content.htm
- http://www.answerthatwork.com/Tasklist_pages/tasklist.htm
- <http://www.3feetunder.com/krick/startlist.htm>



Software Program Details

Want a second opinion on spyware? For a more comprehensive scan try [Computer Associates' free online spyware scan](#).

[Home](#) | [Our Legal Stuff](#) | [Privacy Policy](#) | [Press](#) | [Link to Us](#)
[Behind the Wheel](#) | [Testimonials](#) | [Support PC Pitstop](#) | [Printable Page](#)

6/1/2005

<http://www.pcpitstop.com/spycheck/SWDetail.asp?fr=HBSRV.EXE>

Computer Tips

or
"I didn't know you could do that!"

All Tips:

- [Today's Tip](#)
- [Access](#)
- [Excel](#)
- [Outlook](#)
- [PowerPoint](#)
- [Word](#)
- [Other](#)

GENERAL WINDOWS TIP Don't Get Tricked, Remove "Hotbar"



BAD for Email

BAD for Browsing

Problem:

Your email is not working quite right. And you downloaded that appealing tool bar that lets you add animations and symbols to your email or decorates your browser window. This tool bar is called "Hotbar" and displays among other buttons, a cute red heart.

Background Information:

The "Hotbar" is really spyware in disguise! Not only does it add its own toolbar to your browser, it also tracks all your site visits and reports them back to Hotbar Marketing. This information is then used to 'tailor' a marketing plan targeting you based on your surfing habits (which means more popups and more junk email). Additionally, Hotbar automatically updates itself and downloads various software onto the infected PC (both without your permission), in an effort to remain updated and to avoid removal by spyware software. This makes Hotbar removal extremely hard!

Some variants of Hotbar add the Hotbar Toolbar to your browser and / or



Authorized Fourth & Central

Computer Tips

to Windows explorer. (We have seen both here at the college.)

This is what Hotbar does once it gains control of your computer:

- Popup advertisements
- Redirects to Hotbar partner sites
- Adds buttons to your browser on the left-hand side leading to advertisers' and/or paid search sites dependent on the site you are currently viewing.
- Installs software on your PC without your consent
- Tracks your site visits and reports them back to Hotbar (for advertising purposes)
- Adds the Hotbar Toolbar to your browser and / or Windows Explorer (some variants of Hotbar)

What to Do:

Just un-displaying the Hotbar won't work. It lurks in the background, still spying on your actions. You must remove the Hotbar using a special program. If you think you have the Hotbar, call the Help Desk (x1435) for assistance.

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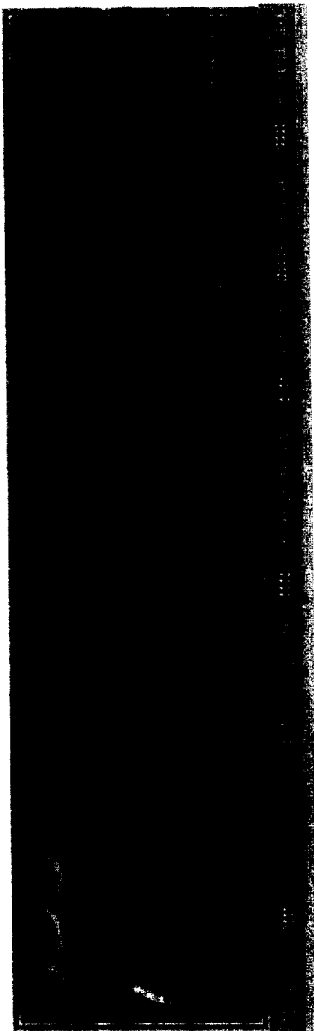
31-oct-03

ITS Dept 101 Nicarry Hall
361-1582

Tip Master

CastleCops Hotbar Hbinst.exe

New User? [Need help?](#) Click here to register for free! Registering removes the advertisements.



StartupList Deep Dive

!! THIS IS A STARTUP PROGRAM AND NOT A TASK MANAGER PROCESS ITEM !!

