Internet censorship in China

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*Main article:*[*Internet censorship by country*](http://en.wikipedia.org/wiki/Internet_censorship_by_country)

**Internet censorship in China** is conducted under a wide variety of laws and administrative regulations. In accordance with these laws, more than sixty Internet regulations have been made by the government of China, which have been implemented by provincial branches of state-owned [ISPs](http://en.wikipedia.org/wiki/Internet_service_provider), companies, and organizations.[[1]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-1)[[2]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-2) The apparatus of China's Internet control is considered more extensive and more advanced than in any other country in the world. The governmental authorities not only block website content but also monitor the Internet access of individuals.[*[citation needed](http://en.wikipedia.org/wiki/Wikipedia:Citation_needed" \o "Wikipedia:Citation needed)*]

[Amnesty International](http://en.wikipedia.org/wiki/Amnesty_International) notes that China "has the largest recorded number of imprisoned journalists and cyber-dissidents in the world"[[3]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-3) and Paris-based [Reporters Without Borders](http://en.wikipedia.org/wiki/Reporters_Without_Borders) stated in 2010 and 2012 that "China is the world's biggest prison for [netizens](http://en.wikipedia.org/wiki/Netizens" \o "Netizens)."[[4]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-4)[[5]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-5) The offences of which they are accused include communicating with groups abroad, signing online petitions, and calling for reform and an end to corruption. The escalation of the government's effort to neutralize critical online opinion comes after a series of large anti-Japanese, anti-pollution, anti-corruption protests, and ethnic riots, many of which were organized or publicized using [instant messaging](http://en.wikipedia.org/wiki/Instant_messaging) services, chat rooms, and text messages.[[*citation needed*](http://en.wikipedia.org/wiki/Wikipedia:Citation_needed)] The size of the Chinese [Internet police](http://en.wikipedia.org/wiki/Internet_police) force was reported to be 2 million in 2013.[[6]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-6)

Contrasting views suggest that local Chinese businesses such as [Baidu](http://en.wikipedia.org/wiki/Baidu), [Tencent](http://en.wikipedia.org/wiki/Tencent" \o "Tencent) and [Alibaba](http://en.wikipedia.org/wiki/Alibaba_Group), some of the world's largest internet enterprises, benefited from the way China has [blocked international rivals](http://en.wikipedia.org/wiki/Protectionism) from the market, encouraging domestic competition.[[7]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-BBC_Alibaba_IPO:_Chairman_Ma.27s_China-7)

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Background[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=1" \o "Edit section: Background)]

The political and ideological background of the Internet censorship is considered to be one of [Deng Xiaoping](http://en.wikipedia.org/wiki/Deng_Xiaoping)'s favorite sayings in the early 1980s: "If you open the window for fresh air, you have to expect some flies to blow in." The saying is related to a period of the economic reform of China that became known as the "socialist market economy". Superseding the political ideologies of the [Cultural Revolution](http://en.wikipedia.org/wiki/Cultural_Revolution), the reform led China towards a market economy and opened up the market for foreign investors. Nonetheless the Communist Party of China has wished to protect its values and political ideas from "swatting flies" of other ideologies.[[8]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-8)

The Internet arrived in China in the year 1994 as an inevitable consequence of, and supporting tool for, the "socialist market economy". Since then, and with gradual increasing availability, the Internet has become a common communication platform and an important tool for sharing information. In 1998 the [Communist Party of China](http://en.wikipedia.org/wiki/Communist_Party_of_China) feared the [China Democracy Party](http://en.wikipedia.org/wiki/China_Democracy_Party) (CDP) would breed a powerful new network that the party elites might not be able to control.[[9]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-9) The CDP was immediately banned followed by arrests and imprisonment.[[10]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-10) That same year the "Golden Shield project" was started. The first part of the project lasted eight years and was completed in 2006. The second part began in 2006 and ended in 2008.

On 6 December 2002, 300 people in charge of the Golden Shield project from 31 [provinces](http://en.wikipedia.org/wiki/Province_(China)) and [cities](http://en.wikipedia.org/wiki/List_of_cities_in_China) throughout China participated in a four-day inaugural "Comprehensive Exhibition on Chinese Information System".[[11]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-11) At the exhibition, many western high-tech products including [Internet security](http://en.wikipedia.org/wiki/Internet_security), video monitoring and human [face recognition](http://en.wikipedia.org/wiki/Facial_recognition_system) were purchased. It is estimated that around 30–50,000 police are employed in this gigantic project.[[12]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-amnesty-12)

Legislative basis[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=2" \o "Edit section: Legislative basis)]

A simplified topology of the Chinese firewall

The government of China defends its right to censor the internet by claiming that the country has the right to govern the internet according to its own rules inside its borders. The [white paper](http://en.wikipedia.org/wiki/White_paper), released in June 2010, called the internet "a crystallization of human wisdom". But in the document the government lays out some of the reasons why its citizens cannot get access to all of that wisdom. Another section of the same white paper reaffirms the government's determination to govern the internet within its borders according to its own rules. "Within Chinese territory the internet is under the jurisdiction of Chinese sovereignty. The internet sovereignty of China should be respected and protected," it says. It adds that foreign individuals and firms can use the internet in China, but they must abide by the country's laws.[[13]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-13)

The central government of China started its [Internet censorship](http://en.wikipedia.org/wiki/Internet_censorship) with three regulations. The first regulation was called the Temporary Regulation for the Management of Computer Information Network International Connection. The regulation was passed in the 42nd Standing Convention of the State Council on 23 January 1996. It was formally announced on 1 February 1996, and updated again on 20 May 1997.[[14]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-14) The content of the first regulation states requires that [Internet service providers](http://en.wikipedia.org/wiki/Internet_service_provider) be licensed and that Internet traffic go through [ChinaNet](http://en.wikipedia.org/wiki/ChinaNet" \o "ChinaNet), GBNet, [CERNET](http://en.wikipedia.org/wiki/CERNET) or [CSTNET](http://en.wikipedia.org/wiki/CSTNET). The second regulation was the Ordinance for Security Protection of Computer Information Systems. It was issued on 18 February 1994 by the State Council to give the responsibility of Internet security protection to the [Ministry of Public Security](http://en.wikipedia.org/wiki/Ministry_of_Public_Security_of_the_People%27s_Republic_of_China).[[15]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-15)

The Ordinance regulation further led to the Security Management Procedures in Internet Accessing issued by the Ministry of Public Security in December 1997. The regulation defines "harmful information" and "harmful activities" regarding internet usage.[[16]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-16) Section Five of the Computer Information Network and Internet Security, Protection, and Management Regulations approved by the State Council on 11 December 1997 states the following:

No unit or individual may use the Internet to create, replicate, retrieve, or transmit the following kinds of information:

1. Inciting to resist or breaking the Constitution or laws or the implementation of administrative regulations;
2. Inciting to overthrow the government or the socialist system;
3. Inciting division of the country, harming national unification;
4. Inciting hatred or discrimination among nationalities or harming the unity of the nationalities;
5. Making falsehoods or distorting the truth, spreading rumors, destroying the order of society;
6. Promoting feudal superstitions, sexually suggestive material, gambling, violence, murder;
7. Terrorism or inciting others to criminal activity; openly insulting other people or distorting the truth to slander people;
8. Injuring the reputation of state organizations;
9. Other activities against the Constitution, laws or administrative regulations.[[17]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-17)

In September 2000, State Council Order No. 292 created the first content restrictions for internet content providers. China-based Web sites cannot link to overseas news Web sites or distribute news from overseas media without separate approval. Only "licensed print publishers" have the authority to deliver news online. Non-licensed Web sites that wish to broadcast news may only publish information already released publicly by other news media. These sites must obtain approval from state information offices and from the State Council Information Agency. Article 11 of this order mentions that "content providers are responsible for ensuring the legality of any information disseminated through their services".[[18]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-18) Article 14 gives government officials full access to any kind of sensitive information they wish from providers of internet services.

