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THE WALL STREET JOURNAL.

WSJ.com

ASIA TECHNOLOGY | APRIL 1, 2010

China's censors thrive in obscurity

Google outage shows how 'great firewall' Internet filter system benefits from unpredictability and official silence

By LORETTA CHAO And JASON DEAN

BEIJING—The confusion over a major outage in China of Google Inc.'s search sites on Tuesday spotlights one of the most remarkable aspects of the Chinese government's Internet censorship apparatus: It is designed to be obscure.

By Wednesday, access to the sites appeared to have returned to normal—searches for some terms, but not all, were blocked. Government officials declined to comment when asked if they were the source of Tuesday's outage, leaving the situation and Google's future in China a mystery for users.

China operates one of the most extensive and sophisticated Internet-filtering systems in the world, according to analysts who have studied it. The system, unofficially dubbed the Great Firewall after China's most famous ancient defense installation, blocks access to a range of foreign content, from criticism of China's leaders to information about sensitive historical events.

China generally doesn't tell its people when it is interfering with their Web access, unlike some other countries, such as Saudi Arabia, that give explanatory warning messages when users are denied access to forbidden sites.

Instead, China's filtering can look to users like a technical glitch—an error message in a user's browser that makes it seem like his connection to the Internet malfunctioned. Authorities don't discuss the methods or tools they use.

Isaac Mao, director of the Social Brain Foundation, a Shanghai-based Internet and new media research group, said the government's tactics cause users to "think it's just a problem with the server of some sites, not a problem with the Great Firewall."

This works to the advantage of authorities because people are more likely to tolerate or even support censorship if "they don't have a clear concept of the criteria," he says. Unpredictability also makes the system harder to circumvent.

Chinese authorities also maintain tight control of information such as print publications, digital music and film. As with Internet censorship, details of what is censored and how the censorship works generally aren't disclosed.

The Great Firewall's mercurial nature makes it hard to tell when authorities are stepping up their filtering efforts, and helps to explain how Google was befuddled on Tuesday over what caused its search sites to become unusable in China for nearly 12 hours.

Because the block was a departure from the regular workings of the Great Firewall, many users saw it as an attempt to target Google, likely in response to the company's refusal to comply with Chinese censorship. Google

on March 22 stopped operating its self-censored Chinese site, Google.cn, and began redirecting users in China to the Hong Kong site—which China censors for users on the mainland.

Google's first statement on the problem came more than seven hours after users across China started reporting that they couldn't execute searches on Google's Hong Kong site, Google.com.hk, and its main global site, Google.com.

In that first statement, Google blamed itself, saying that—for reasons it didn't explain—the company had started adding the letters "gs_rfai" into the Web addresses of all search results pages (every Google search produces a unique Web address encoded to return the right results). Because the string contained the initials for Radio Free Asia, an organization China's government dislikes, it triggered the Great Firewall to block access in China to all results pages, Google said.

About four hours later, Google issued another statement saying that the "rfa" string had actually been added into results addresses a week earlier, so that "whatever happened today ... must have been as a result of a change in the Great Firewall."

By Wednesday, Google posted a brief statement on its Web site saying it "will continue to monitor the situation, but for the time being this issue seems to be resolved."

It remains unclear what happened. China's Ministry of Industry and Information Technology, which oversees the Internet industry, declined to comment Wednesday, as did other agencies.

Web sites based in China such as Google's former Chinese search site and its rival Baidu.com, are required to remove search results containing forbidden material. Self-censored local sites are the most popular among Chinese users, in part because access to them is consistent.

The Great Firewall is used to screen content on sites based overseas, such as Google.com.hk. Much like its namesake, which is actually an array of fortifications built over centuries rather than a single Great Wall, the Great Firewall involves a number of different tools for controlling content.

On one level, access to some overseas sites, such as YouTube and Facebook, is blocked completely. Other sites are filtered with software that can interrupt access when it spots forbidden keywords. Users get a message saying their connections were "reset," or "timed-out." After a few minutes, they can access the sites again.

The filtering is often implemented by government-owned Internet service providers at the local level, so blocks often don't happen simultaneously or uniformly. The filtering pattern can seem random. Sometimes one sensitive search term alone won't trigger the interruptions, but a string of such keywords will.

Many Google users in China—accustomed to using Google.cn, which is inside the Great Firewall—have been confused by their experience using Google sites on the other side of the censorship divide, in part because the criteria for what triggers blocking are sometimes unpredictable.

For example, a search on Google.com.hk of the Chinese word for "carrot" causes an error message and temporary disruption of access to Google—apparently because one of its three characters is the same as the surname of Hu Jintao, China's top leader. Likewise, searching the word "warm" sparks the filter because it contains the character for the surname of Premier Wen Jiabao.

Mr. Mao says the carrot problem wasn't new. " 'Carrot,' " he says, seems to have been "part of censorship criteria for a long time."

Printed in The Wall Street Journal Asia, page 4

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