CNNIC UPDATE

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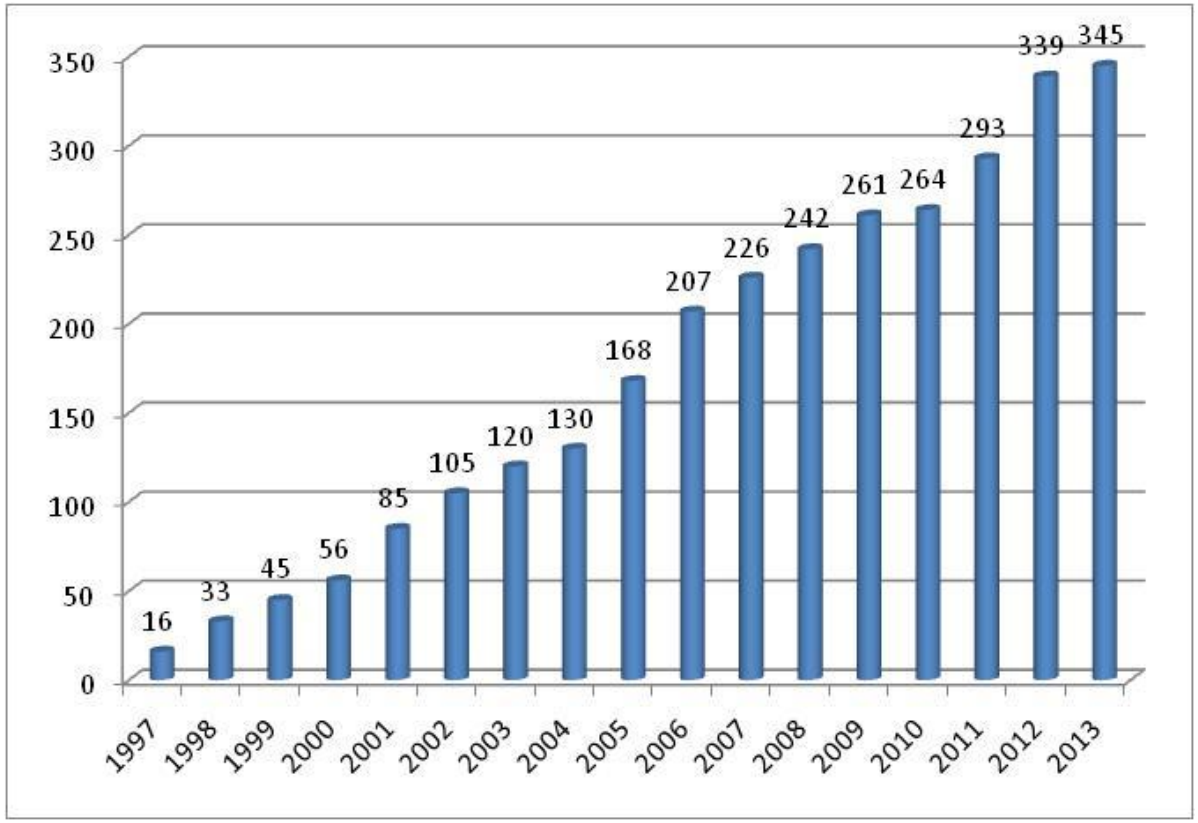
Outline

- Member Update
- IP Allocation Status
- IPv6 Seminar and Training
- China Domain Name System Upgrading Project
- Other Activities