Enforcement[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=3" \o "Edit section: Enforcement)]

In December 1997, Public Security minister Zhu Entao released new regulations to be enforced by the ministry that inflict fines for "defaming government agencies," "splitting the nation," and leaking "state secrets." Violators could face a fine up to 15.000 Yuan ($1800).[[19]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Harwit.2C_Eric_2008-19) Banning appears mostly uncoordinated and ad hoc, with some sites blocked, yet similar sites allowed or even blocked in one city and allowed in another. The blocks have often been lifted for special occasions. For example, [*The New York Times*](http://en.wikipedia.org/wiki/The_New_York_Times) was unblocked when reporters in a private interview with CPC general secretary [Jiang Zemin](http://en.wikipedia.org/wiki/Jiang_Zemin) specifically asked about the block and he replied that he would look into the matter. During the [APEC](http://en.wikipedia.org/wiki/Asia-Pacific_Economic_Cooperation" \o "Asia-Pacific Economic Cooperation)summit in Shanghai during 2001, normally blocked media sources such as [CNN](http://en.wikipedia.org/wiki/CNN), [NBC](http://en.wikipedia.org/wiki/NBC), and the [*Washington Post*](http://en.wikipedia.org/wiki/Washington_Post) became accessible. Since 2001, the content controls have been further relaxed on a permanent basis, and all three of the sites previously mentioned are now accessible from [mainland China](http://en.wikipedia.org/wiki/Mainland_China). However, access to the New York Times was briefly re-blocked in December 2008,[[20]](http://en.wikipedia.org/wiki/Internet_censorship_in_China" \l "cite_note-20) and is currently blocked.

In the summer of 2005, China purchased over 200 routers from an American company, [Cisco Systems](http://en.wikipedia.org/wiki/Cisco_Systems), that allowed the Chinese government a more advanced technological censoring ability.[[21]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-21)[[22]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-22) In February 2006, [Google](http://en.wikipedia.org/wiki/Google) made a significant concession to the [Great Firewall of China](http://en.wikipedia.org/wiki/Great_Firewall_of_China), in exchange for equipment installation on Chinese soil, by blocking websites which the Chinese government deemed illegal.[[23]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-23) They reversed this policy in 2010, refusing to continue to censor results.

In May 2011, the [State Council Information Office](http://en.wikipedia.org/wiki/State_Council_Information_Office) announced transfer of its offices which regulated the Internet to a new subordinate agency, the [State Internet Information Office](http://en.wikipedia.org/w/index.php?title=State_Internet_Information_Office&action=edit&redlink=1)which would be responsible for regulating the [Internet in China](http://en.wikipedia.org/wiki/Internet_in_China). The relationship of the new agency to other agencies in China which regulate the Internet was unclear from the announcement.[[24]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-24)

**Self-regulation**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=4" \o "Edit section: Self-regulation)]

Internet censorship in China has been called "a [panopticon](http://en.wikipedia.org/wiki/Panopticon_(Internet_culture)" \o "Panopticon (Internet culture)) that encourages [self-censorship](http://en.wikipedia.org/wiki/Self-censorship) through the perception that users are being watched".[[25]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-truefire-25) The enforcement (or threat of enforcement) of censorship creates a [chilling effect](http://en.wikipedia.org/wiki/Chilling_effect_(term)) where individuals and businesses willingly censor their own communications to avoid legal and economic repercussions. ISPs and other service providers are [legally liable for](http://en.wikipedia.org/wiki/Cyber_defamation_law) customers' conduct. The service providers have assumed an editorial role with regard to customer content, thus became publishers, and legally responsible for libel and other torts committed by customers. Some hotels in China advise Internet users to obey local Chinese Internet access rules by leaving a list of Internet rules and guidelines near the computers. These rules, among other things, forbid linking to politically unacceptable messages, and inform Internet users that if they do, they will have to face legal consequences.[[26]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-26)

On 16 March 2002, the [Internet Society of China](http://en.wikipedia.org/wiki/Internet_Society_of_China), a self-governing Chinese Internet industry body,[[27]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-27) launched the [Public Pledge on Self-Discipline for the Chinese Internet Industry](http://en.wikipedia.org/wiki/Public_Pledge_on_Self-Discipline_for_the_Chinese_Internet_Industry), an agreement between the Chinese Internet industry regulator and companies that operate sites in China. In signing the agreement, web companies pledge to identify and prevent the transmission of information that Chinese authorities deem objectionable, including information that "breaks laws or spreads superstition or obscenity", or that "may jeopardize state security and disrupt social stability".[[28]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-28)[[29]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-29)[[30]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-30) As of 2006, the pledge had been signed by more than 3,000 entities operating websites in China.[[31]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-31)

**Use of service providers**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=5" \o "Edit section: Use of service providers)]

Although the government does not have the physical resources to monitor all Internet chat rooms and forums, the threat of being shut down has caused Internet content providers to employ internal staff, colloquially known as "[big mamas](http://en.wikipedia.org/wiki/Big_mama)", who stop and remove forum comments which may be politically sensitive. In [Shenzhen](http://en.wikipedia.org/wiki/Shenzhen), these duties are partly taken over by a pair of police-created cartoon characters, [Jingjing and Chacha](http://en.wikipedia.org/wiki/Jingjing_and_Chacha" \o "Jingjing and Chacha), who help extend the online "police presence" of the Shenzhen authorities. These cartoons spread across the nation in 2007 reminding Internet users that they are being watched and should avoid posting "sensitive" or "harmful" material on the Internet.[[19]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Harwit.2C_Eric_2008-19)

However, Internet content providers have adopted some counter-strategies. One is to post politically sensitive stories and remove them only when the government complains. In the hours or days in which the story is available online, people read it, and by the time the story is taken down, the information is already public. One notable case in which this occurred was in response to a school explosion in 2001, when local officials tried to suppress the fact the explosion resulted from children illegally producing [fireworks](http://en.wikipedia.org/wiki/Fireworks).[[32]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-32)

