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ANNUAL REPORT 2008

# 2008

## ANNUAL REPORT

China Internet Network Information Center

China Internet Network Information Center



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## Chairman's Statement

The Internet, as the primary drive for the emergence of the information society, has grown up to be a global public facility, supporting the economic development and social progress of the human society. Its potentiality is far more that what we can see within the short time since its incipience.

The application and technology of the Internet and corresponding management and service level reflect the level of IT application in a country. China rose late in the big Internet family, but after only fifteen years, China has now the largest group of netizens in the world, and has taken the initial shape of a giant in the Internet, with a rich diversity of network applications and frequently emerging technical innovations. The new generation will grow up with the Internet.

The domain name system operated and managed by the CNNIC is a very important central infrastructure of the Internet in China. The construction and development of national domain names as the entrance and fundamental resources of the Internet also lead the development of the Internet. In this sense, the domain name system is a public instrument and domain name service is public service. How well this work is fulfilled is directly related to the development of the whole Internet.

As a Confucian saying goes, "A Gentleman must be strong and resolute, for his burden is heavy and the road is long." The public service provided by the CNNIC is oriented to a huge group. Users and practitioners come from every corner of the world, with different requirements on service. We can imagine how difficult administration and service can be. Strengthening administration and improving service are the eternal CNNIC themes. In such a market environment, only when we work hard on both administration and service can we better fulfill the sacred responsibilities assigned by the state.

I hope that the CNNIC will adopt more open vision to actively publicize its work through various approaches, draw on the wisdom of the people, actively learn and draw on advanced experiences, explore, free of restraint, all effective measures, unite all the forces that can be united, manage well service and technical support and satisfactorily fulfill the task allocated by the country and society with excellent service quality and sound management level.

This 2008 Annual Report has initiated a good beginning. I wish that the CNNIC would continue to maintain this open mindset and better fulfill its missions with a view to the future.

Shi Erwei, Chairman of the CNNIC Steering Committee and Vice President of the China Academy of Sciences

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## To Users

Domain names are fundamental resources of the Internet, indispensable to it like air and water to people. The CNNIC team feels very much honored to assume the strategic responsibility for constructing, operating and administering the national domain name system, as our cause is the cause of the country. In the market economy environment, it is impossible for us to rely on administrative orders to develop national CN domain names. We must win users with excellent service and put users in the center of all work. Users' satisfaction is our starting point and goal.

Domain name registration administration and service is a public service oriented to the society. Apparently, such responsibilities require that we should follow the principle of reliability, accountability and fairness and that we should always bear our missions in mind, be oriented to the public, and win users with efficient, standardized and meticulous service, ability of rapid response and ability of sustainable development. The CNNIC has always been unremittingly exploring and adopting various effective measures to fulfill our missions.

The CNNIC is willing to report to the public about its work in domain name registration administration, technical R & D, service operation and maintenance, communication with other countries, research in Internet statistics. We also hope to hear the evaluation of and suggestions for our work from the public, so as to pool the wisdom and effort of everyone, improve public service and jointly promote the development of the Internet in China.

At last, we would like to thank the users that have been concerned with us in the past twelve years. Your expectations are our drive for keeping making progress, and your satisfaction is the best encouragement for our work.

China Internet Network Information Center  
March 2009



# Introduction of the Organization

## CNNIC Profile

*The development experience of the world Internet and CNNIC development achievements have fully proven: the foundation of the CNNIC reflected the great foresight of the country on the fact that information technology revolution would inevitably bring about social progress, and is of far-sighted strategic significance for participating in international competition in information technology and grasping the initiative for R & D and construction of information technology.*

---Hu Qiheng, Academician of the Chinese Academy of Engineering and Director-General of the Internet Society of China

The China Internet Network Information Center (CNNIC), the state network information center of China, was founded as an administration and service organization on June 3, 1997 upon the approval of the competent state department.

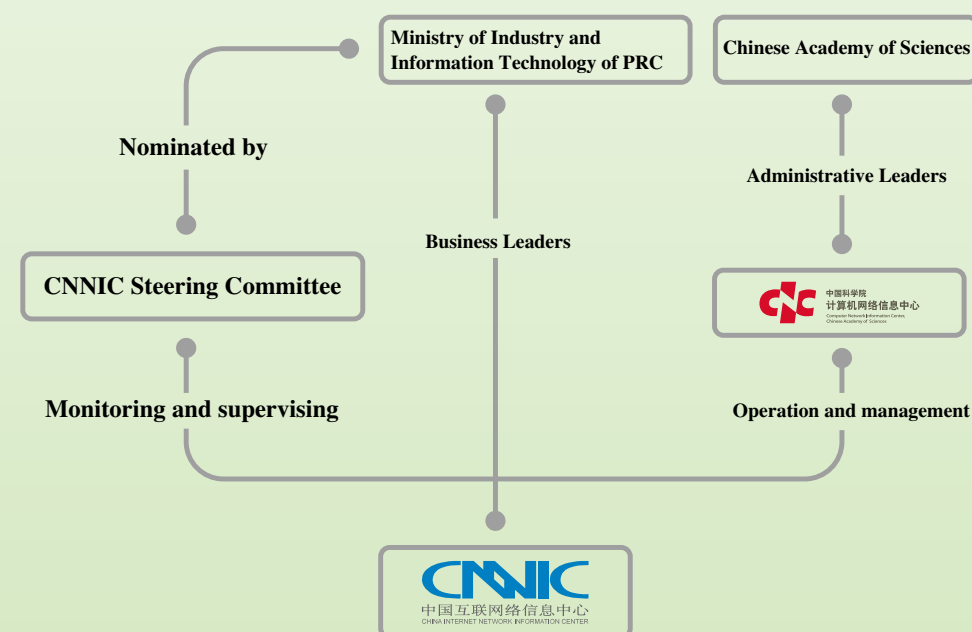
**Missions:** important infrastructure constructor, operator and administrator of the information society in China.

**Vision:** to construct a world class Internet information center with excellent culture, strive to become the state network fundamental resource operation and administration organization, a think tank for state network development policies, the state R & D center for network fundamental resources and technology, and the backbone for international communication and cooperation.

**Innovation culture:** pragmatism, enterprising, integrity and cooperation

**Responsibilities:** being responsible for administering and maintaining the Internet address system in China, leading the development of the Internet address industry in China, publicizing authoritative research on Internet statistics in China, and participating in the international Internet community on behalf of China.

### CNNIC Leadership Structure



## Profile of the CNNIC Steering Committee

The CNNIC Steering Committee (CNNIC SC), founded on May 28, 1997, was organized upon the decision of the former office of the information technology work leading team of the State Council, for the purpose of strengthening the administration of the Internet domain name system in China and guaranteeing and promoting the healthy development of the Internet network in China.

Its primary responsibilities are to help the Ministry of Industry and Information Technology administer the Internet domain name system in China and supervise and evaluate the work done by the CNNIC.

The CNNIC Steering Committee has a chairman, a first deputy chairman and a deputy chairman. Its members are representatives from the organization governing the administration of the CNNIC (the Chinese Academy of Science) and representatives from the department governing the business of the CNNIC (the Ministry of Industry and Information Technology). Expert members are experts, scholars and commercial representatives in the domestic Internet community. Internet units join the steering committee as unit members. The secretary-general of the Steering Committee is a representative of the CNNIC.



Honorary chairman:  
Hu Qiheng

(Director-General of the Internet Society of China and Academician of the Chinese Academy of Engineering) She actively promoted the entry of China into the Internet when she was Vice President of the Chinese Academy of Sciences. In 1997, she acted as Director of the CNNIC Expert Team and led the Preparatory Team to organize the CNNIC. From May to December 1997, she was Chairman of the CNNIC Steering Committee.



Chairman: Shi Erwei

Vice President of the Chinese Academy of Sciences, Member of Party Leadership Group, PhD and Researcher. Chairman of the CNNIC Steering Committee from December 2007.



First Deputy Chairman:  
Su Jinsheng

Chief Engineer and Director of the Telecommunication Administration Bureau of the Ministry of Industry and Information Technology



Vice Chairman:  
Han Xia

Deputy Director of the Telecommunication Administration Bureau of the Ministry of Industry and Information Technology



Vice Chairman:  
Tan Tieniu

Vice Secretary-General, Chinese Academy of Sciences



### Expert committee members (in the order of the number of strokes in the surnames)



Qu Chengyi

Member of the State Advisory Committee for Informatization, Deputy Director of the Network Special Committee of the China Computer Federation.



Zhang Xinghua

Professor of the Center for Computational Science & Engineering, Peking University.



He Dequan

Deputy Director of the State Advisory Committee for Informatization, and Academician of the Chinese Academy of Engineering.



Zhao Xiaofan

Director of the Software Service Industry Division of the Ministry of Industry and Information Technology



Gao Lulin

Honorary Director-General of the China Intellectual Property Society and Deputy Director-General of the Internet Society of China.



Qian Hualin

Chief Scientist of the Computer Network Information Center of the Chinese Academy of Sciences.



Yan Baoping

Chief Engineer of the Computer Network Information Center of the Chinese Academy of Sciences.



Jiang Lintao

Chief Engineer of the China Academy of Telecommunication Research of MIT.

### Secretary-General



Mao Wei

Deputy Director of the Computer Network Information Center of the Chinese Academy of Sciences, and Director of the China Internet Network Information Center (CNNIC).

### Unit members

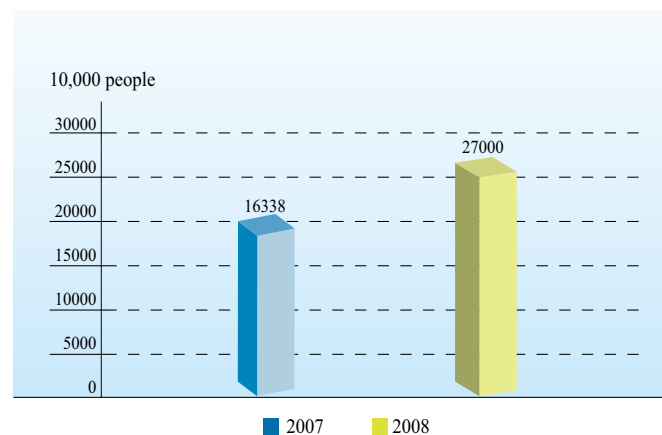
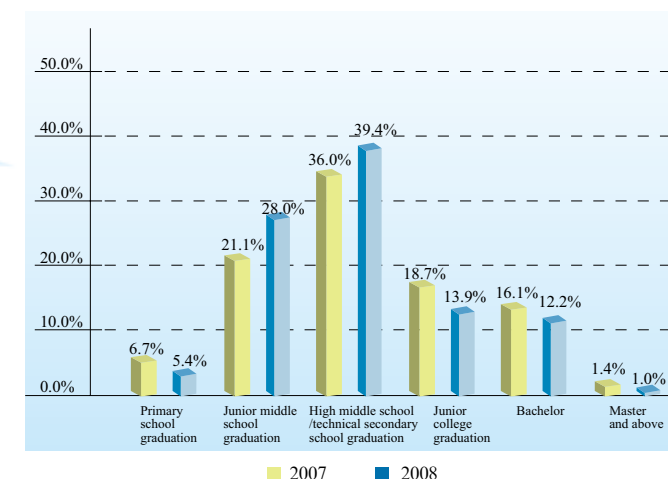
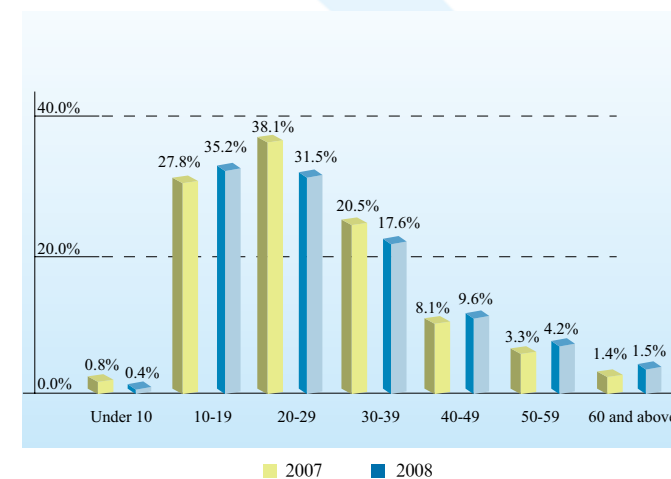
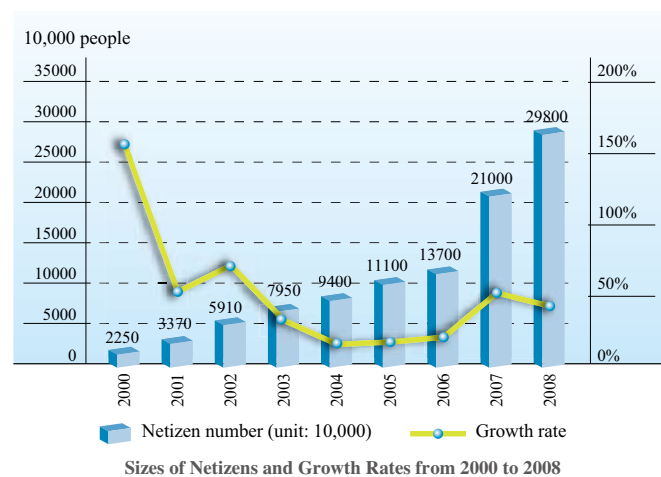
China Telecom  
China Mobile  
China Unicom  
Communication Department of GSD  
Internet Society of China.