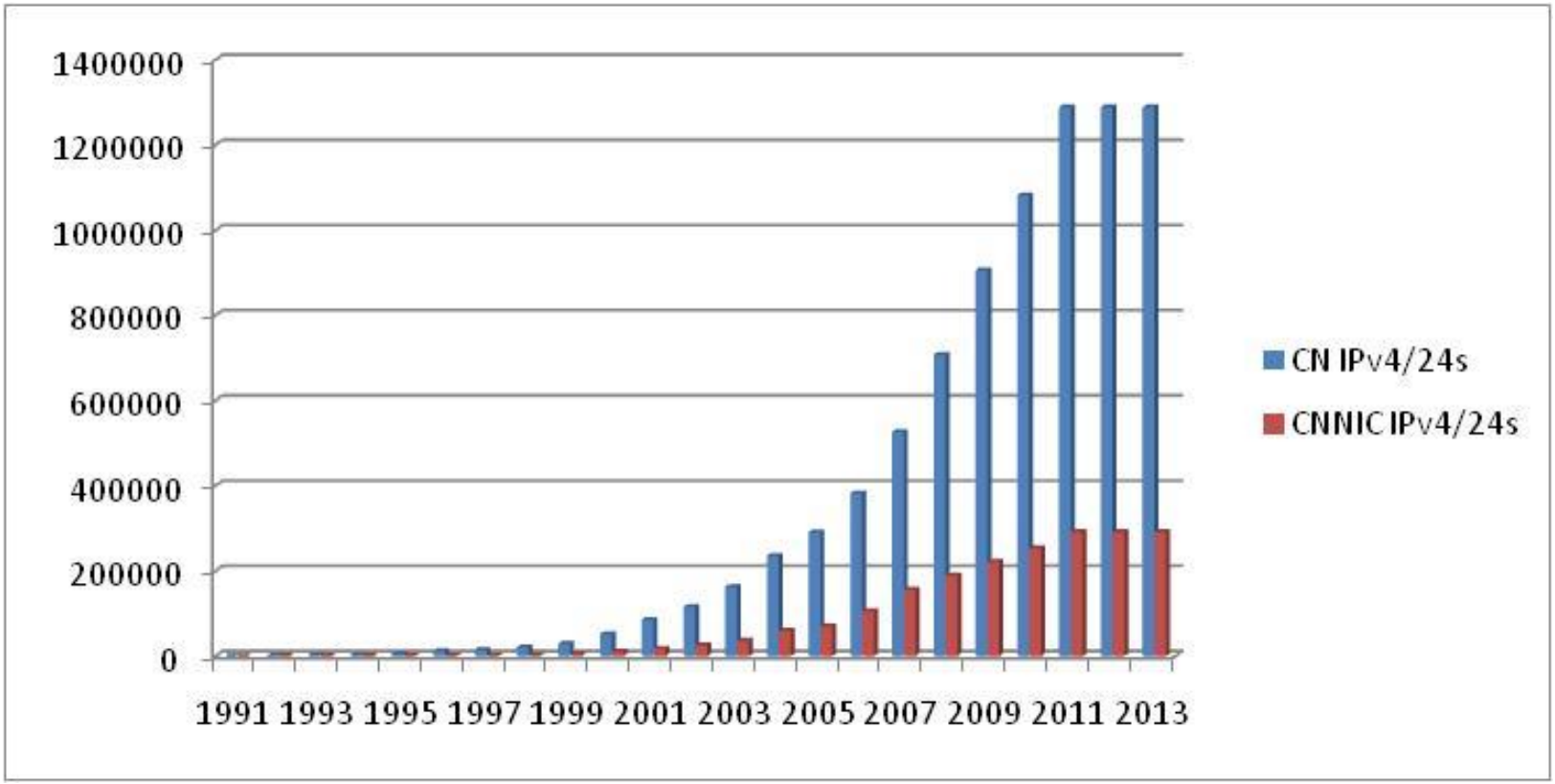
Member Update

Though 16-year development, CNNIC currently has 345 members, holding IP addresses or ASNs



IPv4 Allocation

- China and CNNIC IPv4 allocations
- CNNIC has allocated 291482 /24s IPv4 addresses in all