On 11 July 2003, the Chinese government [started granting licenses](http://en.wikipedia.org/wiki/ICP_license) to businesses to open [Internet cafe](http://en.wikipedia.org/wiki/Internet_cafe) chains. Business analysts and foreign Internet operators regard the licenses as intended to clamp down on information deemed harmful to the Chinese government. In July 2007, the city of [Xiamen](http://en.wikipedia.org/wiki/Xiamen) announced it would ban anonymous online postings after text messages and online communications were used to rally protests against a proposed chemical plant in the city. Internet users will be required to provide proof of identity when posting messages on the more than 100,000 Web sites registered in Xiamen.[[33]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-33) The Chinese government issued new rules on Friday requiring Internet users to provide their real names to service providers, while assigning Internet companies greater responsibility for deleting forbidden postings and reporting them to the authorities. The new regulations, issued by the Standing Committee of the National People’s Congress, allow Internet users to continue to adopt pseudonyms for their online postings, but only if they first provide their real names to service providers, a measure that could chill some of the vibrant discourse on the country’s Twitter-like microblogs. The authorities periodically detain and even jail Internet users for politically sensitive comments, such as calls for a multiparty democracy or accusations of impropriety by local officials.[[34]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-34)

**Arrests**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=6" \o "Edit section: Arrests)]

Fines and short arrests are becoming an optional punishment to whoever expresses undesirable information through the different Internet formats, as this is seen as a risk to social stability.[[35]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-35)

In 2001, Wang Xiaoning and other Chinese activists were arrested and sentenced to 10 years in prison for using a Yahoo email account to post anonymous writing to an Internet mailing list.[[36]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-36) On 23 July 2008, the family of Liu Shaokun was notified that he had been sentenced to one year [re-education through labor](http://en.wikipedia.org/wiki/Re-education_through_labor) for "inciting a disturbance". As a teacher in Sichuan province, he had taken photographs of collapsed schools and posted these photos online.[[37]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-37) On 18 July 2008, Huang Qi was formally arrested on suspicion of illegally possessing state secrets. Huang had spoken with the foreign press and posted information on his website about the plight of parents who had lost children in collapsed schools.[[38]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-38) Shi Tao, a Chinese journalist, used his Yahoo! email account to send a message to a U.S.-based pro-democracy website. In his email, he summarized a government order directing media organizations in China to downplay the upcoming 15th anniversary of the 1989 crackdown on pro-democracy activists. Police arrested him in November 2004, charging him with "illegally providing state secrets to foreign entities". In April 2005, he was sentenced to 10 years' imprisonment and two years' subsequent deprivation of his political rights.[[39]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-39)

In mid-2013 police across China announced the arrests of hundreds of people accused of spreading false rumors online. Chinese authorities have said the crackdown is directed at abuses such as fraud, fakery, and slander. But the accusations against many of the arrested microbloggers have a political edge with many of the rumors called outrageously false by the government dealing with the sins of officials: corruption, venality, and sexual escapades. The suspicion is that the crackdown is intended to break up online networks of like-minded people whose ideas could challenge the Communist Party. Some of China's most popular microbloggers have been arrested. In September 2013 China’s highest court and prosecution office issued guidelines that define and outline penalties for punishing online rumors and slander. The rules give some protection to citizens who accuse officials of corruption, but they say that a slanderous message forwarded more than 500 times or read more than 5,000 times could result in up to three years in prison.[[40]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-40)

Technical implementation[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=7" \o "Edit section: Technical implementation)]

*Main article:*[*Golden Shield Project*](http://en.wikipedia.org/wiki/Golden_Shield_Project)

**Current methods**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=8" \o "Edit section: Current methods)]

The system blocks content by preventing [IP addresses](http://en.wikipedia.org/wiki/IP_address) from being routed through. It consists of standard firewalls and [proxy servers](http://en.wikipedia.org/wiki/Proxy_server) at the Internet [gateways](http://en.wikipedia.org/wiki/Gateway_(telecommunications)). The system also selectively engages in [DNS poisoning](http://en.wikipedia.org/wiki/DNS_poisoning) when particular sites are requested. The government does not appear to be systematically examining Internet content, as this appears to be technically impractical.[[41]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-41) Researchers at the [University of California, Davis](http://en.wikipedia.org/wiki/University_of_California,_Davis), and at the [University of New Mexico](http://en.wikipedia.org/wiki/University_of_New_Mexico) said that the censorship system is not a true firewall since banned material is sometimes able to pass through several routers or through the entire system without being blocked.[[25]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-truefire-25) Details for some commonly used technical methods for censoring are:[[42]](http://en.wikipedia.org/wiki/Internet_censorship_in_China" \l "cite_note-42)

|  |  |
| --- | --- |
| **Method** | **Description** |
| [IP blocking](http://en.wikipedia.org/wiki/IP_blocking) | The access to a certain [IP address](http://en.wikipedia.org/wiki/IP_address) is denied. If the target Web site is hosted in a [shared hosting server](http://en.wikipedia.org/wiki/Shared_web_hosting_service), all Web sites on the same server will be blocked. This affects all IP protocols (mostly [TCP](http://en.wikipedia.org/wiki/Transmission_Control_Protocol)) such as [HTTP](http://en.wikipedia.org/wiki/Hypertext_Transfer_Protocol), [FTP](http://en.wikipedia.org/wiki/File_Transfer_Protocol) or [POP](http://en.wikipedia.org/wiki/Post_Office_Protocol). A typical circumvention method is to find [proxies](http://en.wikipedia.org/wiki/Proxy_server) that have access to the target Web sites, but proxies may be jammed or blocked. Some large Web sites allocated additional IP addresses (for instance, an [IPv6](http://en.wikipedia.org/wiki/IPv6) address) to circumvent the block, but later the block may be extended to cover the new addresses.[[*citation needed*](http://en.wikipedia.org/wiki/Wikipedia:Citation_needed)] |
| [DNS](http://en.wikipedia.org/wiki/Domain_name_system)filtering and redirection | The DNS doesn't resolve [domain names](http://en.wikipedia.org/wiki/Domain_name) or returns incorrect IP addresses.[[43]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-43) This affects all IP protocols such as HTTP, FTP or POP. A typical circumvention method is to find a domain name server that resolves domain names correctly, but domain name servers are subject to blockage as well, especially IP blocking. Another workaround is to bypass DNS if the IP address is obtainable from other sources and is not blocked. Examples are modifying the [Hosts file](http://en.wikipedia.org/wiki/Hosts_file) or typing the IP address instead of the domain name in a [Web browser](http://en.wikipedia.org/wiki/Web_browser). |
| [URL](http://en.wikipedia.org/wiki/Uniform_Resource_Locator)filtering | Scan the requested [Uniform Resource Locator](http://en.wikipedia.org/wiki/Uniform_Resource_Locator) (URL) string for target keywords regardless of the domain name specified in the URL. This affects the [Hypertext Transfer Protocol](http://en.wikipedia.org/wiki/Hypertext_Transfer_Protocol). Typical circumvention methods are to use [escaped characters](http://en.wikipedia.org/wiki/Percent-encoding) in the URL, or to use encrypted protocols such as [VPN](http://en.wikipedia.org/wiki/Virtual_private_network) and [SSL](http://en.wikipedia.org/wiki/Transport_Layer_Security).[[44]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-44) |
| [Packet filtering](http://en.wikipedia.org/wiki/Deep_packet_inspection#Deep_Packet_Inspection_by_governments) | Terminate TCP [packet](http://en.wikipedia.org/wiki/Packet_(information_technology)) transmissions when a certain number of [controversial keywords](http://en.wikipedia.org/wiki/List_of_words_censored_by_search_engines_in_Mainland_China) are detected. This can be effective with many TCP protocols such as HTTP, FTP or POP, but [Search engine](http://en.wikipedia.org/wiki/Search_engine) pages are more likely to be censored. Typical circumvention methods are to use encryption means, such as VPN and SSL, to protect the HTML content, or reducing the [TCP/IP](http://en.wikipedia.org/wiki/Internet_protocol_suite) [stack](http://en.wikipedia.org/wiki/Protocol_stack)'s [MTU](http://en.wikipedia.org/wiki/Maximum_transmission_unit), thus reducing the amount of text contained in a given packet. |
| [Man-in-the-middle attack](http://en.wikipedia.org/wiki/Man-in-the-middle_attack#Man-in-the-middle_attack_by_governments) | GFW can use a root certificate from [CNNIC](http://en.wikipedia.org/wiki/CNNIC), which is found in most operating systems and browsers, to make a MITM attack. On 26 Jan 2013, the [GitHub](http://en.wikipedia.org/wiki/GitHub) SSL certificate was replaced with a self-signed certificate in China by, generally believed, the GFW.[[45]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-45) |
| [TCP connection reset](http://en.wikipedia.org/wiki/TCP_reset_attack) | If a previous TCP connection is blocked by the filter, future connection attempts from both sides will also be blocked for up to 30 minutes. Depending on the location of the block, other users or Web sites may be also blocked if the communications are [routed](http://en.wikipedia.org/wiki/Routing) to the location of the block. A circumvention method is to ignore the reset packet sent by the firewall.[[46]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-46) |
| [VPN blocking](http://en.wikipedia.org/wiki/VPN_blocking) | Beginning in 2011, users reported disruptions of [Virtual Private Network](http://en.wikipedia.org/wiki/Virtual_Private_Network) (VPN) services.[[47]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-guardvpn-47) In late 2012, GFW was able to "learn, discover and block" the encrypted communications methods used by a number of different VPN systems. China Unicom, one of the biggest telecoms providers in the country, was killing connections where a VPN is detected, according to one company with a number of users in China.[[48]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-guardvpn2-48) |