China Education and Research Network Center  
China Science and Technology Network Center  
China International Electronic Commerce Center  
China Internet Network Information Center

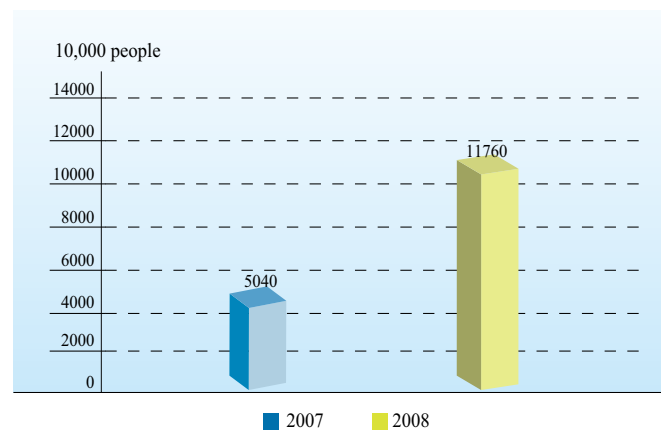
# Macro Conditions of the Internet in China

## Size of Netizens and Demographic Structure

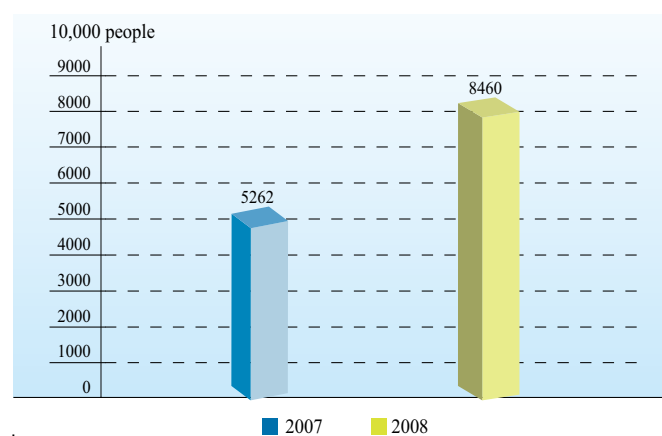
The popularization of the Internet, has maintained rapid growth in China. In December 2008, the size of netizens in China reached 298 million, ranking top in the world. The size of netizens in 2008 grew by 88 million from that in 2007 and the annual growth rate is 41.9%. The Internet penetration rate in China reached 22.6%, surpassing the average global level for the first time (21.9%).



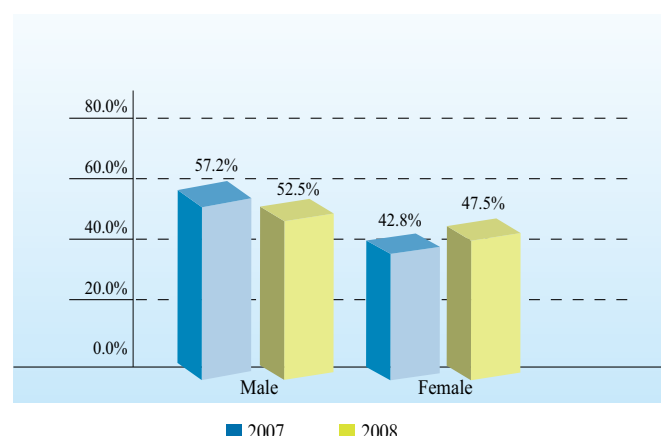
Comparison of Sizes of Netizens in 2007 and 2008



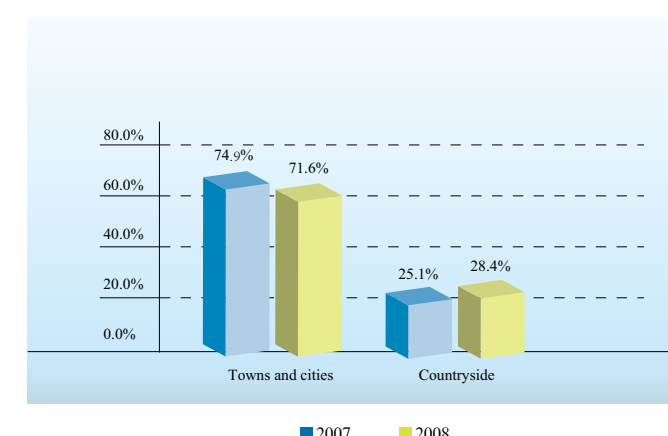
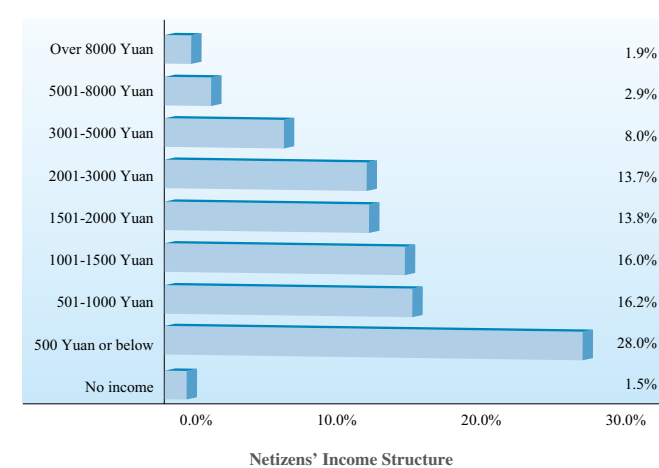
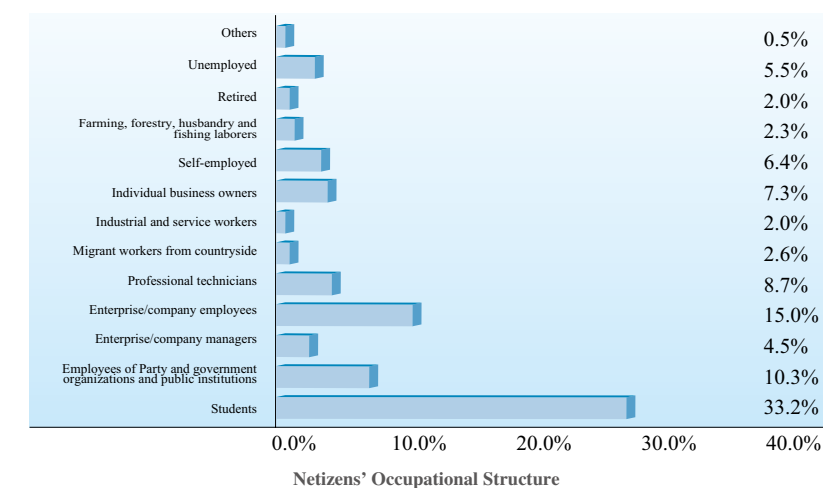
Comparison of Sizes of Netizens Accessing the



Comparison of Sizes of Rural Netizens in China in 2007 and 2008



Comparison of Netizens' Gender Structures in 2007 and 2008



Comparison of Netizens Urban-Rural Structures in 2007 and 2008

## Internet Fundamental Resources

CN domain names have become the national domain names with the largest amount of registration in the world. Domain names are fundamental address resources of the Internet, the rapid growth of the number of domain name meets the demands for resources resulting from the rapid development of the Internet, and the amount of registration of domain names, to some extent, also reflects the penetration of the Internet in China. Domain names are also the entries to the Internet. The increase of CN domain names has also started to drive the increase of websites, and the amount of websites grows by nearly one time.

Comparison of Internet Fundamental Resources in China in 2007 and 2008

	2007	2008	Amount of growth	Growth rate
IPv4 (Nrs)	135,274,752	181,273,344	45,998,592	34.0%
Domain name (Nrs)	11,931,277	16,826,198	4,894,921	41.0%
Including CN domain names (Nrs)	9,001,993	13,572,326	4,570,333	50.8%
Website (Nrs)	1,503,800	2,878,000	1,374,200	91.4%
Including websites under .CN (Nrs)	1,006,000	2,216,400	1,210,400	120.3%
International bandwidth (Mbps)	368,927	640,286.67	271,359.67	73.6%

Number of websites under various domain names in China

	Number Of Websites	Percentage
cn	2,216,437	77.0%
com	552,898	19.2%
net	87,713	3.0%
org	21,005	0.7%
Total	2,878,053	100.0%

Note: this data does not include websites under edu.cn

With the endeavor of each IP address allocation unit, the IPv4 address resources in China still maintain rapid growth. By 2008, the IP addresses allocated by the CNNIC had accounted for over a quarter of the total amount of IPv4 addresses in China. However, the growth of IPv4 addresses in China is lower than the growths of other Internet indexes, and the gap of IPv4 addresses is expanding. Against the backdrop of imminent exhaustion of global Internet IPv4 addresses, this situation is becoming increasingly serious and the whole society's estimation of the urgency of the exhaustion of IPv4 addresses and its consequences is seriously inadequate.



## Network Applications

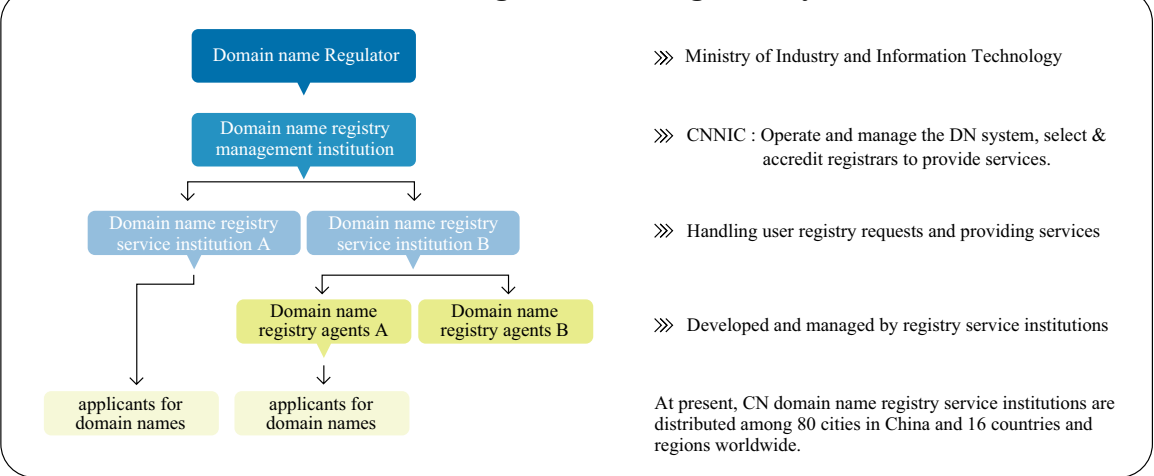
Comparison of Network Applications by Chinese Netizens in 2007 and 2008