Field	Value
Name	Hobbar
Command	Hbinst.exe
Status	X
Description	Hobbar enhances the surfing experience offering a variety of innovative and fresh skins to the browser while providing users worldwide with access to various services of added value and fun. Also regarded as adware/spyware due to it's adds and browsing habits information gathering - see FIELD

Viewed 7 times since 23 May 2005, 1825 Hours UTC-4.

Ads by Google

Free Hotbar's Toolbar.

Enjoy free smileys, ecards, skins, animations, pictures & many more!
www.Hotbar.com

Spyware Remover Download

Free Scan, awarded Spyware and Adware killer - 5 Stars Rated.
www.pctools.com

Rundll32.exe

EXE errors all Fixed instantly! aff Free download available Now
pcmightymax.net

Fix AILEXE Errors - Free

2005 Most-Advanced Error Remover. Fix Your Computer - Free Download!
PcOnPoint.com

STATUS KEY:

- "N" - Normally leave to run at start-up
- "n" - Not required - typically infrequently used tasks that can be started manually if necessary
- "U" - User's choice - depends whether a user deems it necessary
- "X" - Definitely not required - typically viruses, spyware, adware and "resource hogs"
- "?" - Unknown

Navigate: [\[Official Forum\]](#) [\[StartupList.Index\]](#) [\[StartupList.INI\]](#) [\[StartupList.XML\]](#)

CastleCops Hotbar Hbinst.exe

Page 2 of 2

If you find the information on these pages useful, why not make a donation to help towards its maintenance :-



or E-mail me.

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Acceptable Use Policy. Use signifies your agreement.
[RSS 0.91](#), [RSS 1.0](#), [RSS 2.0](#)
137ppm 0.071s [Engine](#)

<http://castlecops.com/startuplist-1423.html>

6/1/2005

EXHIBIT L

Hotbar Installs via Banner Ads at Kids Sites

Hotbar Installs via Banner Ads at Kids Sites
Benjamin Edelman - Misleading Installations - Spyware Research, Legislation, and Suits

Hotbar promotes its toolbar software via banner ads shown on sites offering kids games. In the course of such installations, Hotbar does not affirmatively show its license agreement, and users who request the license must scroll through dozens of pages to a mislabeled section to learn more about the ads to be shown. Hotbar's on-screen notifications provide one notice that Hotbar is "ad-supported," but Hotbar fails to disclose the specific nature of these ads, or to offer users a "cancel" button if they do not accept. When installed, Hotbar shows ads in browser toolbars, pop-ups, pop-up-unders, auto-opening sidebars, and desktop icons.

Hotbar distributes a variety of programs that offer users some trinket of apparent value (e.g. smileys for email programs) while also adding an extra toolbar to users' web browsers and bombarding users with frequent and intrusive advertising. Hotbar promotes its programs in ways that do not entail meaningful user consent. This article examines one such installation, its (purported) license agreement, and its effects. Notable characteristics:

- Installation at a site targeting kids. [Details.](#)
- License agreement not affirmatively shown. Unhelpful section headings, convoluted language. [Details.](#)
- Installation confirmation screen lacks a button or option to cancel installation. [Details.](#)
- Intrusive advertising, not specifically disclosed in prior on-screen text, including ads in toolbars, pop-ups, pop-up-unders, auto-opening sidebars, and desktop icons. [Details.](#)