IPv6 Allocation

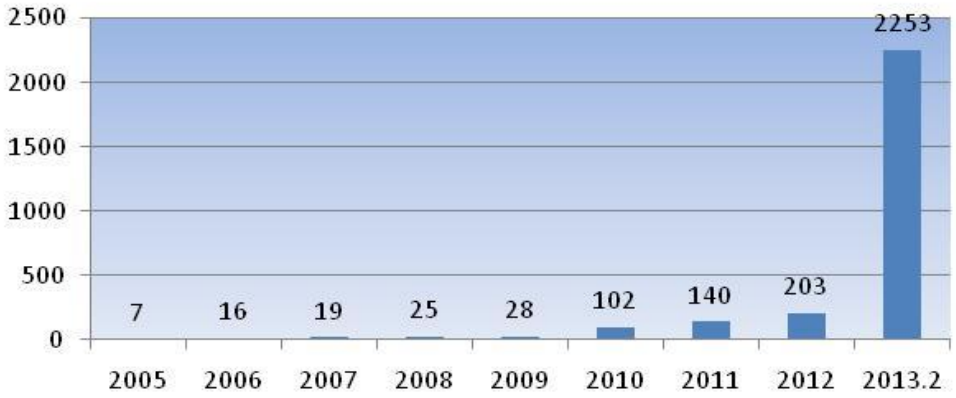
■IPv6 allocation in the world

No.	Country	IPv6 (/32s)	Proportion
1	Brazil	65728	36.16%
2	America	19112	10.51%
3	China	14587	8.02%
4	Germany	11356	6.25%
5	Japan	11228	6.18%
Global Total		181764	

■IPv6 allocation in China

Organization	IPv6(/32)
CHINANET	4099
CHINA UNICOM	4098
CHINA MOBILE	4098
CNNIC members	2253
Others	39
China Total	14587

■CNNIC IPv6 allocations



Internet resource Seminar

Date: 30 October, 2012
Location: Hangzhou
Number of participants: 97
Local host: Internet Society of Zhejiang

Topics:

- IPv6 adoption in the world
- APNIC IP allocation status and China allocations
- IPv4&IPv6 allocation policies and procedure
- Website Security and server certificate

APNIC IPv6 Training

Date: 31 October - 2 November, 2012
Location : Hangzhou
Local Host: CNNIC
Presenters: Champika Wijayatunga, Guangliang Pan
Number of participants: 30

Training contents:

01 Introduction to IPv6

02 IPv6 Addressing and Subnetting

03 IPv6 Host Configuration

04 IPv6 Deployment Plan – Case Study

05 IPv6 Deployment in IGP and EGP

06 IPv4 to IPv6 Transition Technologies

07 IPv6 DNS

China Domain Name System Upgrading Project

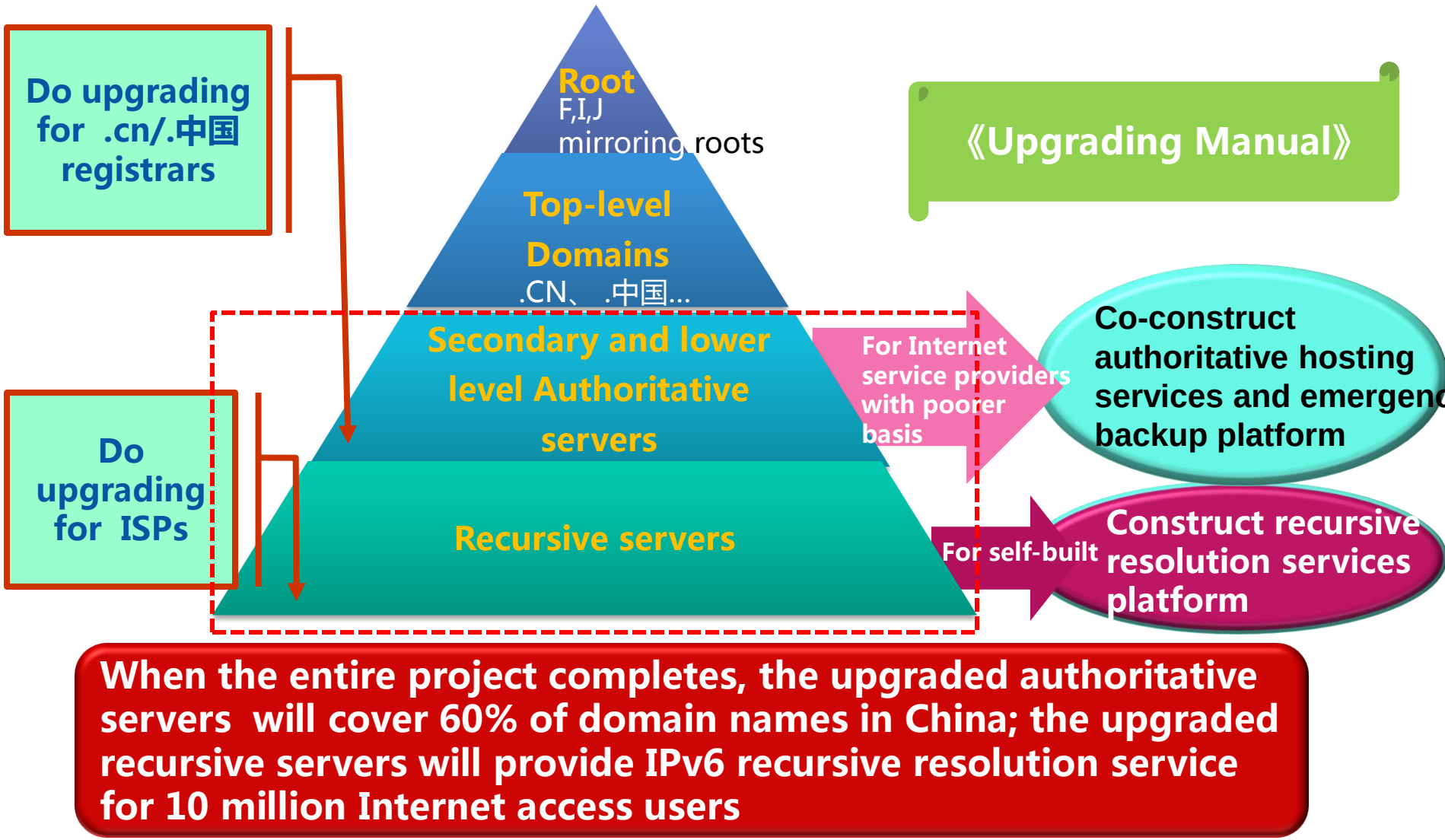
Domain Name System(DNS) is a core service on Internet; upgrading DNS to IPv6 is an important part of the whole IPv6 transition work in China

■The project is under the China Next Generation Internet(CNGI) project, which is a large National Project driven by Chinese government

■The upgrading project is from January, 2012 to December, 2013

■CNNIC is the undertaker of the project; Dozens Internet Service Providers are chosen as co-undertakers

Project Content

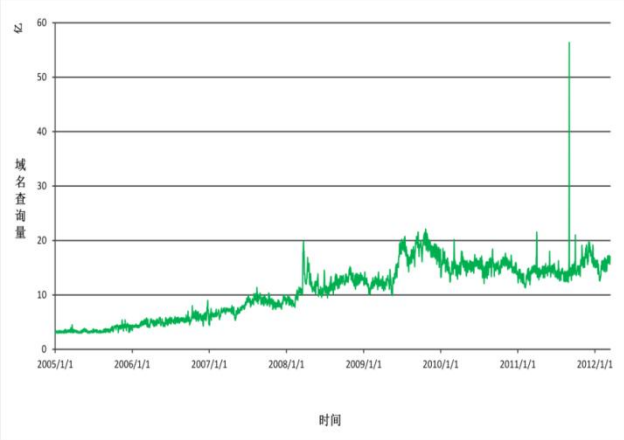


When the entire project completes, the upgraded authoritative servers will cover 60% of domain names in China; the upgraded recursive servers will provide IPv6 recursive resolution service for 10 million Internet access users