	By the end of 2007		By the end of 2008		Change	
	Use rate	Size of netizens (ten thousand)	Use rate	Size of netizens (ten thousand)	Amount of increase (ten thousand)	Growth rate
Online news	73.60%	15,500	78.50%	23,400	7,900	51.00%
Search engines	72.40%	15,200	68.00%	20,300	5,100	33.60%
Online job hunting	10.40%	2,200	18.60%	5,500	3,300	150.00%
Email	56.50%	11,900	56.80%	16,900	5,000	42.00%
Instant messaging	81.40%	17,100	75.30%	22,400	5,300	31.00%
Having a blog	—	—	54.30%	16,200	—	—
Upgrading a blog	23.50%	4,900	35.20%	10,500	5,600	114.30%
Forum/BBS	—	—	30.70%	9,100	—	—
Dating websites	—	—	19.30%	5,800	—	—
Online games	59.30%	12,500	62.80%	18,700	6,200	49.60%
Online music	86.60%	18,200	83.70%	24,900	6,700	36.80%
Online video	76.90%	16,100	67.70%	20,200	4,100	25.50%
Online shopping	22.10%	4,600	24.80%	7,400	2,800	60.90%
Online selling	—	—	3.70%	1,100	—	—
Online payment	15.80%	3,300	17.60%	5,200	1,900	57.60%
Travel reservation	—	—	5.60%	1,700	—	—
Online banking	19.20%	4,000	19.30%	5,800	1,800	45.00%
Online stock speculation	18.20%	3,800	11.40%	3,400	-400	-10.50%
Online education	16.60%	3,500	16.50%	4,900	1,400	40.00%

Source of the data: CNNIC, The 23<sup>rd</sup> Statistic Report on Development of Internet in China, Jan. 2009

# National Domain Name Registration Administration

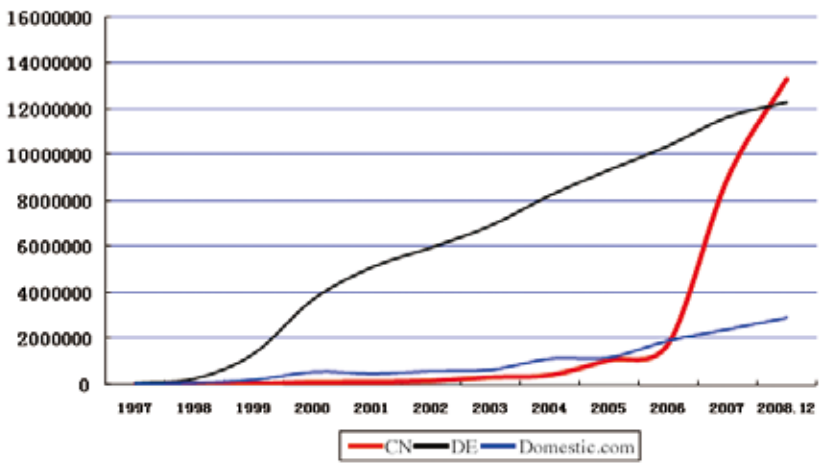
## Domain Name Registration Management System



The amount CN domain name registration grows rapidly, and CN domain names are the preferred domain names when Chinese users register for domain names. By December 2008, the amount of CN domain name registration had reached 13.57 million, and CN domain names had become the national top level domain names with the largest amount of registration in the world (see the table).

Table of the Growth Trend of CN Domain Names in Recent Years.

Various Internet applications based on CN domain names are very active. The amount of domain name resolution has grown from 300 million every day in 2005 to 1.5 billion, with the peak value reaching 2 billion. The rapid rise of the amount of domain name resolution also reflects the growth of Internet applications in China from one aspect.



Growth Trend of .CN Domain Names in Recent Years



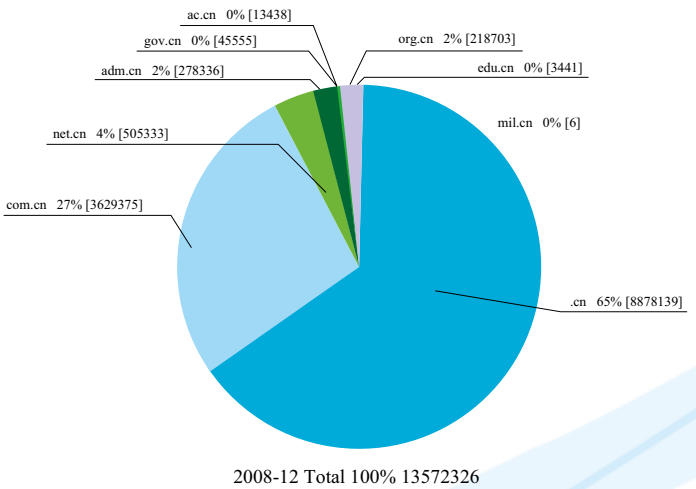
CN Domain Name Resolution Amount Trend

The CNNIC should also do some in-depth reflections on its own domain name technologies and infrastructure, including some long-term planning for some demands. Only in this way can our technologies and facilities keep up with the development of technology and application demands in the future.

---Yan Baoping, CNNIC Steering Committee Member

Amounts of Various Domain Names in China

	Number	Percentage
cn	13,572,326	80.66%
com	2,739,130	16.28%
net	419,220	2.49%
org	91,913	0.56%
Others	1,609	0.01%
Total	16,826,198	100.0%



The market shares of CN domain names in China have reached 80.7%. CN domain names have become an important force for driving the growth of Internet resources in China. Driven by the significant growth of CN domain names, ccTLD in the world increased by 13 million in 2008, surpassing the amount of increase of gTLD, 11 million, for the first time.



## Domain name registration and application

In terms of registration policies, the CNNIC extended the “CN domain name 1 yuan experience activity” started from March 2007 to December 31, 2008, which also directly drove the rapid growth of CN domain names. The annual growth rate of the amount of CN domain name registration has reached 50.8%.

*In the past year, remarkable achievements have been made in CN domain names. That is, the amount of registration has increased. But there are not many applications. I don't know whether the CNNIC agrees with this view. If it agrees, if it wants to make CN domain names mainstream domain names in the world in the future few years, it should take actual actions to support them.*

*Blog author Zhou Xinning*

The CNNIC has successively accredited blog service providers and electronic commerce service providers etc. as CN domain name registrars, and combined CN domain names with network services such as website construction, blog, network commerce and album.

By December 2008, the amount of websites under CN had increased by 120% from 2007, accounting for 77% of the total amount of websites in China.

### CN in Earthquake Relief

After the terrible Wenchuan Earthquake that shocked the whole world, the CNNIC announced that all the English CN domain names and Chinese CN domain names due from May 13, 2008 to June 13, 2008 be extended by one month without conditions. Over RMB 410 thousand of domain name operation fees were exempted.

On May 13, 2008, the CNNIC called on netizens to donate domain names for websites of earthquake relief. The donation applications of nearly 700 national domain names were processed, and 25 Chinese and English domain names for earthquake relief were started, providing in time national domain name support for websites of earthquake relief under Xinhuanet.com, People.com.cn and CCTV.com



Prizes for domain name donors to the earthquake relief work



The donated domain name used by People's net for earthquake relief

*My original intention was to build a website to popularize earthquake knowledge. After the Earthquake on 12 May 2008, I made a simple website. However, I found myself personally incapable of such a huge project. So I think it might be better for someone more capable to do this job. I hope through this website we can popularize knowledge about earthquake and prevent future disasters.*

*---rosa, donor of the domain name earthquake.org.cn*

*We purchased this domain name and hope it can be used by any institution or website to fight against earthquakes. This is what we can do in the joint effort against disasters.*

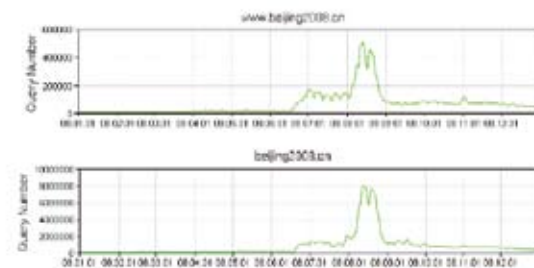
*---The donor of the domain name wcdz.net.cn from Hangzhou Chuangyehulian Technology Company*

*China is a country prone to earthquakes. Due to its large population, each earthquake can cause a great loss to the country. To popularize knowledge about earthquake, some students proposed to develop a wiki+rss website at the innovation conference of the e-commerce innovation laboratory of our school, and registered some related domain names. We hereby donate these domain names. If this will contribute to the efforts against earthquakes and help people in disaster areas, we will be honored.*

*---Nie Xiaoyi, donor of the domain name antique.cn*

### Olympic Network, CN Convoys

To guarantee the successful holding of the Beijing Olympics, the CNNIC arranged and perfected the Olympic domain name special emergency plan, carried out a contact mechanism, established a rapid response mechanism, and carried out 7 cross-departmental rehearsals before the Games. During the Olympics, the Olympic domain names were monitored 7x24 hours. 252 person-times were on duty, and 8 person-times were dispatched to the disaster preparation center to keep watch and disaster preparation switch was carried out. To make sure that the domain name of the official website, beijing2008.cn, has smooth, stable and safe access, the CNIC arranged 8 global spare resolution nodes for the authoritative domain, covering Beijing, Guangzhou, Chengdu, Seoul of South Korea and Frankfurt of Germany. With such work, the CNNIC successfully fulfilled the commitment of “Olympic network, CN convoy”.



Meanwhile, on August 8, 2008, the CNNIC called on domain name holders to domain names similar to names of Olympians and to support the Beijing Olympics with this special method. Over 250 domain names of Olympians' names were received. On August 27, the CNNIC cooperated with the State Administration of Sport to open the resolution of 222 domain names of champions. On September 4, the CNNIC assisted the China Disabled Persons' Federation to register ahead of time over 1,000 Chinese and English domain names of athletes of the Paralympics



Thanks letter and award medal from Beijing Olympics Organization Committee

*The greatest significance is to make a little contribution to the Beijing Olympics, to protect athletes' domain names so that they can use them in the future. This is also a kind of respect for athletic spirit. I hope that these domain names can be applied as soon as possible and their function will be put into the best use.*

*---Guo Jianguang, donor of the domain names of 188 participating athletes and champions such as gaoyulan.cn and jinziwei.com.cn*

*To cherish and protect the image and rights of our Olympic champions is what every Chinese should do.*

*---Zhejiang BYF technology Co., Ltd., donor of the domain names of 51 participating athletes and champions such as liuzige.cn and zhouhaibin.cn*

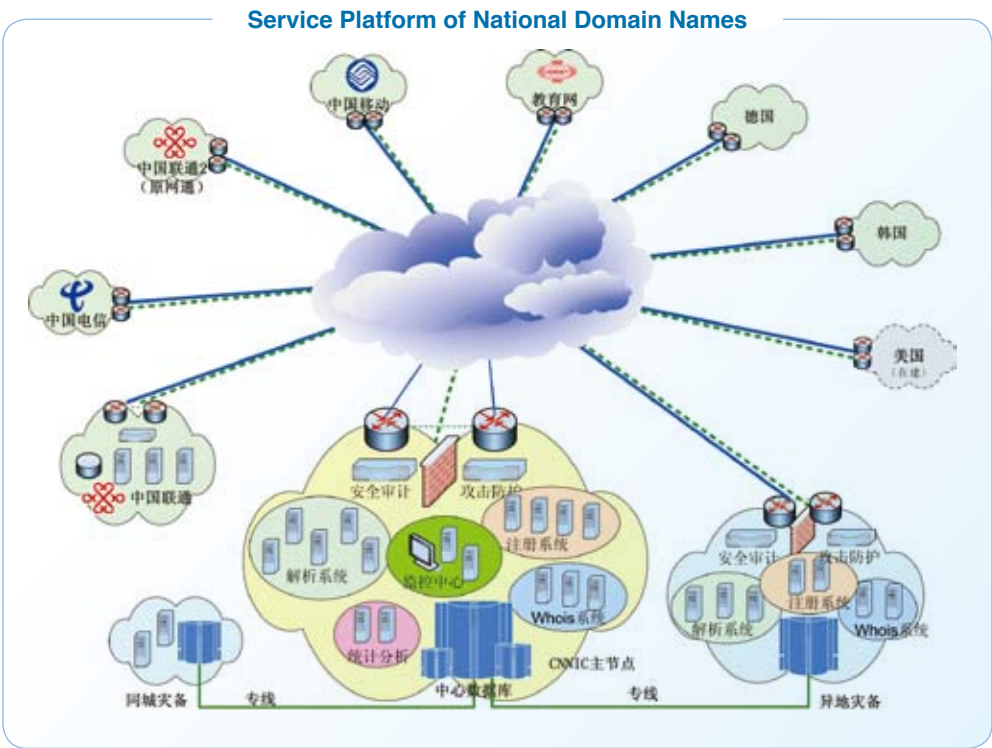
# Operation and Maintenance of Domain Name System

The domain name system of the Internet is equivalent to the signaling system of the telecommunication network. Security is especially important. As an operator of one of the national fundamental network facilities, the CNNIC should manage well the domain name work guided by the scientific outlook to development, with "serving economic and social development and serving people's life" as the object and following the guideline of "active development, strengthening management, drawing on advantages and avoid disadvantages and using beneficial resources". Firstly, we should keep expanding the scale; secondly, we should strengthen management of operation and maintenance and provide domain name services with the operation and maintenance standard of basic telecommunication carriers.