Targeting Kids

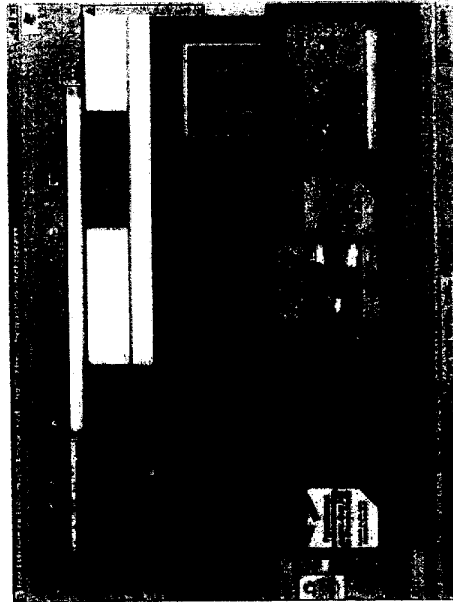
I have observed Hotbar software promoted at a variety of sites clearly targeted at kids. This page documents Hotbar ads at thekidzpage.com, a site which I believe is clearly targeted at kids. The site's very name is a play on "kids," and its title bar and "welcome" text both say it's "for children." Its advertisement pitch specifically says it's "for kids and adults ... family and students ... school-aged children along with the 'grown-ups' who supervise them." It's linked from Yahoo!igans (Yahoo for kids). Furthermore, the Hotbar ad is likely to be particularly attractive to kids -- with overstated smiley faces, including an enlarged central image with its eyes, tongue, and hands in a characteristically child-like pose. See [first inset image](#) above.

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

Related Projects

- [180solutions & Affiliate Commissions Advertisers Using WhenU](#)
- [WhenU Violates Own Privacy Policy](#)
- [Documentation of Gator Advertisements and Targeting](#)
- ["Spyware": Research, Testing, Legislation, Suits](#)
- [Other Research by Ben Edelman](#)



Installation on a game site catering to kids.

Installation on a game site catering to kids -- with overstated smiley faces, including an enlarged central image with its eyes, tongue, and hands in a characteristically child-like pose. See [first inset image](#) above.

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

6/1/2005

Hotbar Installs via Banner Ads at Kids Sites

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.

Thekidzpage.com is but one of many similar kids sites promoting Hotbar. Hotbar's many relationships with such sites proceed via intermediaries such as, in this instance, Fastclick (Nasdaq: FSTC). The Hotbar ad at issue was placed onto the site through a Fastclick placement and/or tracking service, indicating that Fastclick profits from Hotbar installations performed on Thekidzpage.com.

Hidden and Half-Hearted Disclosures

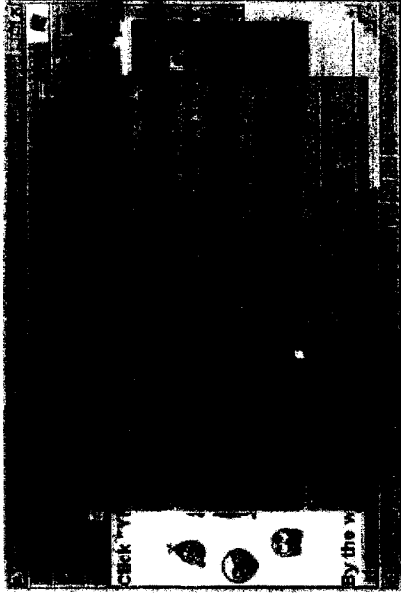
A user who obtains Hotbar from Thekidzpage has no reasonable basis to expect the intrusive advertisements Hotbar ultimately shows. This section presents the deficiencies in Hotbar's notice procedure -- Hotbar's failure to tell users about its effects in a way that users will reasonably notice and that users can reasonably understand, and denying users a meaningful opportunity to decline installation if Hotbar's terms are unacceptable.

The Hotbar initial banner ad (first screenshot at right) mentions only "free emoticon icons," without any mention of a toolbar, advertisements, or other unwanted software.