Other reported methods have included:

|  |  |
| --- | --- |
| **Method** | **Description** |
| [Network enumeration](http://en.wikipedia.org/wiki/Network_enumerating) | It has been reported that unknown entities within China, likely with [deep packet inspection](http://en.wikipedia.org/wiki/Deep_packet_inspection) (DPI) capabilities, have initiated unsolicited TCP/IP connections to computers within the United States for the purported purpose of [network enumeration](http://en.wikipedia.org/wiki/Network_enumerating) of services, in particular [TLS](http://en.wikipedia.org/wiki/Transport_Layer_Security)/[SSL](http://en.wikipedia.org/wiki/Secure_Sockets_Layer) and [Tor (anonymity network)](http://en.wikipedia.org/wiki/Tor_(anonymity_network)) services, with the aim of facilitating IP blocking.[[49]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-49) |

**Future projects**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=9" \o "Edit section: Future projects)]

The Golden Shield Project is owned by the [Ministry of Public Security of the People's Republic of China](http://en.wikipedia.org/wiki/Ministry_of_Public_Security_of_the_People%27s_Republic_of_China) (MPS). It started in 1998, began processing in November 2003, and the first part of the project passed the national inspection on 16 November 2006 in Beijing. According to MPS, its purpose is to construct a communication network and computer information system for police to improve their capability and efficiency. By 2002 the preliminary work of the Golden Shield Project had cost US$800 million (equivalent to RMB 5,000 million or €620 million).[[50]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-50) Greg Walton, a freelance researcher, said that the aim of the Golden Shield is to establish a "gigantic online database" that would include "speech and face recognition, closed-circuit television... [and] credit records" as well as traditional Internet use records.[[51]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-51)

A notice[[52]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-52) issued by the Ministry of Industry and Information Technology on 19 May stated that, as of 1 July 2009, manufacturers must ship machines to be sold in mainland China with the [Green Dam Youth Escort](http://en.wikipedia.org/wiki/Green_Dam_Youth_Escort) software.[[53]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-WSJ-53) On 14 August 2009, Li Yizhong, minister of industry and information technology, announced that computer manufacturers and retailers were no longer obliged to ship the software with new computers for home or business use, but that schools, Internet cafes and other public use computers would still be required to run the software.

A senior official of the [Internet Affairs Bureau of the State Council Information Office](http://en.wikipedia.org/wiki/State_Council_Information_Office#Internet_Affairs_Bureau) said the software's only purpose was "to filter pornography on the Internet". The general manager of Jinhui, which developed Green Dam, said: "Our software is simply not capable of spying on Internet users, it is only a filter."[[54]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-54) Human rights advocates in China have criticized the software for being "a thinly concealed attempt by the government to expand censorship".[[55]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-55) Online polls conducted on [Sina](http://en.wikipedia.org/wiki/Sina.com" \o "Sina.com), [Netease](http://en.wikipedia.org/wiki/Netease" \o "Netease), [Tencent](http://en.wikipedia.org/wiki/Tencent_QQ" \o "Tencent QQ), [Sohu](http://en.wikipedia.org/wiki/Sohu" \o "Sohu), and *Southern Metropolis Daily* revealed over 70% rejection of the software by [netizens](http://en.wikipedia.org/wiki/Netizen" \o "Netizen).[[56]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-56)[[57]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-57) However, [Xinhua](http://en.wikipedia.org/wiki/Xinhua) commented that "support [for Green Dam] largely stems from end users, opposing opinions primarily come from a minority of media outlets and businesses".[[58]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-58)[[59]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-59)

Targets of censorship[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=10" \o "Edit section: Targets of censorship)]

**Targeted content**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=11" \o "Edit section: Targeted content)]

*See also:*[*Websites blocked in China*](http://en.wikipedia.org/wiki/Websites_blocked_in_China)

According to a [Harvard](http://en.wikipedia.org/wiki/Harvard_University) study, at least 18,000 websites are blocked from within mainland China,[[60]](http://en.wikipedia.org/wiki/Internet_censorship_in_China" \l "cite_note-60) including 12 out of the Top 100 Global Websites. The Chinese-sponsored news agency, Xinhua, stated that censorship targets only "superstitious, pornographic, violence-related, gambling, and other harmful information.".[[61]](http://en.wikipedia.org/wiki/Internet_censorship_in_China" \l "cite_note-61) This appears questionable, as the e-mail provider gmail.com is blocked, and it cannot be said to fall into any of these categories.[[62]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-62) On the other hand, websites centered on the following political topics are often censored: [Falun Gong](http://en.wikipedia.org/wiki/Falun_Gong),[[63]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-autogenerated1-63) [police brutality](http://en.wikipedia.org/wiki/Police_brutality), [Tiananmen Square protests of 1989](http://en.wikipedia.org/wiki/Tiananmen_Square_protests_of_1989), [freedom of speech](http://en.wikipedia.org/wiki/Freedom_of_speech), democracy,[[64]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-youtubeblock-64) [Taiwan independence](http://en.wikipedia.org/wiki/Taiwan_independence),[[63]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-autogenerated1-63) [Tibetan independence movement](http://en.wikipedia.org/wiki/Tibetan_independence_movement),[[63]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-autogenerated1-63)and the [Tuidang movement](http://en.wikipedia.org/wiki/Tuidang_movement" \o "Tuidang movement).[[65]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-65) Foreign media websites such as Yahoo! Hong Kong and the Voice of America are occasionally blocked while as of 2014 the *New York Times*, the BBC, and Bloomberg News are indefinitely blocked.

