

CAPTCHA 101

CAPTCHA For Hackers

CAPTCHAs are the visual puzzles some Web sites use to try to ensure a human is accessing the site. The puzzles try to prevent computers from accessing a site to try to distribute spam. (*CAPTCHA* is short—very short—for *Completely Automated Public Turing test to tell Computers and Humans Apart.*) CAPTCHAs initially appeared in the late 1990s, and most of the puzzles are text CAPTCHAs, involving a string of letters and numbers that are distorted or that appear over the top of a grid or a curved line. By distorting the characters, the CAPTCHA can fool spammers' computers using visual recognition technology to try to solve the CAPTCHA.



Breaking Point

Obviously, as the distortion to the letters increases, the puzzles become more difficult for humans to read and solve, too. If the current trends continue, it would seem obvious that one of two things will happen to CAPTCHAs in the future: The distortion needed to fool computers will become too prohibitive for humans to solve, or computers will fully crack CAPTCHAs, regardless of the distortion used. Once one of those two scenarios occurs, CAPTCHAs will lose their viability.

Cracking The Code

One researcher has developed a program that solved some CAPTCHAs more than half the time. He initially solved a CAPTCHA Microsoft was using in September 2007, but he didn't announce his findings until April 2008, giving the company a chance to correct the vulnerability. He discovered a similar flaw in a Yahoo! CAPTCHA in April 2008, releasing some details of that problem in October 2008.

Many companies, including Google, Yahoo!, and Microsoft, continue to use CAPTCHAs for various functions, including Web-based email.

There is no company out there that is giving up on CAPTCHAs. A lot of big Web sites use CAPTCHA.. People dislike the CAPTCHA. But it's wishful thinking that computers are breaking the CAPTCHA technology.

Continued scrutiny by antispam researchers will continue to improve CAPTCHAs.

For the near future, no matter how much people like or hate it,

CAPTCHA will still be around.
The reasons are simple.

First, it's now part of the Internet infrastructure.

Second, it has indeed made, and will continue to make, spammers' lives harder.

Third, better CAPTCHA designs will be coming soon..