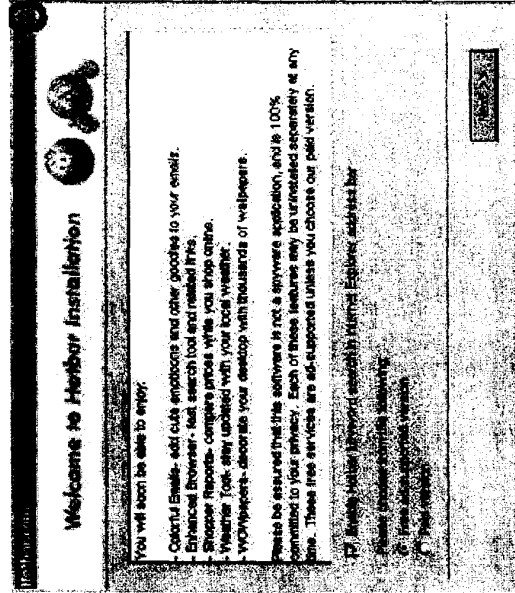
If a user clicks the Hotbar banner ad, the user receives the second screenshot at right, including an ActiveX "Security Warning" that mentions "Hotbar.com" -- again mentioning no advertisements or even a toolbar (except to the extent that "bar" in the proper noun "Hotbar" might be taken to indicate presence of a toolbar). Combining these failures to disclose with Hotbar's initial child-targeted "emoticon icon" offer, users have no substantial reason to fear that Hotbar will bombard them with unwanted advertising.

Meanwhile, Hotbar simultaneously presents users with apparent endorsements of dubious value: First, Hotbar notes that its "publisher authenticity" has been verified by VeriSign. (See analysis of VeriSign's role in these ActiveX installations.) In addition, Hotbar claims to be a "Microsoft Certified Partner" -- even though such certification offers no substantial verification of the quality of Hotbar's products. (Analysis and screenshots.)

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



Installation confirmation. Can install Hotbar without seeing its license.



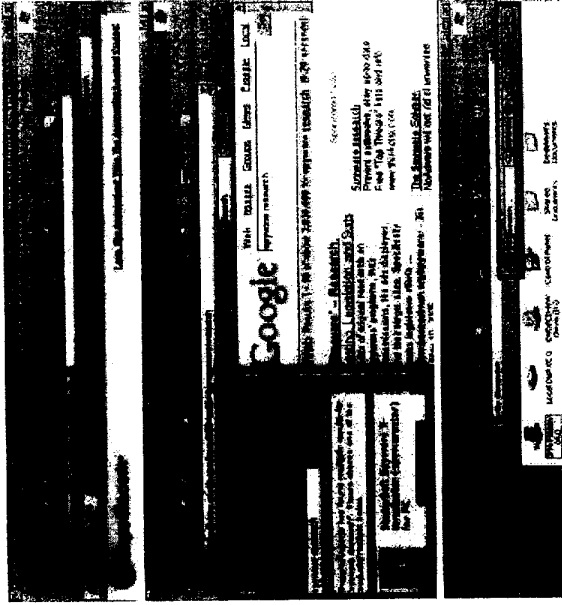
Installation "welcome" screen. Offers no "Cancel" button. No specific mention of the type of ads to be shown.

Hotbar Installs via Banner Ads at Kids Sites

Hotbar's ActiveX warning does ask users to "agree to Hotbar's Terms of Use and License," and it indicates that users can click to review that document. Clicking the specified link yields a lengthy license agreement -- some 4,562 words, shown in 37 on-screen pages. Although this document ultimately explains that Hotbar will show ads, its explanation is substantially deficient:

- Although Hotbar mentions "ads" in the first page of its license, ads are discussed there only in the context of effects on privacy. The paragraph begins "HOTBAR COLLECTS AND STORES AGGREGATED INFORMATION ABOUT," and continues with a total of 220 words of all-caps text. So users who care more about unwanted ads than about privacy are likely to ignore this paragraph altogether, failing to notice Hotbar's mention of ads.
- The license's next mention of advertisements comes at page 13, under a heading confusingly labeled "Disclaimer of Warranties." This section does not specifically say that Hotbar will show advertisements. Instead, it merely (purportedly) disclaims any liability Hotbar may have for any such ads.
- A more detailed discussion of advertising arrives on pages 16-17, mentioning ads within a heading labeled "Licensee's acknowledgments relating to information and content." Here too, the license is needlessly indirect. For one, the "acknowledgements..." heading does not reasonably alert readers to the important text within. Furthermore, the section uses confusing wording users are unlikely to understand. For example, the text repeatedly refers to a "licensee" -- when the document could instead say "user" or, even more simply, "you." In addition, the license uses complicated language like "will be exposed to" rather than directly stating that Hotbar will "show" ads. Finally, Hotbar buries mention of advertisements within a long list of other things that users may be "exposed to": "... text, jokes, riddles, graphics, pictures, background, links, bookmarks, www sites, advertisements, products, ..." (emphasis added). Putting "advertisements" within this lengthy string makes it that much harder for users to notice the advertising provision.