---Xi Guohua, Vice Minister of the Ministry of Industry and Information Technology

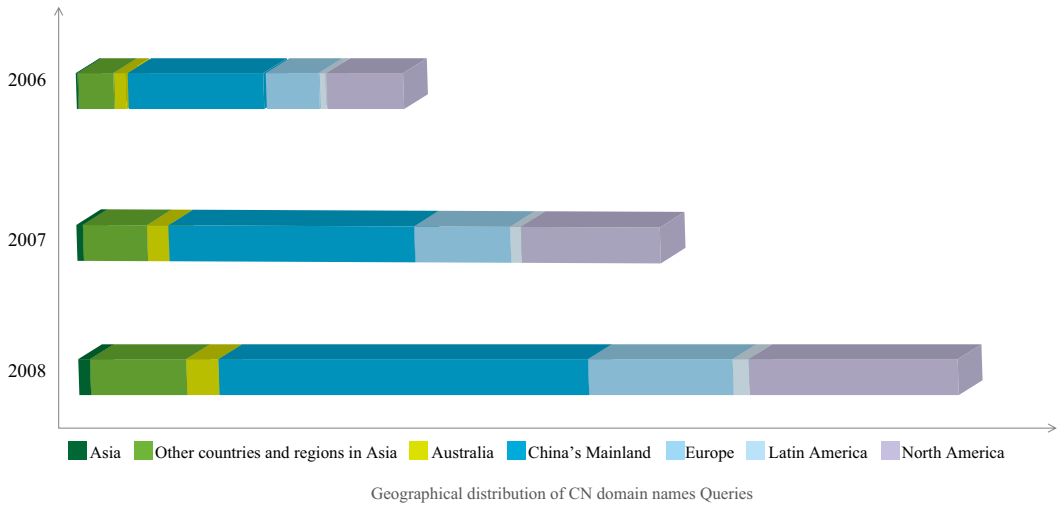
A strong system, stable operation and maintenance, R & D keeping up with the time and effective and considerate technical support and technical service are the foundation for the survival and development of national domain name services, requiring input and mechanism guarantee in an all-round manner.

In terms of hardware, the CNNIC has continued to deploy overseas nodes, optimize the service platform of national domain names and invest altogether over RMB 100 million in hardware and software relying on its own accumulation; in terms of software, domain name service software with independent intellectual property has been developed and perfected to improve the security of the system. In 2008, 5 new systems were developed independently, existing products were updated for 40 times, 8 old systems were integrated, and the amount of work in development was about 300 thousand lines of codes. Besides, the 7\*24 hour monitoring mechanism has been implemented and a comprehensive security guarantee system has been established.



Through this series of investment and efforts, the infrastructure guarantee system of CN domain names has stood various kinds of tests. From January to November 2008, 140 thousand attacks were detected every day, and altogether 810 million harmful mails were intercepted; the system stood the daily 2 billion peak resolution impact. The average level of the registration of CN domain names, Whois and resolution service agreement (service level agreement SLA) keep improving sustainably and stably. All the indexes have surpassed over 99.99%, and 100% of the resolution service is available.

	Registration availability rate	whois availability rate	Resolution availability rate
Standard promised by the CNNIC SLA	99.9%	99.9%	100%
CN domain name operation and maintenance in 2008	99.9921%	99.9984%	100%
Chinese domain name operation and maintenance in 2008	99.9984%	99.9984%	100%



In the information infrastructure security guarantee system, the CNNIC has done a lot of work, but in-depth analysis is to be done to discover underlying problems and major weak points. We should strengthen work in this respect.

---Qu Chengyi, Member of the CNNIC Steering Committee



## Customer Service

In 2008, the CNNIC founded a 7\*24 technical and customer service system by establishing a call center, public consultation and complaint telephone, providing customers with 7\*24 services for answering questions and solving problems. Throughout the year, altogether 50 thousand phone calls for consultation and 22 thousand emails were received.



In February 2009, in the survey of final user satisfaction, some users raised questions on the fact that sometimes the service telephone has to be dialed several times and sometimes it is busy.  
Solution: All the workers in the calling center are connected. At peak time, other employees are dispatched as supplement. Through constructing a knowledge base and internal tutorship of the employees, the time for answering a call by a customer service worker has been shortened.

CNNIC Information Center,  
A problem arose in the domain name resolution of a website which our company is responsible for support. In the course of trouble shooting, No. 6155 engineer gave us warm-hearted support and patiently answered our questions. Here we would like to express our deep thanks for your center!  
Teng Shiyong

China Internet Network Information Center (CNNIC)  
Dear leaders and related working personnel, The food and drug quality inspection resource integration, sharing and warning platform in Lishui www.spjcgx.gov.cn, with your active assistance, has formally started with the click of the vice mayor yesterday afternoon. Here we would like to express our sincere gratitude to you!  
For a small city like Lishui, we missed the time for government website domain name registration because of our own fault. As it was quite difficult, we just had a try at sending mails and calling you for help. We had not thought that your center could help us to examine and open the domain name within 2 hours (3-5 work days according to standard procedure). The members of the project team of our website, the Lishui registration agent service unit and personnel of the meeting team were very much touched. Here we would like to thank the leaders and related working personnel of the China Internet Network Information Center again.  
Welcome to our beautiful city to enjoy the natural scenery here.

Lishui Green Technology Software Development Center  
Chen Wenyao

We hope that the rate of solving users' problems at one time will be raised  
Solution: Establish an upgraded problem coordination process, arrange the time for treatment, and monitor the progress problem process regularly  
Customer service personnel are examined regularly. Each worker receives one-on-one tutoring to improve their business knowledge and answering skills



Hello!  
Please tell Miss 3-6160 that we thank her for her conscientious work. Our complaint was replied very quickly. Also she called us to tell us how to solve the problem and contact her if the problem was not solved. We thank her very much! If there were more people like her in the society, this society would be better.  
Xia



## Standards for the Domain Name Service Industry

While CN domain names are rapidly developing, the CNNIC is strengthening the standards for the domain name registration service industry, improving service quality, guaranteeing users' rights and interests and promoting the sustainable development of the industry.

### Industry self discipline

In 2008, the CNNIC, as a supervisory organization, continued to promote the registrar industry self discipline activities started in 2007. At present, there are 296 registrars that have signed the convention on self discipline. The inventory of domain names of the organizations that have signed the convention accounts for over 95% of the country. Since 2007, 89 registrars violating regulations were exposed. Also, the CNNIC assisted the administration for industry and commerce in investigating and punishing 14 registrars violating regulations.



### Commitment of self discipline:

Exercise self discipline: never cheat users into registering an Internet address  
Operate civilly: do not force users to register an Internet address  
Carry out promotion honestly: do not mislead users to register an Internet address  
Administer strictly: do not use many telephone calls, faxes or emails to disturb users  
Freedom in choosing years of registration: let users decide on the number of years of registration  
True information: truthfully provide users' registration information  
Rapid response: respond to user demand in time  
Free transfer: respect users' will for transfer

### Credit standing ranking

It was initiated by the initiators of the "Convention on the Self-Discipline of the Internet Address Registration Service Industry" and launched by the "Credit Standing Ranking of Internet Address Service Organizations" which the CNNIC was responsible for supervising in April 2008.



LOGO of Credit Standing Ranking

Credit standing ranking should consider the characteristics of medium and small registrars and some projects may be added to establish the image of medium and small registrars.

---A senior professional in the Internet circle Shen Yang

Driven and influenced by industry self discipline activities and credit standing ranking activities, the benign competition in the domain name registration service market has been strengthened, the industry self discipline level and service level have also been improved to a large extent, and the users' complaint rate has been reduced by 90%.



Attachment: Results of the Annual Credit Standing Ranking of Internet Address Service Organizations in 2008:

Five-star registrars (9):

Beijing HiChina zhicheng Technology Co., Ltd.	Beijing Xinnet Digital Information Technology Co., Ltd.
Xiamen 35 Internet Technology Co., Ltd.	Zhongqi Dongli Technology Group Co., Ltd.
Xiamen Bizcn Computer & Network Co., Ltd.	Xiamen Nawang Technology Co., Ltd.
Xiamen Chinasource Internet Service Co., Ltd.	Guangong Huyi Technology Co., Ltd.
Guangdong Age-Internet Technology Co., Ltd.	

Four-star registrars(26)

Beijing Hongwang Shenzhen Technology Development Co., Ltd.	CERNET Co., Ltd.
Beijing Dongfang Wangjing Network Technology Co., Ltd.	Beijing Capnet Co., Ltd.
Jiangsu Wanglushen E-business Technology Co., Ltd.	Guangdong New Generation Technology Co., Ltd.
Hangzhou Alibaba (China) Network Technology Co., Ltd.	Chongqing Zhijia Infotech Co., Ltd.
Hainan Property Right Trading Center	Xiamen Ename Network Technology Co., Ltd.
Beijing Vitech Technology Co., Ltd.	Guangzhou Mingyang Information Technology Co., Ltd.
Beijing Innovative Linkage Technology Co., Ltd.	Beijing Zongxin Qiankun Network Technology Co., Ltd.
Dalian Zhongyi Hulian Technology Co., Ltd.	Beijing Shiji Yaolan Network Technology Co., Ltd.
MainOne Information Technology Co., Ltd.	Chengdu Xiwei Digital Technology Co., Ltd.
Beijing Guangsu Liantong Technology and Trade Co., Ltd.	Shanghai Meicheng Technology Information Development Co., Ltd.
Hangzhou Chuangye Internet Technology Co., Ltd.	Chengdu Shiji Dongfang Network Communication Co., Ltd.
Zhejiang Telecommunications Co., Ltd.	Henan Weichuang Network Technology Co., Ltd.
Guangzhou Wangzun Technology Co., Ltd.	Shenzhen Hulian Shikong Technology Co., Ltd.

Three-star registrar (5)

Fuzhou Zhongxu Network Technology Co., Ltd.	Gangzhou first web Technology Co., Ltd.
Beijing Sinonets Xingye Network & Telecom Co., Ltd.	Guangzhou Wulong Network Technology Consulting Co., Ltd.
Beijing Dongfang Ruipeng Digital Information Technology Co., Ltd.	

Anti-Phishing Website Union



To crack down online cheatings and construct reliable network, under the advocating of the CNNIC, banks, securities companies, e-commerce companies, domain name registration administration and service organizations were united to establish the “Anti-Phishing Website Union” in August 2008, and the CNNIC acted as the secretariat of the union. The union actively responds to the current online phishing phenomena by establishing a rapid handling mechanism and active prevention. By December 2008, the resolution of over 3,600 phishing domain names had been stopped. In December, a peak period when phishing websites broke out, the average daily amount of phishing websites treated amounted to 60.