Testing performed by [Freedom House](http://en.wikipedia.org/wiki/Freedom_House) in 2011 confirmed that material written by or about activist bloggers is removed from the Chinese internet in a practice that has been termed "cyber-disappearance".[[66]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-66)[[67]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-67)[[68]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-68)

A 2012 study of social media sites by other Harvard researchers found that 13% of Internet posts were blocked. The blocking focused mainly on any form of collective action (anything from false rumors driving riots to protest organizers to large parties for fun), pornography, and criticism of the censors. However, significant criticisms of the government were not blocked when made separately from calls for collective action.[[69]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-69)

A lot of larger Japanese websites were blocked during the afternoon of 15 June 2012 (UTC+08:00) to the morning of 17 June 2012 (UTC+08:00), such as Google Japan, Yahoo! Japan, Amazon Japan, Excite, Yomiuri News, Sponichi News and Nikkei BP Japan.[[*citation needed*](http://en.wikipedia.org/wiki/Wikipedia:Citation_needed)]

Chinese censors have been relatively reluctant to block websites where there might be significant economic consequences. For example, a block of [GitHub](http://en.wikipedia.org/wiki/GitHub) was reversed after widespread complaints from the Chinese software developer community.[[70]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-70) In November 2013 after the Chinese services of [Reuters](http://en.wikipedia.org/wiki/Reuters) and the [Wall Street Journal](http://en.wikipedia.org/wiki/Wall_Street_Journal) were blocked,*greatfire.org* mirrored the Reuters website to an [Amazon.com](http://en.wikipedia.org/wiki/Amazon.com) domain in such a way that it could not be shut down without shutting off domestic access to all of Amazon's [cloud storage](http://en.wikipedia.org/wiki/Cloud_storage) service.[[71]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-71)

For one month beginning 17 November 2014, [ProPublica](http://en.wikipedia.org/wiki/ProPublica" \o "ProPublica) tested whether the homepages of 18 international news organizations were accessible to browsers inside China, and found the most consistently blocked were Bloomberg, *New York Times*, *South China Morning Post*, *Wall Street Journal*, Facebook, and Twitter.[[72]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-72)

**Search engines**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=12" \o "Edit section: Search engines)]

*See also:*[*List of blacklisted keywords in China*](http://en.wikipedia.org/wiki/List_of_blacklisted_keywords_in_China)

One part of the block is to filter the search results of certain terms on Chinese [search engines](http://en.wikipedia.org/wiki/Search_engines). These Chinese search engines include both international ones (for example,[yahoo.com.cn](http://en.wikipedia.org/wiki/Yahoo!), [Bing](http://en.wikipedia.org/wiki/Bing), and (formerly) [Google China](http://en.wikipedia.org/wiki/Google_China)) as well as domestic ones (for example, [360 Search](http://en.wikipedia.org/wiki/Qihoo) and [Baidu](http://en.wikipedia.org/wiki/Baidu)). Attempting to search for censored keywords in these Chinese search engines will yield few or no results. Previously, google.cn displayed the following at the bottom of the page: "According to the local laws, regulations and policies, part of the searching result is not shown." As was the case when searching for information about the [2011 uprising in Egypt](http://en.wikipedia.org/wiki/2011_Egyptian_protests).[[73]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-73) When Google did business in the country, it set up computer systems inside China that try to access Web sites outside the country. If a site is inaccessible, then it is added to Google China's blacklist.[[74]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-74)

In addition, a connection containing intensive censored terms may also be closed by The Great Firewall, and cannot be reestablished for several minutes. This affects all network connections including [HTTP](http://en.wikipedia.org/wiki/HTTP) and [POP](http://en.wikipedia.org/wiki/Post_Office_Protocol), but the reset is more likely to occur during searching. Before the search engines censored themselves, many search engines had been blocked, namely Google and AltaVista. [Technorati](http://en.wikipedia.org/wiki/Technorati), a search engine for blogs, has been blocked.[[75]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-75) Different search engines implement the mandated censorship in different ways. For example, the search engine [Bing](http://en.wikipedia.org/wiki/Bing) is reported to censor search results from searches conducted in [simplified Chinese characters](http://en.wikipedia.org/wiki/Simplified_Chinese_characters) (used in [China](http://en.wikipedia.org/wiki/China)), but not in [traditional Chinese characters](http://en.wikipedia.org/wiki/Traditional_Chinese_characters)(used in [Hong Kong](http://en.wikipedia.org/wiki/Hong_Kong), [Taiwan](http://en.wikipedia.org/wiki/Taiwan) and [Macau](http://en.wikipedia.org/wiki/Macau)).[[76]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-76)

**Discussion forums**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=13" \o "Edit section: Discussion forums)]

"*For reason which everyone knows, and to suppress our extremely unharmonious thoughts, this site is voluntarily closed for technical maintenance between 3 and 6 June 2009...*" Dusanben.com (translation)

Several [Bulletin Board Systems](http://en.wikipedia.org/wiki/Bulletin_Board_System) in universities were closed down or restricted public access since 2004, including the [SMTH BBS](http://en.wikipedia.org/wiki/SMTH_BBS) and the [YTHT](http://en.wikipedia.org/wiki/YTHT)BBS.[[77]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-77)

In September 2007, some data centers were shut down indiscriminately for providing interactive features such as blogs and forums. [CBS](http://en.wikipedia.org/wiki/CBS) reports an estimate that half the interactive sites hosted in China were blocked.[[78]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-78)

Coinciding with the twentieth anniversary of the government suppression of the [pro-democracy protests in Tiananmen Square](http://en.wikipedia.org/wiki/Tiananmen_Square_protests_of_1989), the government ordered Internet portals, forums and discussion groups to shut down their servers for maintenance between 3 and 6 June 2009.[[79]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-servermaintenance-79) The day before the mass shut-down, Chinese users of Twitter, [Hotmail](http://en.wikipedia.org/wiki/Hotmail) and [Flickr](http://en.wikipedia.org/wiki/Flickr), among others, reported a widespread inability to access these services.[[80]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-80)

**Social media websites**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=14" \o "Edit section: Social media websites)]

Although the government and media often use [microblogging](http://en.wikipedia.org/wiki/Microblogging) service [Sina Weibo](http://en.wikipedia.org/wiki/Sina_Weibo" \o "Sina Weibo) to spread ideas and monitor corruption, it is also supervised and self-censored by 700 Sina censors.[[81]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-81)