- Continuing within the misleading "acknowledgements" heading (described in the preceding bullet), the page 17 text mentions some specific kinds of ads that Hotbar will show. Here too, the text is confusing, such that consumers are unlikely to notice or understand. The paragraph begins with the dull text "Licensee shall receive, and desires to so receive, various products/services" -- only subsequently admitting to inclusion of "marketing ads [and] pop-ups." The subsequent sentence purports to offer samples of such ads ("click here to view samples"), but the "click here" text is not a working link, and the adjacent URL yields a 404 error (page not found). Screenshot of license text and broken link.



Hotbar advertising within web browser toolbars and sidebars, on PC desktop, and in Windows Explorer.

If a user clicks Yes within the ActiveX warning, with or without first reading the Hotbar license, Hotbar proceeds to show the choice screen shown in the third image at right. This screen does prominently mention advertising. But it offers only two choices: The "free ad-supported version" of Hotbar, or a paid version. No cancel button is shown. Note also the absence of an X in the upper-right corner of the installer, and even right-clicking on the taskbar entry does not work (does not yield a menu with a Close button). Users wishing to cancel the installation would have to know to press Alt-F4 or Control-Alt-Delete, or else turn off their PCs altogether. Users unaware of these options will reasonably conclude that their only options are a paid version (undesirable for its cost) or an "ad-supported" version. Without any statement of the specific kinds of ads at issue -- their placement, frequency, or intrusiveness -- users may choose the ad-supported option without understanding its true effects.

Via this installation sequence, Hotbar has failed to reasonably disclose the core effect that typical users most urgently want to know about: That Hotbar will show ads, including the pop-up ads that users are known to find so objectionable. This failure to disclose is entirely avoidable: Hotbar has numerous straightforward opportunities to improve its disclosures and avoid the problems flagged above. For example, Hotbar need not advertise on sites primarily serving kids. Hotbar

Hotbar Installs via Banner Ads at Kids Sites

could include text within its ads that specifically mentions that its software is not for kids. Hotbar could include text within its ads prominently mentioning that its software will show pop-up ads, toolbar ads, and more. Hotbar could include an advertisement disclosure in its ActiveX warning. Hotbar could include a prominent section within its license agreement that, in plain language under an appropriate heading, clearly describes all ads to be shown. In Hotbar's subsequent ad-supported/paid choice screen, Hotbar could include a disclosure of the specific kinds of ads associated with the ad-supported version. Finally, Hotbar could include a **Cancel button in that choice screen. Hotbar's failure to take any of these steps tends to indicate a desire to maximize installation rates, rather than to** give users accurate and complete information about Hotbar before it becomes installed.

Hotbar's Advertising Methods

Hotbar's advertising is exceptionally pervasive, spreading throughout users' computer. Whereas programs like Claria "only" show users pop-up ads, Hotbar combines pop-up ads with other forms of advertising, including ads within web browser toolbars, automatically-opening sidebars, ads in ordinary Windows Explorer screens (e.g. My Computer), and desktop icons.

See [screenshots of Hotbar advertisement types](#).

Some of these advertising methods also entail tracking what web sites users visit. Using my network monitor, I have confirmed that Hotbar sends its web servers information about the specific sites users visit, as well as cookies and ID numbers that uniquely identify a given user's computer.

Last Updated: May 16, 2005 - [Sign up for notification of major updates and related work](#).