## The structure of the China anti-phishing Alliance website

### The leading organizations of the union

- 1) Expert members of the Expert Advisory Committee come from**  
Ministry of Industry and Information Technology  
Ministry of Public Security  
Chinese Academy of Sciences  
National Computer Virus Emergency Response Center  
National Computer Network Emergency Response Technical Team/Coordination Center  
Internet Society of China  
China University of Political Science and Law  
Haidian District People's Court  
Beijing Chaoyang Law Firm
- 2) Third Party Technology Accreditation Organizations**  
National Computer Virus Emergency Response Center  
National Computer Network Emergency Response Technical Team/Coordination Center

### Member units of the Union (list of initiators)

- 1. Domain name administration organizations and registrars:**
- |  |   |
|--|---|
| CNNIC  | HiChina   |
| Zhongqi Dongli   | Xinnet  |
| Xiamen Chinasource   | Xiamen Ename                                    |
| Xiamen Bizcn   | Zhuhai Today's Network Inc.                     |
| Alibaba  | China Springboard Inc.                          |
| Beijing Vitech Co., Ltd.                                   | Beijing Innovative Linkage Technology Co., Ltd. |
| Beijing Lightspeed Connection Technology and Trade Center  | Hangzhou Ecentral Internet Technology Co., Ltd. |
| Beijing Hongwang Shenzhen Technology Development Co., Ltd. | Beijing Jinluoshen E-commerce Co., Ltd.         |
| Guangzhou Wangzun Information Technology Co., Ltd.         | East Telecommunication Co., Ltd.                |
| Hangzhou Chuangye Internet Technology Co., Ltd.            | Beijing eBizAnywhere Technologies Ltd.          |
| Beijing Wangyu Mingcheng Investment Consulting Co., Ltd.   | Beijing Capnet Co., Ltd.                        |
| CERNET Co., Ltd.   | China Netcom(Group) Co., Ltd, Beijing Branch    |
| Guangdong Huyi Technology Co., Ltd.                        | Hainan Property Right Trading Center            |
| Guangzhou Mingyang Information Technology Co., Ltd.        | Dalian Zhongyi Hulian Technology Co., Ltd.      |
| MainOne Information Technology Co., Ltd.                   |   |
- 2. Banks and securities companies**
- |   |                            |
|---|----------------------------|
| Industrial and Commercial Bank of China | Agricultural Bank of China |
| Bank of China                           | China Construction Bank    |
| Huaxia Bank                             | Everbright Bank            |
| Minsheng Bank                           |                            |
| Galaxy Securities                       |                            |
- 3. E-commerce**
- |   |  |
|---|--|
| Tencent   | Taobao   |
| Taobao  | Beijing Baidu Network Information Technology Co., Ltd. |
| Alipay  | Beijing Baidu Network Information Technology Co., Ltd. |
| Google Information Technology (China) Co., Ltd. |  |

### Secretariat of the Union

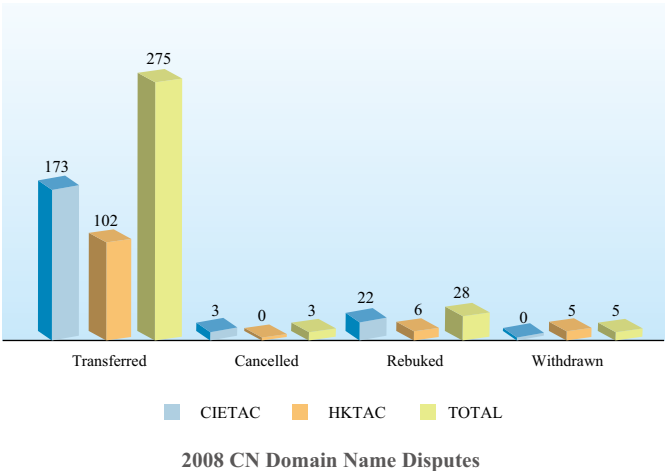
- The China Anti-Phishing Website Union has a secretariat, responsible for the daily work operation of the Union, summoning of meetings and response to emergencies etc; the secretariat in set in the CNNIC. The responsibilities of the secretariat are:**
1. Accepting complaints of Union members and identifying phishing websites;
  2. Notifying domain name registrars to stop website resolution;
  3. Summoning daily meetings and coordination between members of the secretariat;
  4. Maintaining a blacklist of phishing websites and sending briefings on treatment to Union members;
  5. Strengthening communication with government organizations;
  6. Strengthening communication with similar international organizations.

## Domain Name Disputes

The organizations accepting CN domain name disputes in 2008 were the Domain Name Dispute Resolution Center of the China International Economic and Trade Arbitration Commission (CEITAC) and the Hong Kong International Arbitration Center (HKIAC), respectively accepting 198 and 113 domain name disputes. The amount of CN domain name disputes cases reached 311 in 2008.

The number of domain name dispute cases in 2008 rose steadily, and the absolute majority of them were about cybersquatting. Seen from the results of disputes, most of the claims of domain name right holders were supported by the domain name dispute resolution organizations.

For more information, please log on: CIETAC:<http://dndrc.cietac.org.cn> HKIAC:<http://dn.hkiac.org>



## Income and Expense

According to the auditing of Beijing Huachen Accounting Firm, the income of the China Internet Network Information Center in 2008 was RMB 114,668,734.30, its expense was RMB 111,718,431.73, and the balance of the year was RMB 2,950,302.57. Beijing Huachen Accounting Firm deems: the results of income and expense are formulated according to the "Accounting Regulations for Scientific Research Institutes" and the "Financial Regulations for Scientific Research Institutes", and fairly reflect the income and expense in domain name registration and service of the China Internet Network Information Center in 2008.



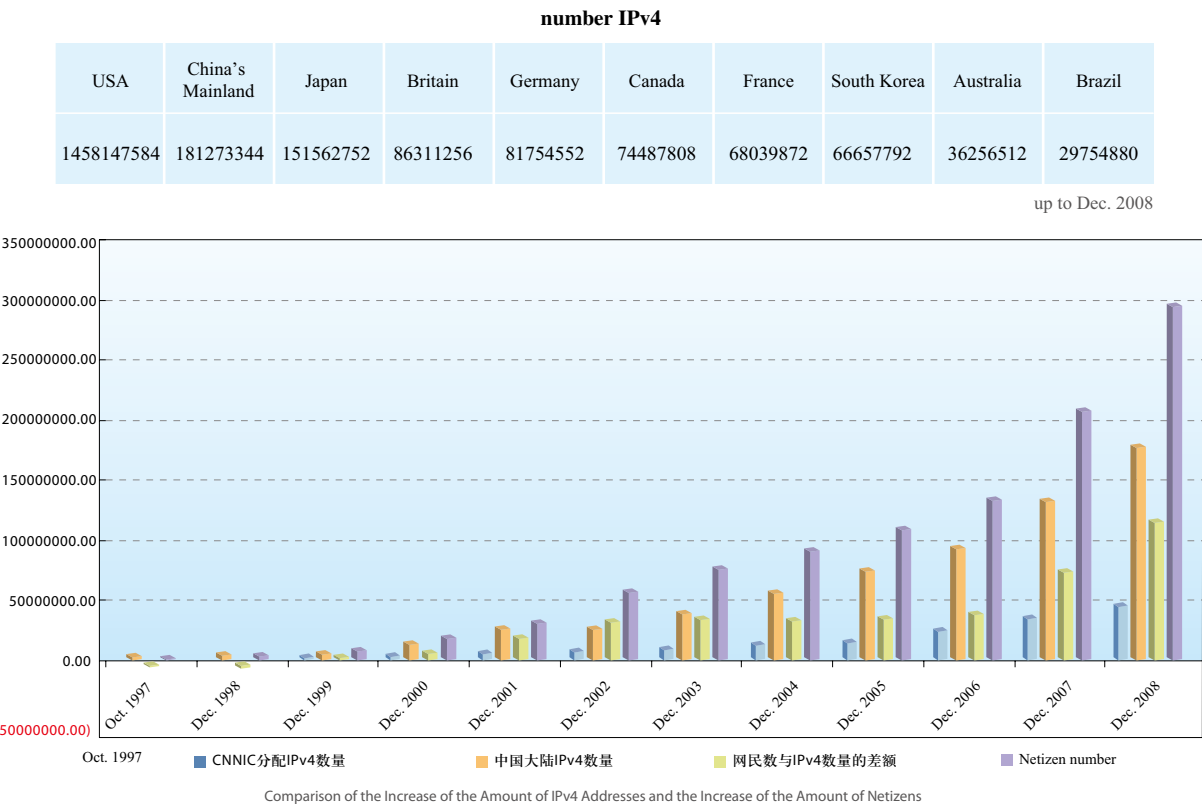
# IP Address Allocation

## Current Situation of IP Address Allocation

IP addresses are necessary fundamental resources for accessing the Internet, and the amount of IP addresses directly decides the size of Internet applications.

According to the statistical data of the global Internet IP address resource allocation organization, by December 31, 2008, Mainland China had got 181 million IPv4 addresses, amounting to 10A+214B+122C, ranking the second in the world, only next to the United States, closely followed by Japan. In 2008, the newly added IPv4 addresses surpassed the amount in Asia in the same period by 50%. In terms of IPv6 addresses, by December 2008, Mainland China had gained 55 blocks/32 IPv6 addresses, ranking the sixteenth in the world.

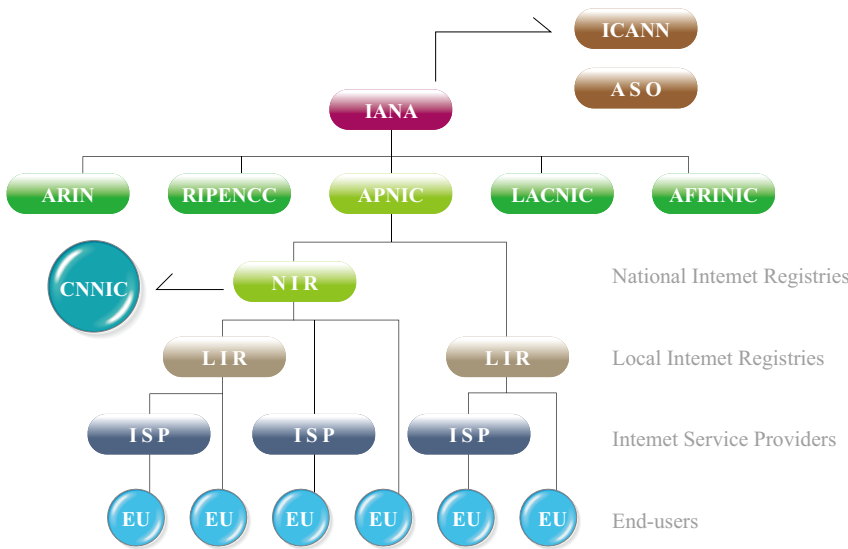
Among the IPv4 address resources administered by IANA, besides 35 Class A addresses reserved for special purposes, the address sections that can be allocated in the public network in the world are 220 Class A addresses. By December 31, 2008, IANA has allocated nearly 185 Class A addresses for the global Internet, and only 36 Class A addresses of IPv4 address resources are left for global public routing, that is, over 600 million addresses. At present, the IPv4 addresses used in the world are being consumed at a speed of increasing about 200 million (about 19%) annually, and will be exhausted around 2012.



The amount of IPv4 addresses that China has gained is less than 4.5% of the total amount of IPv4 addresses that have been allocated in the world, and the amount of future demand will be high and the increase speed will be higher than the average global increase. In the recent three years, the increase of IPv4 addresses in China has been far lagging behind the increase of netizens. The shortage of IPv4 addresses is becoming serious. Therefore, how to respond to the exhaustion of IPv4 addresses and transit to the next generation Internet with IPv6 as the core protocol is an imminent problem

## IP Address Allocation Union and Policies

The allocation of IP addresses and AS numbers on the Internet is carried out step by step.

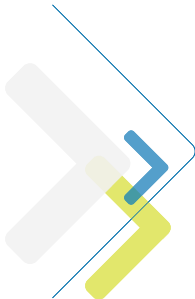


As a national level IP address registration administration organization accredited by the APNIC, the CNNIC has established an IP address allocation union for which the CNNIC acts as a summoning unit, and helps union members apply for IP addresses with the APNIC. The CNNIC union members consist mainly of domestic carriers and ISPs of certain scale. At present, there are 273 members. The CNNIC can allocate 260 thousand (4B) IPv4 addresses at one time, which is the largest amount of national level IP address allocated in Asia. This also symbolizes the improvement of the ability of China in independently allocating IP addresses. In 2008, the CNNIC newly allocated 10.27 million IPv4 addresses, the accumulated amount of IPv4 addresses allocated was 48.82 million.

After the IP address allocation union receives IP addresses, it either allocates them to its downstream ISPs or designates them to its users. The CNNIC is only responsible for the allocation and registration of IP addresses and is not responsible for providing network connection or router advertisement. It is a neutral address issuing organization independent from network carriers and carries out fair and uniform address allocation policies all over China.