In the second half of 2009, the social networking sites Facebook and Twitter were blocked, presumably because of containing social or political commentary (similar to LiveJournal in the above list). An example is the commentary on the [July 2009 Ürümqi riots](http://en.wikipedia.org/wiki/July_2009_%C3%9Cr%C3%BCmqi_riots).[[82]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-82)[[83]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-83) Another reason suggested for the block is that activists can utilize them to organize themselves.[[84]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-84)[[85]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-85)

In 2010, [Chinese human rights](http://en.wikipedia.org/wiki/Chinese_human_rights) activist [Liu Xiaobo](http://en.wikipedia.org/wiki/Liu_Xiaobo) became a forbidden topic in Chinese media due to his winning the [2010 Nobel Peace Prize](http://en.wikipedia.org/wiki/2010_Nobel_Peace_Prize).[[86]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-86)

After the 2011 [Wenzhou train collision](http://en.wikipedia.org/wiki/Wenzhou_train_collision), the government started emphasizing the danger in spreading 'false rumors' (yaoyan), making the permissive usage of Weibo and social networks a public debate.[[87]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-87)

In 2012, [*First Monday*](http://en.wikipedia.org/wiki/First_Monday_(journal)) published an article on "political *content* censorship in social media, i.e., the active deletion of messages published by individuals."[[88]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-88) This academic study, which received extensive media coverage,[[89]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-89)[[90]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-90) accumulated a dataset of 56 million messages sent on Sina Weibo from June through September 2011, and statistically analyzed them three months later, finding 212,583 deletions out of 1.3 million sampled, more than 16 percent. The study revealed that censors quickly deleted words with politically controversial meanings (e.g., *qingci* 请辞 "asking someone to resign" referring to calls for Railway Minister [Sheng Guangzu](http://en.wikipedia.org/wiki/Sheng_Guangzu) to resign after the [Wenzhou train collision](http://en.wikipedia.org/wiki/Wenzhou_train_collision) on 23 July 2011), and also that the rate of message deletion was regionally anomalous (compare censorship rates of 53% in [Tibet](http://en.wikipedia.org/wiki/Tibet) and 52% in [Qinghai](http://en.wikipedia.org/wiki/Qinghai) with 12% in [Beijing](http://en.wikipedia.org/wiki/Beijing) and 11.4% in [Shanghai](http://en.wikipedia.org/wiki/Shanghai)).

Specific examples of internet censorship[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=15" \o "Edit section: Specific examples of internet censorship)]

**Tiananmen Square protest of 1989**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=16)]

*See also:*[*Tiananmen Square protests of 1989*](http://en.wikipedia.org/wiki/Tiananmen_Square_protests_of_1989)

The Chinese government censors internet materials related to the [Tiananmen Square protest of 1989](http://en.wikipedia.org/wiki/Tiananmen_Square_protest_of_1989). According to the government’s [white paper](http://en.wikipedia.org/wiki/White_paper) in 2010 on the subject of [internet in China](http://en.wikipedia.org/wiki/Internet_in_China), the government protects “the safe flow of internet information and actively guides people to manage websites in accordance with the law and use the internet in a wholesome and correct way.”[[91]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-white_paper-91) The government, therefore, prevents people on the internet from “divulging state secrets, subverting state power and jeopardizing national unification; damaging state honor” and “disrupting social order and stability."[[91]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-white_paper-91) Law-abiding Chinese websites such as [Sina Weibo](http://en.wikipedia.org/wiki/Sina_Weibo" \o "Sina Weibo) censors words related to the protest in its search engine.[[92]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Weibo_Blocked-92) Weibo is one of the largest Chinese [microblogging](http://en.wikipedia.org/wiki/Microblogging) services.[[92]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Weibo_Blocked-92) As of October 2012, Weibo’s censored words include “[Tank Man](http://en.wikipedia.org/wiki/Tank_Man).”[[92]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Weibo_Blocked-92) The government also censors words that have similar pronunciation to “June 4,” the date that the violent government’s crackdown occurred. “陆肆” (pinyin: lu si), for example, is similar in pronunciation to “June 4” (pinyin: liu si).[[92]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Weibo_Blocked-92) The government forbids [remembrances of the protest](http://en.wikipedia.org/wiki/Memorials_for_the_Tiananmen_Square_protests_of_1989). Weibo’s search engine, for example, censors Hong Kong lyricist Thomas Chow’s song called 自由花 or “The Flower of Freedom.”[[93]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-93) This is because attendees of the [Vindicate 4 June and Relay the Torch](http://en.wikipedia.org/w/index.php?title=Vindicate_4_June_and_Relay_the_Torch&action=edit&redlink=1) rally at Hong Kong’s [Victoria Park](http://en.wikipedia.org/wiki/Victoria_Park,_Hong_Kong) sing this song every year to commemorate the victims of the protest.[[94]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-94)

The government’s internet censorship of the protest was especially strict during the [20th anniversary of Tiananmen Square protests of 1989](http://en.wikipedia.org/wiki/20th_anniversary_of_Tiananmen_Square_protests_of_1989) in 2009. According to a [Reporters Without Borders](http://en.wikipedia.org/wiki/Reporters_Without_Borders)’ article, searching photos related to the protest such as “June 4” on [Baidu](http://en.wikipedia.org/wiki/Baidu), the most popular Chinese search engine, would return blank results and a message stating that the “search does not comply with laws, regulations and policies.” [[95]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-95) Moreover, a large number of [netizens](http://en.wikipedia.org/wiki/Netizens" \o "Netizens) from China claimed that they were unable to access numerous Western web services such as Twitter, Hotmail, and Flickr days leading up to and during the anniversary.[[96]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Websites_maintenance-96) Netizens in China claimed that many Chinese web services were temporarily blocked days before and during the anniversary.[[96]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Websites_maintenance-96) Netizens also reported that microblogging services including Fanfou and Xiaonei (now known as [Renren](http://en.wikipedia.org/wiki/Renren" \o "Renren)) were down with similar messages that claim that their services were “under maintenance” for a few days around the anniversary date.[[96]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Websites_maintenance-96)

**Reactions of netizens in China**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=17" \o "Edit section: Reactions of netizens in China)]

Western news articles claimed that Chinese netizens responded with subtle protests against the government’s temporary blockages of large web services. A news article from The Guardian, for instance, stated that Chinese websites made subtle grievances against the state’s censorship by sarcastically calling the date June 4 as the [中国互联网维护日](http://zh.wikipedia.org/wiki/%E4%B8%AD%E5%9B%BD%E4%BA%92%E8%81%94%E7%BD%91%E7%BB%B4%E6%8A%A4%E6%97%A5) or “Chinese Internet Maintenance Day.”[[97]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Veiled_protest-97) Owner of the blog Wuqing.org stated, “I, too, am under maintenance.”[[97]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Veiled_protest-97) The dictionary website Wordku.com voluntarily took its site down with the claim that this was because of the “Chinese Internet Maintenance Day.”[[97]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Veiled_protest-97) Chinese netizens use subtle and sarcastic internet meme to criticize the government and to bypass censorship. Netizens created and posted humorous pictures or drawings that are similar to the Tank Man photo on Weibo.[[98]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Big_yellow_duck-98) One of these pictures, for example, shows Florentijin Hofman’s [rubber ducks sculptures](http://en.wikipedia.org/wiki/Rubber_Duck_(sculpture)) replacing tanks in the Tank Man photo.[[98]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Big_yellow_duck-98) On Twitter, a Beijing-based AIDS activist, Hu Jia asked netizens in mainland China to wear black T-shirts on June 4 to oppose censorship and to commemorate the date.[[98]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Big_yellow_duck-98) Chinese web services such as Weibo eventually censored searches of both “black shirt” and “Big Yellow Duck” in 2009.[[98]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Big_yellow_duck-98)