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

6/1/2005

EXHIBIT M



August 6, 2004

In this issue:

- [Successful News Release Strategies](#)
- [Keep Those "Closet" Laptops Up to Date](#)
- [Providing Access to ANGEL to the Public](#)
- [Just Say "No" to Hotbar](#)

[Contact Us](#)

Successful News Release Strategies

For most of us, news releases are like ukuleles or toilet tissue: they lack flash and high-tech cache, but they still do what they do better than anything invented to replace them. The advantages of using news releases haven't changed much since the electronic revolution: low cost, potentially high impact, flexibility and staying power.

Here are a few things that you can do to give your news release the best possible chance of bobbing to the top of the media pile.

Find a Tie-In to a news event of the day, either at the national or local level—this could be anything from "mad cow disease" to the county tax rates. For instance, if foodborne illness is in the news, it might be a good time to talk about your county food safety educational program. Also

look to tie into seasonal activities or holidays—Christmas, gardening season and back-to-school sales happen every year, and newspapers need stories for those dates just as surely as the calendar. The right tie-in can make your news release invaluable.

Provide Expert Commentary on a national or local issue. If you can look at a local issue and say, "what the average person doesn't know about this problem is..." then you can provide valuable insights—and establish yourself (and your organization) as a credible source of expertise worthy of being called about issues in the future. Commenting on a national issue helps media to "localize" a national story and make it more relevant for their audience.

Use What You Have as the basis for a news release. If you have to write a newsletter, brochure or annual report on a specific program or activity, you may have the raw information for a press release. Just massage it, answering the classic "who-what-when-where-why-how" questions formula.

Remember Your Audience, which in most cases starts with one editor and one reporter. If you can tell them why your story should matter to them or their readers, then you've made it news and greatly increased its chance of being used. Be ready to write your press release from the perspective of the audience: why should they care?

Say It Clearly, which isn't as easy as it sounds. Our familiarity with, and enthusiasm for, a subject often pushes us to use the words and phrases that we see in other reports and memos. But those euphemisms, buzzwords and catchphrases are the type of language that sets off a good reporter's fudge-meter. Instead, just say what you mean. Keep it simple, and avoid words that imply value judgment, such as "exciting."

ICT's news unit is available to help with producing and distributing news releases, and we are happy to advise you on news value and audience. Contact news coordinator Chuck Gill at 814-863-2713 or by e-mail at cdg5@psu.edu for more information. To see the college's current news

releases, visit <http://aginfo.psu.edu/news/>.

Gary Abdullah
News Staff

Keep Those "Closet" Laptops Up to Date

With all of the viruses going around these days, the thought of being on the network is getting scarier by the minute. You need to protect yourself and every computer in the office.

Symantec Antivirus v8.0 or v8.1 should be installed on all computers (Windows and Macintosh) and all of you should be doing your Windows critical updates and security patches.

But what about those "closet laptops"? You know the ones...the ones that staff use to attend a training, or that are used only by the summer helper or intern?

Since these computers most likely don't have all their security updates and current virus definitions, they are "wide open" to be attacked by hackers and viruses. Because of this, these computers can be compromised in a matter of minutes if attached to the network without having all the updates and patches installed.

In one example, the training laptop was "pulled from the closet" and hooked to the network. The automatic downloads probably started to download, but since there were so many to be downloaded and installed, the new viruses were able to sneak through the "holes" and take over the computer.

This issue is something that we all need to be aware of. Each office is going to have to work on and create a policy or procedure to make sure the "closet" laptop has all its Windows updates and security patches and

updated virus definitions, for both Macintosh and Windows, especially if it's going to be used on the network for any amount of time.

Here are some possible solutions to this issue:

1. On a monthly basis, connect these computers to the network and *immediately* download the latest virus definitions and then do the Windows updates. Do these manually, too, since that will force the computer to look for security patches.
2. If possible, leave this computer on the network on *all* the time and make sure that it is configured to do the daily check of the virus definitions and the Windows critical updates.