Technological Research and Innovation

Name	2007	2008	Details of the results in 2008
Patent	1 application	9 applications and 1 was approved	
Copyright application	Copyright application 3 applications and 3 were approved	26 applications and 17 were approved	
Trademark	Trademark 4 applications	1 was approved	
IETF standard drafts or standards 3 drafts	3 drafts	1 standard	《SMTP Extension for Internationalized Email Addresses》 (RFC5336)
		4 drafts	《EAI Deployment Practices》 (draft-yao-eai-deployment-00.txt)
			《Architecture and Practice for VoIP Lawful Interception Using Session Border ntroller(SBC)》
			《Object Naming Service (ONS) Extension for Extensible Supply-chain Discovery Service (ESDS)》
			《Load Balancing based on IPv6 Anycast and pseudo-Mobility》
National industry standards CCSA standards or standard drafts	4	4 drafts	EAI Deployment Practices (draft-yao-eai-deployment-00.txt)
			Architecture and Practice for VoIP Lawful Interception Using Session Border Controller (SBC)
			Object Naming Service (ONS) Extension for Extensible Supply-chain Discovery Service (ESDS)
			Load Balancing based on IPv6 Anycast and pseudo-Mobility
		11 project initializations for industry standard	Overall Technical Requirements of the Mapping and Resolution System of Keywords and Resource Identifier Based on the Internet entered the stage of delivery for examination
			Overall Technical Requirements for the Internet Chinese Email Address Framework entered the stage of delivery for examination
			Project initialization of Technical Requirements of SMTP Expansion Support Internet Chinese Email Address
			Project initialization of Technical Requirements of Mail Header of Internet Chinese Email Address Format
			Project initialization of Technical Requirements of the Internet Keyword Resolution System
			Project initialization of Technical Requirements of Internet Keyword Registration Administration
			Project initialization of Overall Technical Code of Operation of the Domain Name System
			Project initialization of Technical requirements of the Recursion Server Operation of the Domain Name System
			Project initialization of Technical Code of the Domain Name System Authorization System
			Project initialization of Technical Code for IPv6 Network Domain Name Service
			Project initialization of Technical Code of Domain Name Service Security Framework

( Table continued )

Name	2007	2008	Details of the results in 2008
RFID committee		1 standard	Technical Specification for Internet-based RFID Tags Information Query
		1 application	Technical Specification for the network architecture of RFID Tags Information Query
Applications for key projects above provincial and ministerial level		4	Project of the Natural Science Foundation: Study of the Theory of Personal Media Service System Model and Critical Technology (cooperated with Tsinghua University)
			CNGI project: Study of Planning of IPv6 Network Addresses
			973 project: Study of the Theory of New Generation Internet Comprehensive Experiment Verification and Demonstration Platform
			CNGI project: Project of the Industrialization of the Next Generation Internet Creditable Domain Name Service System
Research project of Internet fundamental resource technology		3	Project of the innovation foundation at institute level, Study of the Next Generation Internet Creditable Mechanism Based on IPv6 Real Name Addresses (September 2008—August 2010)
			Project of the youth foundation at institute level, Study of Network Analysis Critical Technology Based on the Domain Name System
			Project of the youth foundation at institute level, Research of Evaluation Method of the Domain Name Service System and Instrument Realization (September 2008—August 2009)
Reports on hot spot technology research and comments	4	4	Domain Name Server Software System, project proposal of the Ministry of Industry and Information Technology was tentatively adopted
			Next Generation Internet Reliable Domain Name Service System was written into the CNGI project guidance of the NRDC.
Core Periodicals or International Conferences	6 articles	9 EI conference papers	Network-Processor-Based IPv4/IPv6 Translator: Implementation and Fault Tolerance, Wanming Luo, Baoping Yan, Xiaodong Lee, Wei Mao, The 10th International Conference on Advanced Communication Technology (ICACT 2008), Volume 1, Feb 17-20. 2008 Page(s):488-493
			An Enhanced Service Differentiation Mechanism for QoS Provisioning in IEEE 802.11e Wireless Networks, Wanming Luo, Baoping Yan, Xiaodong Li, Wei Mao, The 10th International Conference on Advanced Communication Technology (ICACT 2008), Volume 1, Feb 17-20. 2008 Page(s):175-180
			Overlay multicast network optimization and simulation Based on Narada Protocol, Xingfeng Li, Baoping Yan, Wanming Luo, The 10th International Conference on Advanced Communication Technology (ICACT 2008), Volume 3, Feb 17-20. 2008 Page(s):2215-2220
			Efficient Complex Event Processing over RFID Data Stream, Xingyi Jin, Xiaodong Li, Ning Kong, Baoping Yan, The 7th IEEE/ACIS International Conference on Computer and Information Science (ICIS 2008), May 14-16, 2008
			A Method for Estimating Distances of Inter-domain Nodes, Zheng Wang, Xinchang Zhang, Wanming Luo, Baoping Yan, Proceedings of ICCSE 2008, The 3rd International Conference on Computer Science & Education, July 25-28, Henan, China, pp.1-6
			A Model Supporting Any Product Code Standard for the Resource Addressing in the Internet of Things, Ning Kong, Xiaodong Li, Baoping Yan, The First International Conference on Intelligent Networks and Intelligent Systems (ICINIS 2008), November 1-3, 2008
			SIP Peering Based On Distance Vector Algorithm, Yuanmin Chen, Xiaodong Li, Wei Mao, The 11th International Conference on Communication Technologies (ICCT 2008), November 10-13, 2008
			Federation Framework for Service Discovery in Ubiquitous Computing, Yuanmin Chen, Xiaodong Li, Wei Mao, The 11th International Conference on Communication Technologies (ICCT 2008), November 10-13, 2008
			A Delivery Tree Building Approach for Application Layer Multicast, Xinchang Zhang, Xiaodong Li, Zheng Wang, Baoping Yan, 2008 International Symposium on Computer Science and Computational Technology (ISCSCCT 2008), December 20-22, 2008

( Table continued )

Name	2007	2008	Details of the results in 2008
Core Periodicals or International Conferences		8 papers published on core periodicals	A Reciprocal Network Bandwidth Allocation Solution Based on the Game Theory, Wang Zheng, Li Xiaodong, Zhang Xinchang, Luo Wanming and Yan Baoping, The Sixteenth National Network and Data Communication Academic Conference (NDCC 2008), November 10-11, 2008, collected in the supplement to Journal of the Southeast University (Natural Science Edition)
			Analysis and Study of Multicast Routing Protocol HBH, Zhang Xinchang, Li Xiaodong, Wang Feng and Yan Baoping, Computer Engineering 2008, 34(20): 112-114
			Analysis of Domain Name Mirror Image Server Deployment, Wang Wei, Li Xiaodong, Sun Guonian, Computer Engineering and Application, 2008, 44(7): 161-163,167
			Domain Key Identification Mail Technology, Wang Xipu, Yao Jiankang, Li Xiaodong, Wang Feng and Mao Wei, Study of Computer Application, 2008, 25(1):33-36
			RPSL Extension Adapting to Detailed Registration Address Information Inquiry, Zhang Xinchang, Li Xiaodong, Wang Feng and Yan Baoping, Study of Computer Application, 2008, 25(7):2132-2134
			Study of the Realization of Services for a Huge Amount of Domain Names, Xu Hailing, Li Xiao and Yan Baoping, supplement to Study of Computer Application, September 2008, PP. 1361-1362
			Analysis and Realization of a Kind of Network Topological Model Based on Complexity Theory, Hao Yunxia, Luo Wanming and Yan Baoping, supplement to Study of Computer Application, September 2008, PP. 1626-1628
			Adopt OSP to Solve Critical Problems of VoIP Interconnection and Communication, Chen Bo, Chen Hui and Mao Wei, supplement to Study of Computer Application, July 2008, PP. 419-420

The CNNIC has been positioned as a national network fundamental resource technology R & D center in terms of technological research and innovation. In 2008, aiming at improving the Internet technology level in China, activating the innovation mechanism and enhancing comprehensive competitiveness, the CNNIC was dedicated to Internet technology R & D and innovation and achieved significant results. Dr. Li Xiaodong won the award of “Excellent Youth in the Software Industry in China” in 2008.



Dr. Li Xiaodong (third from right) is awarded the title of Outstanding Youth in China's Software Business 2008

Now we should press on with the completion of the related operation systems. The CNNIC should take the lead. It should manage well the domain name business and also construct the domain name environment based on IPv6. It is a very important thing itself.

---Jiang Lintao, Member of the CNNIC Steering Committee

Without the support of a domain name system, our information security system cannot be well operated. I suggest that we establish an expert team to specially study domain name technology, and carry out planning and guidance. It is a very important matter.

---Qian Hualin, Member of the CNNIC Steering Committee

# Study of Internet Development

Now everyone attaches great importance to the decisions of the state. The CNNIC should consider how to bring into play its resource advantages and carrying out more study on soft science. Through these statistical studies, we can see some problems and give some beneficial suggestions for the state department concerned.

---Gao Lulin, Member of the CNNIC Steering Committee.

## Internet Development Study of Internet Development

The CNNIC has been positioned as a think tank for national network development policies in terms of study of Internet development. 2008 was the eleventh year for the CNNIC to issue the Statistical Survey Report on the Internet Development in China. Over the 11 years, the CNNIC continuously issued, twice every year, reports on the macro development of the Internet in China and carried out in-depth analysis of various data of Internet development. In the whole year of 2008, altogether 20 research reports and 3 reports entrusted by the government were issued, which provided reference for the government and enterprises to develop various management and development strategies.

In 1999, the CNNIC organized renowned experts into an expert evaluation committee for important events in Internet development, edited and released for the first time the Important Events in Internet Development in China, a practice continued in every subsequent year. The Important Events in Internet Development in China 2008 was released in April 2009.



On July 24, 2008, the CNNIC issued the “22<sup>nd</sup> Statistical Survey Report on the Internet Development in China” in Beijing.



On January 13, 2009, the CNNIC issued the 23<sup>rd</sup> Statistical Survey Report on the Internet Development in China in Beijing.

Compared with CNNIC reports in the past years, this report (the 23rd) has one significant development, that is, addition of in-depth analysis of user behaviors. We can look for the market orientation and competition strategy of our own company according to the behavior characteristics of users' network application.

Xie Wen, a senior expert on the Internet

CNNIC's major research area and its results on Internet development in 2008

Field	Name of report	Major data and suggestions
Macro conditions of the Internet	The 22 <sup>nd</sup> Statistical Survey Report on the Internet Development in China	1. The amount of netizens in China reached 253 million, surpassing that in the United States to a large extent for the first time, and the size of netizens ranked the first in the world. 2. The proportion of broadband access among netizens in China was 84.7%, the amount of broadband netizens reached 214 million, and the size of broadband netizens ranked the first in the world. 3. By July 22, the amount of CN domain name registration in China, which was 12.188 million, also surpassed the amount of German .de domain names, and CN domain names became the largest national top level domain names in the world.
	The 23 <sup>rd</sup> Statistical Survey Report on the Internet Development in China	1. By December 2008, the Internet penetration rate in China, which was 22.6%, surpassed, for the first time, the global average level, which was 21.9%. 2. The amount of netizens in China reached 298 million, the amount of broadband netizens reached 270 million, and the amount of national CN domain names reached 13.572 million. The three indexes continued to rank the first in the world.
Search engine	Survey Report on the Search Engine Market in China 2008	By the end of 2008, the size of users using search engines in China had reached 203 million, the annual growth rate was 33.6% and the use rate was 68%. 1. Follow the principle of users' experience being the most important. 2. Improve the effectiveness of search engine advertisement clicks. 3. Reduce the urban-rural gap of search engine applications.
Netizens' hotspot behaviors	Research Report on Chinese Netizens' Olympic Media Consumption Behaviors 2008	1. 82% of the netizens were concerned with the Beijing Olympics. 2. Nearly 80% of the netizens concerned with the Olympics acquired Olympic information via the Internet.
Network media	Research Report on the Internet Transmission Effect of the 2008 Beijing Olympics	1. Watching the Olympics online became an important part of netizens' daily life. 2. 56.2% of the netizens paid most attention to textual news, 50.4% of the netizens paid most attention to video live broadcasting, and 47.6% of the netizens paid most attention to vivid pictures.
Virtual world	Development Condition of the 3D Virtual World in China	1. 3D virtual world is not online games and is not just an online community; 2. The application of the 3D virtual world is not wide in China
Network problems	Research Report on the Current Situation of Human-powered Search	1. 20% of the people are worried that they will be subject to human-powered search 2. 80% of the people think that we should standardize human-powered search.
Blog	Research Report on the Blog Market and Blog Behavior in China 2008	By the end of December 2008, the proportion of netizens having personal blog/personal space had reached 54.3%, and the size of users had reached 162 million. The proportion of netizens often upgrading blog/personal space had reached 22% and the size of active blog authors had reached 35.64 million.
Search engines	Research Report on Advertisers in the Search Engine Market of China 2008	1. 38% of the enterprises survey use search engines and e-commerce websites at the same time. 2. Advertisers in machinery and manufacturing industry occupy the absolute leading position with a proportion of 49%, and advertisers in the IT industry place the second with a proportion of 12%. 3. 86% of the advertisers choose Baidu, and 61% choose Google.
Online games	Research and Analytical Report on Online Game Users in China	The amount of online game users in China reached 187 million in 2008, and the size of active users of large-scale multiperson online games reached 55.5 million.
Wireless Internet	Research of Information Transmission Behaviors via Mobile Phones	1. 29.8% of the mobile phone users have received information on activities and gatherings etc. 2. 25% of the users may re-transmit the information sent by others;



