Web Bugs: Frequently Asked Questions (FAQ)

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Web Bugs Basics

1. What exactly is a Web Bug?

A Web Bug is a graphics on a Web page or in an Email message that is designed to monitor who is reading the Web page or Email message. Web Bugs are often invisible because they are typically only 1-by-1 pixel in size. They are represented as HTML IMG tags. For example, here are two Web Bugs recently found on Quicken's home page (www.quicken.com):

> <img src="http://ad.doubleclick.net/ad/pixel.quicken/NEW" width=1 height=1 border=0>
>
> <IMG WIDTH=1 HEIGHT=1 border=0 SRC="http://media.preferences.com/ping?ML_SD=IntuitTE_Intuit_1x1_ RunOfSite_A ny&db_afcr=4B31-C2FB-10E2C&event=reghome&group=register&time=1999.10.27.20.5 6.37">

The two Web Bugs were placed on the home page by Quicken to provide "hit" information about visitors to DoubleClick and MatchLogic (AKA, preferences.com), two Internet advertising companies.

2. Why are Web Bugs invisible on a page?

To hide the fact that monitoring is taking place.

3. Are Web Bugs always invisible on a page?

Not necessarily. Any graphics on a Web page that is used for monitoring purposes can be considered a Web Bug.

4. Are all invisible GIF images, Web Bugs?

No. Invisible GIF files are also used for alignment purposes on Web pages. A Web Bug will typically be loaded from a different Web server than the rest of the page, so they are easy to distinguish from alignment GIF files.

5. What other names are Web Bugs known by?

The Internet advertising community prefers the more sanitized term "clear GIF". Web Bugs are also known as "1-by-1 GIFs" and "invisible GIFs".

6. What information is sent to a server when a Web Bug is viewed?

- The IP address of the computer that fetched the Web Bug
- The URL of the page that the Web Bug is located on
- The URL of the Web Bug image
- The time the Web Bug was viewed
- The type of browser that fetched the Web Bug image
- A previously set cookie value

7. What are some of the uses of a Web Bug on a Web page?

Ad networks can use Web Bugs to add information to a personal profile of what sites a person is visiting. The personal profile is identified by the browser cookie of an ad network. At some later time, this personal profile which is stored in a data base server belonging to the ad network, determines what banner ad one is shown.

Another use of Web Bugs is to provide an independent accounting of how many people have visited a particular Web site.

Web Bugs are also used to gather statistics about Web browser usage at different places on the Internet.

8. Where can I find Web Bugs being used?

- [Quicken](#)
- [FedEx](#)
- [Metamucil](#)
- [Oil of Olay](#)
- [StatMarket](#)

9. How can I see a Web Bug on a page?

A Web Bug can be found by viewing the HTML source code of a Web page and searching for IMG tags. A Web Bug will typically have its HEIGHT and WIDTH parameters in the IMG tag set to 1. Also for the tag to be a bug, the image should be loaded from a different server then the rest of the Web page.

Web Bugs in Email Messages

10. What kinds of uses does a Web Bug have in an Email message?

1. A Web Bug can be used to find out if a particular Email message has been read by someone and if so, when the message was read.
2. A Web Bug can provide the IP address of the recipient if the recipient is attempt to remain anonymous.
3. Within an organization, A Web Bug can give an idea how often a message is being forwarded and read.

11. Why are Web Bugs used in "junk" Email messages?

1. To measure how many people have viewed the same Email message in a marketing campaign.
2. To detect if someone is viewed a junk Email message or not. People who do not view a message are removed from the list for future mailings.
3. To synchronize a Web browser cookie to a particular Email address. This trick allows a Web site to know the identity of people who come to the site at a later date,

12. What are some of the Email marketing companies who are known to use Web Bugs?

- Exactis
- Digital Impact
- Responsys

13. What companies have used Web Bugs in Email marketing campaigns?

- Barnes and Noble
- eToys
- Cooking.com
- Microsoft
- InfoBeat

14. What do Web Bugs in Email messages look like?

Email Web Bugs are represented as 1-by-1 pixel IMG tags just like Web Bugs for Web pages. However, because the sender of the message already knows your Email address, they also include the Email address in the Web Bug URL. The Email address can be in plain text or encrypted. For example, here are two Web Bugs sent to me in junk Email messages:

<img width='1' height='1' src="http://www.m0.net/m/logopen02.asp?vid=3&catid=370153037&email=SMITHS%40tiac.net" alt=" ">

<IMG SRC="http://email.bn.com/cgi-bin/flosensing?x=ABYoAEhouX">

Advanced topics

15. Is there any method of removing Web Bugs from HTML pages?

Not really. The technical problem is that there is no method of distinguishing Web Bugs from spacer GIFs which are used on Web pages for alignment purposes. Your best defense against Web Bugs is to turn off cookies. Instructions for turning off cookies can be found at the Junkbusters Web site:

http://www.junkbusters.com/ht/en/cookies.html#disable

One note about cookies. Netscape Navigator and Internet Explorer will still send out existing cookies after disabling cookies in the browser. You must manually delete any cookie files on your hard drive to eliminate being tracked by third-party ad networks.

16. Why don't Web site privacy policies ever mention Web Bugs?

Good question. Clearly Web site privacy policies need to disclose the use of Web Bugs as a minimum. Also the general practice of online profiling by third-party ad networks should be talked about in privacy policies. However, this important topic is rarely mentioned.

17. Are the use of Web Bugs legal?

A complicated question that is best answered by a lawyer.

18. Are the use of Web Bugs unethical?

Clearly Web Bugs are controversial. Because they allow people to be monitored, when they don't expect it, they certainly can be very upsetting. For example, most people will likely be troubled to learn that an outsider is tracking when they read Email.

19. Can newsgroup messages be bugged also?

Yes. If someone is using Outlook Express or Netscape Messenger to read a newsgroup, then Web Bugs will also work inside of HTML newsgroup messages. A Web Bug can be used to log people who are reading messages in particular newsgroup. Such bugs might be used for example by investigators to track illegal activity such as trading in child pornography and copyrighted MP3 music files. Web Bugs might also be used to monitor people in extreme political groups.

20. Can Yahoo profiles be bugged?

Yes. For a demonstration of a bugged Yahoo profile, see:

http://profiles.yahoo.com/webbug2000

This profile contains a visible Web Bug image that is being loaded from a server other than Yahoo. The Web Bug provides a log of everyone who has visited the profile page.