**Debates about the significance of internet resistance to censorship**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=18" \o "Edit section: Debates about the significance of internet resistance to censorship)]

According to Chinese studies expert Johan Lagerkvist, scholars [Pierre Bourdieu](http://en.wikipedia.org/wiki/Pierre_Bourdieu) and [Michel de Certeau](http://en.wikipedia.org/wiki/Michel_de_Certeau) argue that this culture of satire is a weapon of resistance against authority.[[99]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-After_the_Internet-99) This is because criticism against authority often resulted in satirical parodies that “presupposes and confirms emancipation” of the supposedly oppressed people.[[99]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-After_the_Internet-99) Academic writer [Linda Hutcheon](http://en.wikipedia.org/wiki/Linda_Hutcheon) argues that some people, however, may view satirical language used to criticize the government as “complicity,” which can “reinforce rather than subvert conservative attitudes.”[[99]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-After_the_Internet-99) Chinese experts [Perry Link](http://en.wikipedia.org/wiki/Perry_Link) and [Xiao Qiang](http://en.wikipedia.org/wiki/Xiao_Qiang), however, oppose this argument. They claimed that when sarcastic terms develop into common vocabulary of netizens, these terms would lose their sarcastic characteristic. They then become normal terms that carry significant political meanings that oppose the government.[[100]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-100) Xiao believes that the netizens’ freedom to spread information on the internet has forced the government to listen to popular demands of netizens.[[101]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Battle-101) For example, the [Ministry of Information Technology](http://en.wikipedia.org/wiki/Ministry_of_Industry_and_Information_Technology_of_the_People%27s_Republic_of_China)’s plan to preinstall mandatory censoring software called [Green Dam Youth Escort](http://en.wikipedia.org/wiki/Green_Dam_Youth_Escort) on computers failed after popular online opposition against it in 2009, the year of the 20th anniversary of the protest.[[101]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Battle-101)[[102]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-102)[[103]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-103)

Lagerkvist states that the Chinese government, however, does not see subtle criticisms on the internet as real threats that could carry significant political meanings and topple the government.[[99]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-After_the_Internet-99) He argues that real threats occur only when “laugh mobs” become an “organized smart mobs” that directly challenge the government’s power.[[99]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-After_the_Internet-99) At a [TED conference](http://en.wikipedia.org/wiki/TED_conference), [Michael Anti](http://en.wikipedia.org/wiki/Michael_Anti_(journalist)) gave a similar reason for the government’s lack of enforcement against these internet memes.[[104]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Anti_firewall-104) Anti suggests that the government sometimes allows limited windows of freedom of speech such as internet memes. Anti explains that this is to guide and generate public opinions that favour the government and to criticize enemies of the party officials.[[104]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Anti_firewall-104)

**Internet censorship of the protest in 2013**[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=19)]

The Chinese government has become more efficient in its internet regulations since the 20th anniversary of the Tiananmen protest. On June 3, 2013, Weibo quietly suspended usage of the candle icon from the comment input tool, which netizens used to mourn the dead on forums.[[105]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-105) Some searches related to the protest on Chinese website services no longer come up with blank results, but with results that the government had “carefully selected.”[[106]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-New_censorship-106) These subtle methods of government censorship may cause netizens to believe that their searched materials were not censored.[[106]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-New_censorship-106) The government, however, is inconsistent in its enforcement of censorship laws. Netizens reported that searches of some censored terms on Chinese web services still resulted in blank pages with a message that says “relevant laws, regulations and policies” prevent the display of results related to the searches.[[107]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-107)

International influence[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=20" \o "Edit section: International influence)]

Foreign content providers such as [Yahoo!](http://en.wikipedia.org/wiki/Yahoo!), [AOL](http://en.wikipedia.org/wiki/AOL), and [Skype](http://en.wikipedia.org/wiki/Skype) must abide by Chinese government wishes, including having internal content monitors, in order to be able to operate within mainland China. Also, in accordance with mainland Chinese laws, [Microsoft](http://en.wikipedia.org/wiki/Microsoft) began to censor the content of its blog service [Windows Live Spaces](http://en.wikipedia.org/wiki/Windows_Live_Spaces), arguing that continuing to provide Internet services is more beneficial to the Chinese.[[108]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-108) [Michael Anti](http://en.wikipedia.org/wiki/Michael_Anti_(journalist)) is a famous Chinese journalist whose blog on [Windows Live Spaces](http://en.wikipedia.org/wiki/Windows_Live_Spaces) was censored by Microsoft. In an April 2006 e-mail panel discussion Rebecca MacKinnon, who reported from China for nine years as a Beijing bureau chief for CNN, said: "... many bloggers said he [Anti] was a necessary sacrifice so that the majority of Chinese can continue to have an online space to express themselves as they choose. So the point is, compromises are being made at every level of society because nobody has the expectation of political freedom anyway."[[109]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-109)

The Chinese version of MySpace, launched in April 2007, has many censorship-related differences from other international versions of the service. Discussion forums on topics such as religion and politics are absent and a filtering system that prevents the posting of content about politically sensitive topics has been added.[[110]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-110) Users are also given the ability to report the "misconduct" of other users for offenses including "endangering national security, leaking state secrets, subverting the government, undermining national unity, spreading rumors or disturbing the social order."[[111]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-111)

Some media have suggested that China's Internet censorship of foreign websites may also be a means of forcing mainland Chinese users to rely on China's own e-commerce industry, thus self-insulating their economy from the dominance of international corporations.[[112]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-Newsvine-112) On 7 November 2005 an alliance of investors and researchers representing 26 companies in the U.S., Europe and Australia with over US $21 billion in joint assets [announced](http://www.wired.com/news/politics/0,1283,69508,00.html) that they were urging businesses to protect freedom of expression and pledged to monitor technology companies that do business in countries violating human rights, such as China. On 21 December 2005 the UN, [OSCE](http://en.wikipedia.org/wiki/Organization_for_Security_and_Co-operation_in_Europe) and [OAS](http://en.wikipedia.org/wiki/Organization_of_American_States) special mandates on freedom of expression[called](http://www.article19.org/pdfs/standards/three-mandates-dec-2005.pdf) on Internet corporations to "work together ... to resist official attempts to control or restrict use of the Internet." Google finally responded when attacked by hackers rumoured to be hired by the Chinese government by threatening to pull out of China[*[citation needed](http://en.wikipedia.org/wiki/Wikipedia:Citation_needed" \o "Wikipedia:Citation needed)*]