# CNNIC Internet Development Research Blog

In March 2008, the CNNIC opened an official Internet development research blog in the Sina blog channel (<http://cnnicresearch.cn>), as an important online platform for the public, netizens and experts in the industry to strengthen communication. By the end of 2008, altogether 176 blog articles had been publicized in the year, involving many fields such as basic aspects of the Internet, rural Internet, e-commerce, telecommunications, online games and virtual world. The accumulated amount of reading of CNNIC official blog had reached 400 thousand.

( Table continued )

Field	Name of report	Major data Major suggestions
Wireless media	Research Report on Mobile Phone Media	1. The penetration rate of mobile phone newspapers has reached 39.65% in the cities surveyed 2. The use rate of mobile phone TV based on the mobile network is only 15.7%, and the fee problem is still one of the major obstacles to the development of mobile phone TV business
Wireless advertising	Study of Mobile Phone PUSH Advertising	Textual information is still the main contents in the advertising information received by users, accounting for 59.2% of the information, followed by illustrated contents, accounting for 35.8%, while video advertising accounts for 5%
Netizen behavior	Research Report on Mobile Phone Online Behaviors	By the end of 2008, the amount of mobile phone users in China had reached 640 million, and the amount of users accessing the Internet via mobile phones had surpassed 117.6 million.
Instant messaging	Research Report of the Instant Messaging Market	By the end of 2008, the IM users in China had accounted for 75.3% of the total netizens in China, reaching 224 million
Network security	Research Report on the Online Security Conditions of Netizens' Information in China 2008	1. 96.1% of the netizens' personal computers have been installed with information security software; 2. Among netizens using security software, 70.5% of the netizens use security package software products; 3. 28% of the netizens have used online virus scanning software
Rural Internet	Survey Report on the Rural Internet 2008	1. By December 2007, the amount of rural netizens had reached 52.62 million and the annual growth rate had reached 127.7%. 2. The proportion of rural netizens accessing the Internet at cybercafés had been close to a half (48.5%) 3. The proportion of rural netizens accessing the Internet via mobile phones had reached 23%.
Online shopping	Research Report on Online Shopping in China 2008	1. Among 19 cities surveyed, the amount of online shopping in the first half of the year reached RMB 16.2 billion 2. 60% of the users only buy things at one website
Regional Internet	Report on the Development of the Internet in Beijing	1. By the end of June 2008, the size of Beijing netizens had surpassed 8 million and the Internet penetration rate had been close to 50%. 2. The total amount of domain names in Beijing had continued to growth, reaching 2,671,206, ranking the first in China.
	Report on the Development of the Internet in Shenzhen	1. By June 30, 2008, the size of Shenzhen netizens had reached 4,387 million, accounting for 1.7% of the total netizens in China. The netizen penetration rate had reached 50.9%. 2. The proportion of Shenzhen netizens accessing broadband had reached 97.4%, far higher than the average level in China, 84.7%. 3. 44.1% of the Shenzhen netizens was mobile phone netizens, and the proportion was higher than the average level in China (28.9%). 4. The use rate of online shopping among Shenzhen netizens was 25.5% and the amount of users reached 1.119 million.



CNNIC Analyzer Sun Xiuxiu: What Are 100 Million Young People and Adolescents Doing Online? Clicking rate has reached 100,000



CNNIC's Research on Internet Development Blog won the title of the Most Popular Weblog on IT technology for 2008



# International Communication and Cooperation

## Participating in the International Internet Community

In these years, the CNNIC has always been well meeting the demands of the country, the society and economy for Internet development. It keeps making active exploration and innovation in the world. Its influence, strength and position keep improving. We hope that continuous work will be done in this respect to maintain national interests and the right to speak, matching our national image.

---Zhao Xiaofan, Member of the CNNIC Steering Committee

International organization tracked by the CNNIC	Major activities and achievements in 2008	Appointment
ICANN	Promoting the launching of the IDN ccTLD implementation policy and deployment plan. “中国” in simplified and traditional Chinese is likely to be written into root names in 2009	Zhang Jian was appointed councilor of ccNSO, an organization supported by the ICANN in 2008
IETF	A standard draft was promulgated. Besides, 4 technical drafts were delivered	Li Xiaodong was appointed co-chairman of the IETF EAI working team
ITU	Participating in the meeting of the second research team of the ITU-T, and carrying out in-depth tracking of the allocation and administration of IP addresses, ENUM and IDN etc	
APNIC	Discussing IP address allocation policy to cope with the exhaustion of IPv4 addresses	Mao Wei was appointed Executive Member of the APNIC
CDNC	In October 2008, sponsored the sixteenth CDNC meeting. The participating domain name registration administration organizations held discussion on the hotspot problems of the EAI and the IETF and communicated on their respective business updating	Researcher Qian Hualin was appointed Chairman of the CDNC
CENTR	Joined the CENTR in October 2008 to become an associated member	
Sino-Korean NSS	In November 2008, sponsored the third Sino-Korean NSS (Naming Services Symposium) technology communication meeting, in which in-depth discussions were held with Korean NIDA on the current situation of the related technology of Internet naming services such as DNS, RFID, IPv6, Keyword, EAI and Wireless Keyword, and development direction	
APTLD	Participating in the APTLD annual meeting	Zhang Jian was appointed director of APTLD
DotAsia		Li Guanghai was reappointed director of DotAsia



Zhang Jian of the CNNIC was delivering a speech at the ICANN meeting

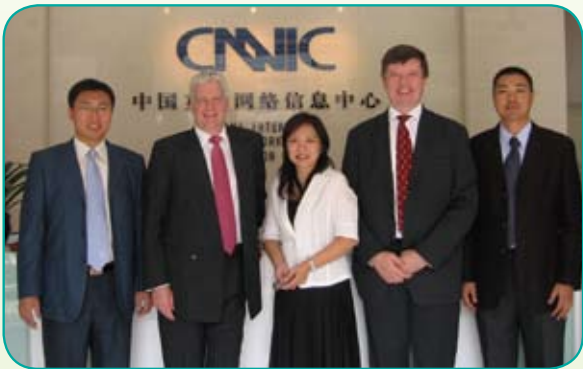


In November 2008, the CNNIC sponsored the third Sino-Korean NSS (Naming Services Symposium) technical communication meeting.

## International Communication and Reception of Visitors

In the whole year of 2008, the CNNIC participated in 32 Internet community conferences, and received over 100 person-times of foreign guests.

In February 2008, ICANN Chairman Peter Dengate Thrush visited the CNNIC. He praised the contributions made by the CNNIC to the Chinese Internet community. Mr. Thrush said that they would continue to strengthen communication and cooperation with the CNNIC in various fields including internationalized domain name (IDN), and meanwhile hoped that the CNNIC could play a bigger role in international Internet affairs.



On October 13, 2008, ICANN President and CEO Paul Twomey and the Chairman of the ICANN ccNSO Committee, Chris Disspain, visited the CNNIC



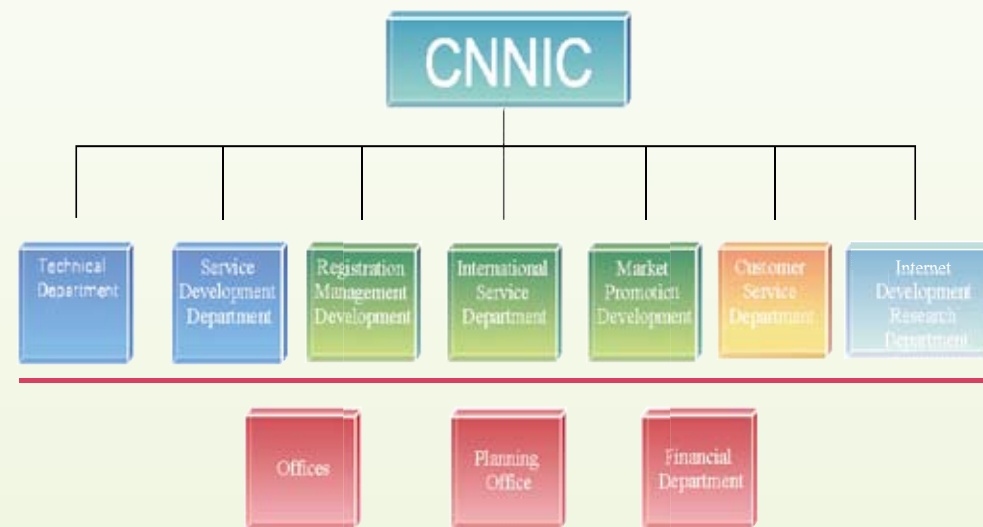
On February 19, 2008, ICANN Chairman Peter Dengate Thrush visited the CNNIC



On November 10, 2008, the Chile Information Industry Delegate visited the CNNIC

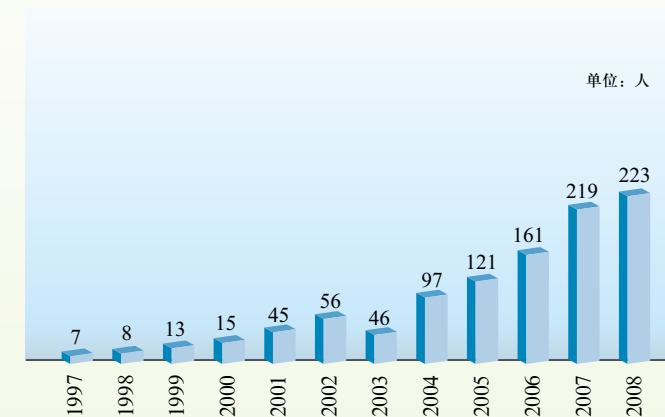
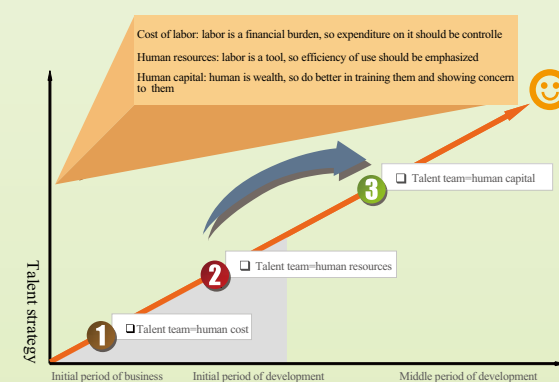
# Talented Team and Innovative Culture

## Organizational structure

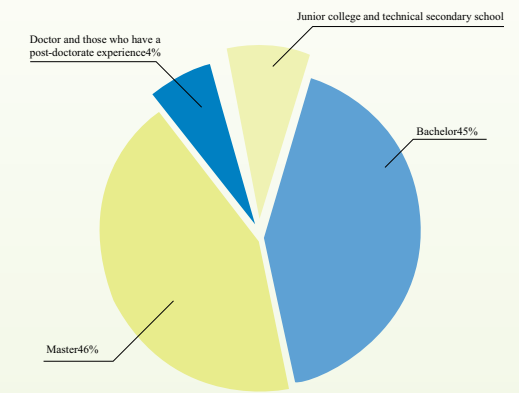


## Construction of the Talent Team

In response to the question, “who is to realize the CNNIC strategy”, the CNNIC thinks that “people” are the most valuable resources for business development of the CNNIC, and human resources are the starting point and end-result of internal management of the CNNIC;  $\text{organizational success} = \text{strategy} \times \text{organizational ability}$ . The ability to manage human resources is an important part of the core competitiveness of the organization.