Refer to our how-to's for this information:
<http://ict.cas.psu.edu/training/howto/util/InstallConfigSAV.htm>

<http://ict.cas.psu.edu/Training/HowTo/ENComputers/WindowsUpdate.html>

If you have any questions or would like to discuss this further, please contact Computer Support at agcompssupport@psu.edu or 814-865-1229.

Jacki Weikert
Regional IT Specialist

Providing Access to ANGEL to the Public

The Friends of Penn State (FPS) service allows a person to create a digital identity to access a variety of Web-based resources and services at Penn State. People with these accounts can be enrolled into ANGEL courses or groups to extend educational opportunities or to involve other

professionals in collaborative projects.

The FPS site can be found at <https://fps.psu.edu/>

If you need more information about FPS accounts or what they might be able to do for you, contact Steve Williams at 814-863-2666 or by email at sfw3@psu.edu.

Steve Williams
Distributed Learning Team Leader

Just Say "No" to Hotbar

Spyware, adware, and other malware (malicious software) have become real threats to our online privacy, security, anonymity, and efficiency. These programs can be installed on our computers without our direct consent. This often happens when visiting a Web site or clicking on a portion of a pop-up advertisement. This software can track our Web surfing habits. This data can be sold to advertising companies, which in turn can use the malware to force pop-up advertisements to appear on our computers. These programs can open Internet connections without our knowledge and can become vehicles for the spread of viruses, worms, and other malware.

Malware reduces our efficiency in a similar fashion to spam. Many spyware and adware programs cause our computers to run more slowly and to launch pop-up advertisements whenever we are connected to the Internet. This reduces our efficiency by forcing us to close extra windows and wait longer for our computers to complete a task. We do, however, have some good tools to effectively combat malware.

The first tool is our own caution and judgment. Often, spyware and adware programs will ask our permission to install themselves on our computers. They use vague or misleading language to trick us into this installation. Sometimes they hide within programs that claim to enhance

our computing experience by changing our desktop wallpaper automatically, adding icons and backgrounds to our e-mail messages, showing us the current temperature on our taskbar, or changing our Windows cursors. It's best to avoid such enticing programs because of the malware that may lurk inside. The loss of computer productivity and efficiency outweighs the benefits we receive from these dubious programs.

Spybot—Search & Destroy is a free and powerful spyware and adware removal tool that we recommend for all of the college's computer users. We've written a how-to that details how to download, configure, and use Spybot: <http://ict.cas.psu.edu/training/howto/util/InstallConfigSpybot.htm>. Use this program to check both your work and home computers for spyware and adware. Some of you may have Spybot version 1.2 installed on your computers. You'll need to follow the instructions in our How-To to download and install the current version, Spybot 1.3. To determine the version of Spybot currently installed on your computer open Spybot, go to the Help menu and choose "About." It's critical to update to Spybot 1.3 because version 1.2 will not detect recent or future malware.

Spybot checks for approximately 15,000 individual spyware and adware programs. For a list of some of the more common ones, visit http://www.spywareguide.com/product_list_full.php. You can click on the individual malware titles to view detailed information on them.

One common piece of malware that Spybot will discover is called "Hotbar." This program is often listed in your Add or Remove Programs control panel as "Hotbar," "Outlook Tools from Hotbar," or "Web Tools from Hotbar." Although this program does add some interesting features to Outlook and Internet Explorer—such as animated smiles, background pictures for e-mail messages, and search toolbars—it violates your online privacy and anonymity by tracking your Web surfing habits. It is also likely that Hotbar harvests e-mail addresses by having the recipients of Outlook messages download the Hotbar-based icons and graphics from the Hotbar servers. The Hotbar company can then potentially use or sell these collections of e-mail addresses, which of

course will drive more spam to your inbox.

We recommend that you use Spybot to locate and remove Hotbar and any other malware program that Spybot finds. Please contact Computer Support at agcompssupport@psu.edu or 814-865-1229 if you have any questions or concerns about Spybot, malware or other computer security issues.

Eric Schimmel
Regional IT Specialist

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