[Reporters Without Borders](http://en.wikipedia.org/wiki/Reporters_Without_Borders) suspects that regimes such as [Cuba](http://en.wikipedia.org/wiki/Censorship_in_Cuba), [Zimbabwe](http://en.wikipedia.org/wiki/Censorship_in_Zimbabwe) and [Belarus](http://en.wikipedia.org/wiki/Censorship_in_Belarus) have obtained surveillance technology from China.[[113]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-cubaonline-113)

Evasion[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=21" \o "Edit section: Evasion)]

*Main article:*[*Internet censorship circumvention*](http://en.wikipedia.org/wiki/Internet_censorship_circumvention)

[Rupert Murdoch](http://en.wikipedia.org/wiki/Rupert_Murdoch) famously proclaimed that advances in communications technology posed an “unambiguous threat to totalitarian regimes everywhere”[[114]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-114) and [Ai Weiwei](http://en.wikipedia.org/wiki/Ai_Weiwei) argued that the Chinese “leaders must understand it's not possible for them to control the Internet unless they shut it off".[[115]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-115)

Internet censorship in China is circumvented by determined parties by using [proxy servers](http://en.wikipedia.org/wiki/Proxy_servers) outside the firewall.[[116]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-116) Users may circumvent all of the censorship and monitoring of the Great Firewall if they have a secure [VPN](http://en.wikipedia.org/wiki/VPN) or [SSH](http://en.wikipedia.org/wiki/Secure_Shell) connection method to a computer outside mainland China. However, disruptions of VPN services have been reported and many of the free or popular services are now blocked.[[47]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-guardvpn-47)[[48]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-guardvpn2-48)

As the Great Firewall of China gets more sophisticated, the users are getting increasingly creative in the ways they elude the censorship such as by using analogies to discuss topics. Furthermore, users are becoming increasingly open in their mockery of them by actively using [homophones](http://en.wikipedia.org/wiki/Homophone) to avoid censorship. Deleted sites have "been harmonized", indicating CPC general secretary [Hu Jintao](http://en.wikipedia.org/wiki/Hu_Jintao)'s Internet censorship under the big picture of creating a "[Socialist Harmonious Society](http://en.wikipedia.org/wiki/Socialist_Harmonious_Society)". For example, censors are referred to as "river crabs", because in Chinese those two words together form a [homophone](http://en.wikipedia.org/wiki/Homophone) for "harmony".[[117]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-117) Since free hosting blog services like [Blogger](http://en.wikipedia.org/wiki/Blogger_(service)) and [Wordpress.com](http://en.wikipedia.org/wiki/Wordpress.com) frequently face blockage,[[118]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-118)[[119]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-119)[[120]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-120)[[121]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-121) some China-focused services explicitly offer to change a blog's IP address within 30 minutes if it is blocked by the authorities.[[122]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-122) In July 2006, researchers at Cambridge University claimed to have defeated the firewall by ignoring the [TCP](http://en.wikipedia.org/wiki/Transmission_Control_Protocol) reset packets.[[123]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-123)

Although many users use VPNs to circumvent the Great Firewall of China, many internet connections are now subject to [Deep-packet inspection](http://en.wikipedia.org/wiki/Deep-packet_inspection) where data packets are scanned before being allowed to pass. This means that many VPNs have been blocked. A notable method of bypassing deep packet inspection with [OpenVPN](http://en.wikipedia.org/wiki/OpenVPN" \o "OpenVPN) is to forward traffic to TCP 443. Obfsproxy[[124]](http://en.wikipedia.org/wiki/Internet_censorship_in_China" \l "cite_note-obsf-124) and other tools also allow users to evade deep-packet inspection.[[125]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-125)[[126]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-126)

The [Tor](http://en.wikipedia.org/wiki/Tor_(anonymity_network)) anonymity network was and is subject to blocking by China's Great Firewall.[[127]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-127)[[128]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-128)[[129]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-129)[[130]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-130) The Tor website is blocked when accessed over [HTTP](http://en.wikipedia.org/wiki/Hypertext_Transfer_Protocol) but it is reachable over[HTTPS](http://en.wikipedia.org/wiki/HTTP_Secure) so it is possible for users to download the Tor Browser Bundle.[[131]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-HowTorIsBlockingChina-131) The Tor network maintains a public list of approximately 3000 relays which are almost all blocked.[[131]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-HowTorIsBlockingChina-131)In addition to the public relays, Tor maintains so called bridges which are non-public relays.[[132]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-132) Their purpose is to help censored users reach the Tor network. The Great Firewall is dynamically blocking these bridges by looking for their [TLS](http://en.wikipedia.org/wiki/Transport_Layer_Security) fingerprint.[[131]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-HowTorIsBlockingChina-131)[[133]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-133) According to a research paper published in April 2012, the block can be circumvented by using packet fragmentation or the Tor obfsproxy bundle in combination with private obfsproxy bridges.[[124]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-obsf-124)[[131]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-HowTorIsBlockingChina-131)

[Psiphon](http://en.wikipedia.org/wiki/Psiphon) is also used.

It was common in the past to use [Google](http://en.wikipedia.org/wiki/Google)'s cache feature to view blocked websites. However, this feature of Google seems to be under some level of blocking, as access is now erratic and does not work for blocked websites. Currently the block is mostly circumvented by using proxy servers outside the firewall, and is not difficult to carry out for those determined to do so. Some well-known proxy servers have also been blocked. Some Chinese citizens used the Google mirror [elgooG](http://en.wikipedia.org/wiki/ElgooG" \o "ElgooG) after China blocked Google.[[134]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-134)

The mobile [Opera Mini](http://en.wikipedia.org/wiki/Opera_Mini) browser uses a proxy-based approach employing encryption and compression in order to speed up downloads. This has the side effect of allowing it to circumvent several approaches to Internet censorship. In 2009 this led the government of China to ban all but a special Chinese version of the browser.[[135]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-135)

Moreover, net surfers come up with many more technical ways to get around with the Great Wall of China. [Steganography](http://en.wikipedia.org/wiki/Steganography) is a "practice of embedding useful data in what looks like something irrelevant. The text of a document can be broken into its constituent bytes, which are added to the pixels of an apparently innocent picture. The effect is barely visible on the picture, but the recipient can extract it with the right software".[[136]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-136)

Economic impact[[edit](http://en.wikipedia.org/w/index.php?title=Internet_censorship_in_China&action=edit&section=22)]

According to [BBC](http://en.wikipedia.org/wiki/BBC), local Chinese businesses such as [Baidu](http://en.wikipedia.org/wiki/Baidu), [Tencent](http://en.wikipedia.org/wiki/Tencent" \o "Tencent) and [Alibaba](http://en.wikipedia.org/wiki/Alibaba_Group), some of the world's largest internet enterprises, benefited from the way China has [blocked international rivals](http://en.wikipedia.org/wiki/Protectionism) from the market, encouraging domestic competition.[[7]](http://en.wikipedia.org/wiki/Internet_censorship_in_China#cite_note-BBC_Alibaba_IPO:_Chairman_Ma.27s_China-7)