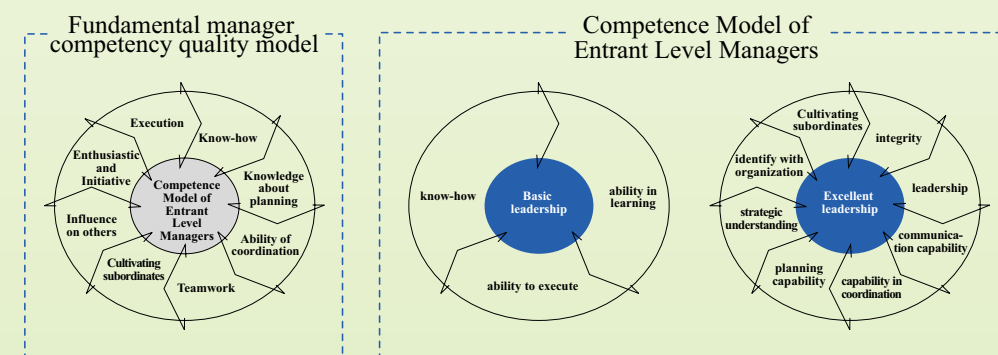
Growth of employees trend



Schooling of employees

In 2008, the CNNIC strengthened the construction of the cadre team and scientifically and effectively selected, assessed and cultivated cadres by constructing a medium level cadre competency model; stepped up efforts in storing and cultivating grassroots cadres, and carried out systematic cultivation of grassroots cadres through pertinent annual training projects; attached importance to the training of new employees, and cultivate qualified CNNIC employees through training on the post and collective cultural training camping. Through echeloned training, the number of training lessons per person in 2008 reached the leading level of the industry, the cadre team developed stably and new talents kept emerging.

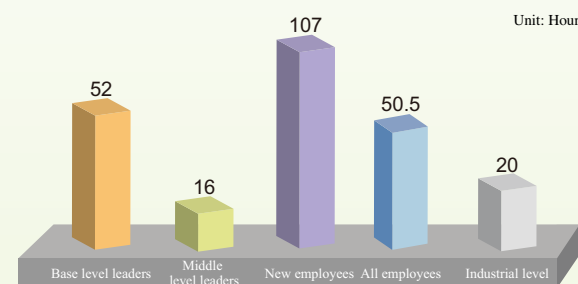
### Talent promotion: competency quality model





### Development of talents: Trainings based on talent development planning

In 2008, the amount and quality of trainings improved substantially from that in the previous year. The training coverage rate and training satisfaction rate reached the average level of the industry market, and hours of training per capita far exceeded the average level of the industry market, vigorously supporting the fulfillment of the CNNIC talent development strategy.



Average personal training courses in 2008 reached industrial leading level

Training coverage rate	98%
Training satisfaction rate	91.9%
Person-times of training	1622 person-times

Training Statistics in 2008

Personnel participating training	Training lesson	Training features
Grassroots cadres	CNNIC Management Take-off Plan (and CNNIC Grassroots Manager 2008 Training Project)	Started from February and ran through the whole year. Designed according to the CNNIC grassroots cadre ability competency model and the current situation of the group. Systematic and pertinent
Cadres at the medium level	5 practical small lectures were held.	Designed on the basis of the CNNIC leadership model training system, catering to the needs of business and work in the near future
New employees	New employee training camp activities	Collective culture education and scattered pre-employment education were combined. Through new employee training, cross-departmental communication channels for the new employees recruited in the same period were built up
All employees	Training at the post	Training at the post was based on departments, involving business training and basic skill training



## Cultural Vision

In 2008, the CNNIC, according to the new situation, strategically adjusted its goal of “constructing a world class Internet information center” to “constructing a world class Internet network information center with excellent culture”. From the height of strategic objective, the CNNIC is required to assume not only the responsibility for the society but also the responsibility for employees. While serving the society whole-heartedly, it should not forget caring its employees.



Based on prudent reflections of CNNIC values, in 2008 the CNNIC put forward the cultural idea of “healthy growth and happy work”. Under the guidance of this idea, the CNNIC consolidated its internal management system, perfected the process management and institutional management system. The internal management value of human resources was improved substantially, and the organizational structure was adjusted to support business restructuring. The talent team was cultivated with orientation, focus and major effort. Cadres were selected by using the qualification model, the overall quality of the employees was strengthened, and an excellent talent development system with a successor echelon took initial shape. Employees’ morale was cohered with innovation culture, and employees were encouraged by team building. Excellent achievements were made in ideological construction and continuous cultural import. In 2008, the CNNIC also won the title of “Model Youth” from the central government.



## Employee Activities

Centering on the cultural idea of “healthy growth and happy work”, the CNNIC held colorful employee activities in 2008.

In March, the CNNIC held in-depth and comprehensive employee opinion survey in terms of ten categories such as work satisfaction, and put forward corresponding improvement measures with respect to some problems

In October, excellent employees gathered in Hangzhou to visit some renowned enterprises and communicated with them, completing a cultural travel enhancing friendship, cooperation and progress. In November, old employees gathered to experience a team building activity on the topic of “endless growth and harmonious relationship” and recalled the 12 years’ experience of personal and organizational growth.

The Party Branch led the cultural construction and attached importance to carrying out education on party spirit and professional ethics; organized a Youth League Branch, re-elected the workers’ union, and perfected various organizations; paid attention to employees’ work ~ family balance, improved the office environment in an all-round manner, vigorously support employees to participate in the activities of the innovation culture team to keep fit, and gave real-time assistance to employees’ life so as to greatly enhance the coherence and sense of belonging of Party members, League members and ordinary employees.



# Appendixes

## Glossary

<b>ICANN:</b>	Internet Corporation for Assigned Names and Numbers. Established in October 1998, the ICANN is a non-profit corporation organization gathering experts in the commercial, non-commercial, technical and academic fields of the network circle all over the world, headquartered in Marina Del Rey, Los Angeles. The ICANN is currently responsible for many important fundamental network tasks, for example: assignment of IP address space, deployment of protocol parameters, and administration of domain name system and root server system.
<b>ITU:</b>	The International Telecommunication Union is a UN organization in charge of information and communication technology affairs. Established on May 17, 1865, it is headquartered in Geneva Switzerland. Its members include 191 member countries and over 700 sector members and associates.
<b>IETF:</b>	The Internet Engineering Task Force. The organization was established at the end of 1985 and its major task is to be responsible for the R & D and formulation of Internet-related technical standards. At present, the IETF has become the most authoritative large technical research organization in the global Internet circle.
<b>APNIC:</b>	Asia Pacific Network Information Center. It is located in Brisbane of Australia, and is one of the five regional Internet registries in the world, a non-profit membership organization responsible for providing IP (v4 and v6) addresses and autonomous system (AS) number assignment to 64 economic bodies in the Asia-Pacific region and reverse DNS authorization service. Its member units include Internet organizations such as ISPs and national (or regional) Internet registries (NIR). Besides, the APNIC also carries out technical training for various IP address assignment units in the Asia-Pacific region.
<b>CDNC:</b>	Chinese Domain Name Consortium. It was formally established on May 19, 2000 by the Internet network information centers in Mainland China, Taiwan, Hong Kong and Macao (CNNIC, TWNIC, HKNIC and MONIC), responsible for coordination and standardization of Chinese domain names.
<b>CENTR:</b>	Council of European National Top Level Domain Registries. Established in March 1998, it is a non-profit organization formed mainly by ccTLD registries in European countries.
<b>APTLD:</b>	Asia Pacific Top Level Domain Association. Established in July 1998, the APTLD is mainly formed by national and regional top level domain registries in the Asia-Pacific region. Its aim is to coordinate the top level domain registries in various countries and regions in the Asia-Pacific region, improve the influence of the Asia-Pacific region in the international Internet network circle, strive for more interests for the development of the Internet in the Asia-Pacific region, and promote the healthy development of the Internet network in this region.
<b>Dotasia:</b>	DotAsia Organisation is a non-profit organization established in Hong Kong and a registry of “.Asia” top level domains.
<b>CIETAC:</b>	China Internet Economic and Trade Arbitration Commission is an organization to settle CN domain disputes.
<b>HKIAC:</b>	Hong Kong International Arbitration Center is an organization to settle CN domain disputes.
<b>CCSA:</b>	China Communications Standards Association was formally established in Beijing on December 18, 2002. This association was organized voluntarily by domestic state-owned enterprises and institutions. Approved by the competent department and registered with the national administrative organ for the registration of organizations, it is a non-profit corporate social organization carrying out standardization activities in the field of communication technology.
<b>IDN:</b>	Internationalized Domain Name
<b>CNGI:</b>	China's Next Generation Internet
<b>EI:</b>	The Engineering Index
<b>SLA:</b>	service level agreement
<b>NSS:</b>	Naming Services Symposium

## Important Events of the CNNIC in 2008

On January 17, 2008, the CNNIC issued the 21st Statistical Survey Report on the Internet Development in China. According to data, by December 31, 2007, the total amount of netizens in China had reached 210 million.

On January 22, 2008, the CNNIC held the Fifth China Internet Network Address Resource Registration Service Conference, and had full communication with registrars with respect to the management, service and promotion experience and developmental prospect of Chinese Internet address resources.

On February 19, 2008, Peter Dengate Thrush, Chairman of the Council of the Internet Corporation for Assigned Names and Numbers (ICANN), visited the CNNIC.

On March 3, 2008, the Youth League Working Committee of the Central Government Organs gave the CNNIC the title of Model Youth of the Central Government Organs in 2007.

On March 28, 2008, the CNNIC issued the Survey Report on Rural Internet in 2008. According to data, by December 31, 2007, the amount of rural netizens in China had reached 52.62 million. The annual growth rate had reached 127.7%, far higher than the growth rate of urban netizens, 38.2%.

On May 8, 2008, the CNNIC held “Olympic Network, CN Convoy—2008 Olympic National Domain Name Security Guarantee Mobilization Conference”.

In May 2008, the CNNIC adopted a series of measures such as extending the due time of national domain names to guarantee earthquake relief.

On July 16, 2008, the CNNIC started the “Global Updating Activity of Chinese Domain Names” to guide users to successfully realize the updating to the “中国” age.

On July 18, 2008, the CNNIC took lead to found the “China Anti-Phishing Website Union”, established a rapid resolution mechanism of stopping the CN domain name resolution of phishing websites, and constructed a creditable website.

On July 24, 2008, according to the 22nd Statistical Survey Report on the Internet Development in China published by the CNNIC in Beijing, the amounts of netizens, broadband netizens and national domain names all ranked the first in the world.

On August 15, 2008, the CNNIC publicized the results of the first Credit Standing Ranking of Internet Website Service Organizations, and 36 CN domain name address service organizations won “star logos”.

In September 2008, the CNNIC successfully completed Olympic security guarantee, fulfilled the promise of “Olympic network, CN convoy”, and won praise from the Olympic Organizing Committee.

In September 2008, the international Internet technical standard development organization, the IETF, formally issued the SMTP Development Support Internationalized Mail Address as RFC5336. Yao Jiankang and Mao Wei of the CNNIC authored the standard. This was the third IETF standard developed by the CNNIC.

In October 2008, the Beijing Olympic Organizing Committee gave the CNNIC the honorary title of “News Publicity Contribution Award in the Beijing Olympics and Paralympics”, praising the CNNIC for making highly effective efforts for guaranteeing the stable operation of the domain name of the Olympic official website and the rights and interests of Olympic champions' domain names and their applications.

On November 25, 2008, the new CNNIC Steering Committee meeting was held at the CNNIC, which evaluated and guided the work of the CNNIC in 2008.

In December 2008, the results of credit standing ranking of Internet address service organizations for which the CNNIC served as the executive supervisory organization, were announced, and 40 CN domain name service organizations won “star logo” in 2008.