Project Content(1)—Upgrade Top-level Domains

In 2009, CNNIC accomplished IPv6 upgrading and reformation of the nodes of .CN Top-level domain

Until now, the total 19 top-level domain nodes located in many countries have supported IPv4/IPv6 dual stack



Project Content(2)—Upgrade Authoritative servers

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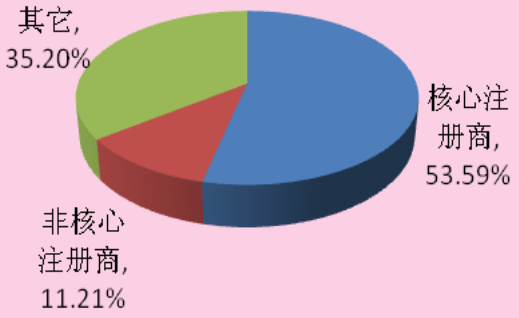
Domain name resolution



Authoritative servers with good foundation:

1. Network environment partially support IPv6
2. System deployment management ability is good, a small number of single-server nodes, the security level is better

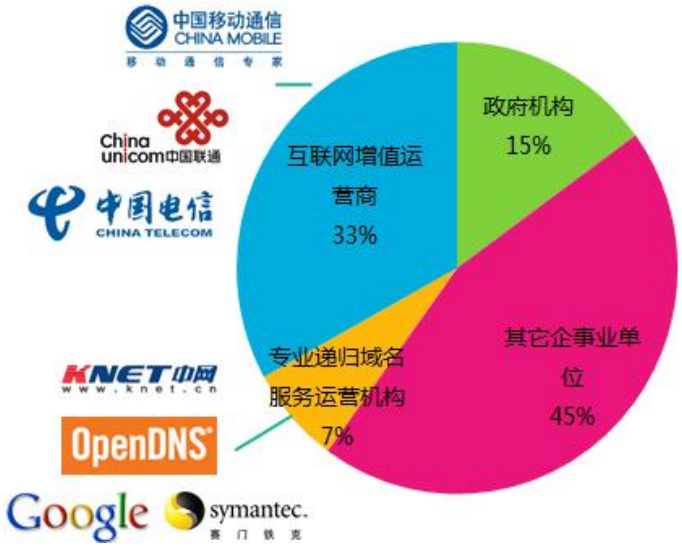
Authoritative servers with poorer foundation:

1. Network environment do not support IPv6, and it is hard to upgrade to IPv6 in a short time
2. A large number of single-server nodes, the security level is low

Scheme:

- For those with good foundation, upgrade and reform their current network and equipment, and deploy specialized security equipment
- For those with poorer foundation, co-build authoritative hosting services and emergency backup platform supporting IPv4/IPv6, and deploy specialized security equipment to existing nodes

Project Content(3)—Upgrade recursive servers



Recursive servers provided by 3 types:

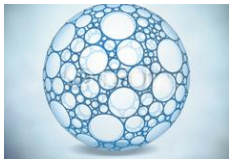
- ✓ **Internet access provider (ISP)**
- ✓ **Professional DNS operating organizations**
- ✓ **Organizations and enterprises who self-build DNS**

Scheme:

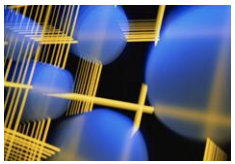
- For ISPs, upgrade and reform their current network and equipment, and deploy specialized security equipment
- For the large number of self-built servers, the cost of upgrading all will too high, so instead, building the open recursive resolution services platform supporting IPv4/IPv6, providing the free public IPv4/IPv6 recursive resolution services

Other Activities

- IPv6 deployment situation statistics
  - co-operate with local ICPs/ISPs
  - based on APNIC IPv6 Capability Tracking model



- Consulting for IPv6 address planning and network upgrading



- Research on G-location based on IPv4/IPv6

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Welcome to APNIC 36

Looking forward to meeting all of you at next APNIC meeting in Xi'an, Shanxi, China

THANKS!

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