

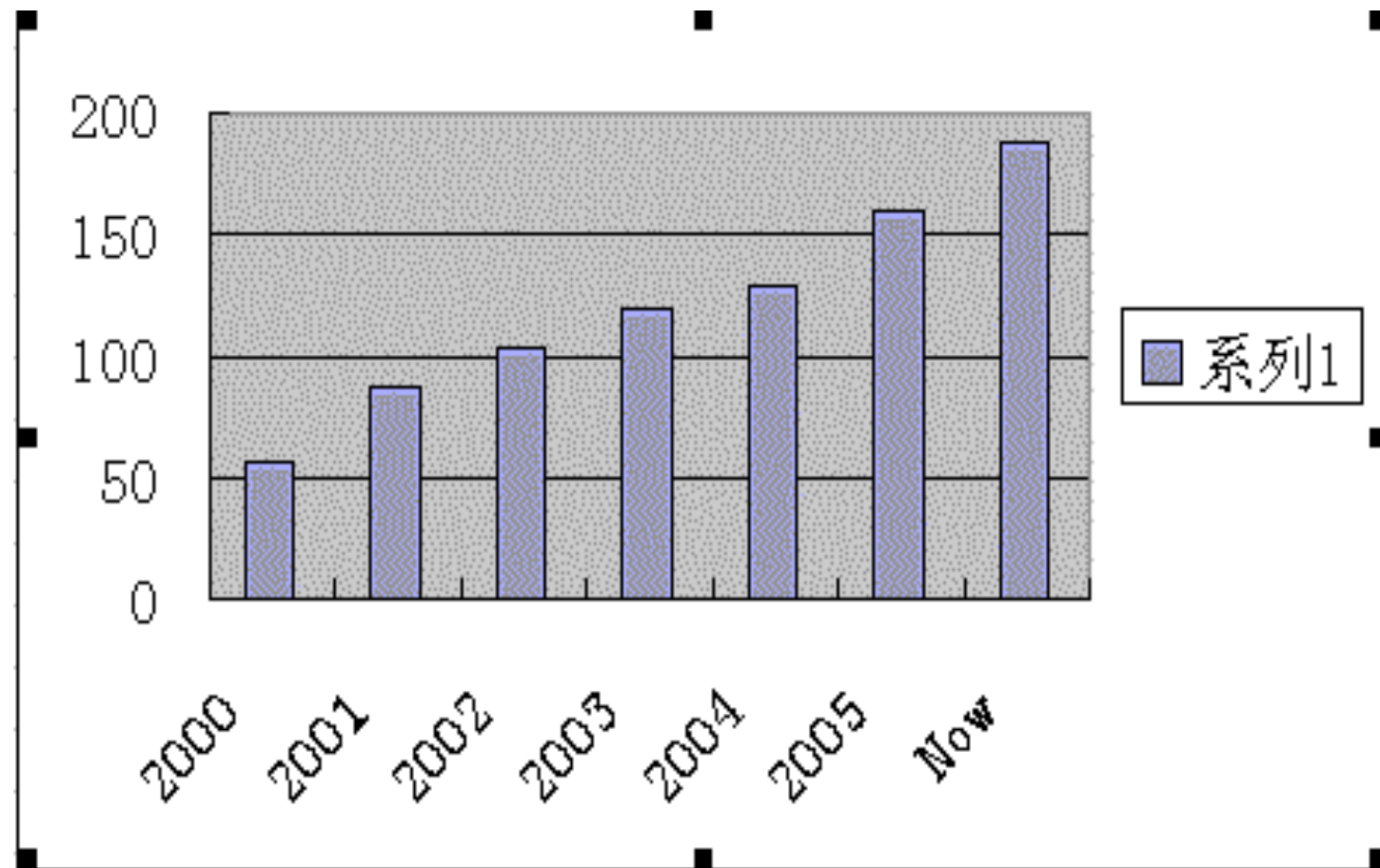
CNNIC UPDATE

9/7/06

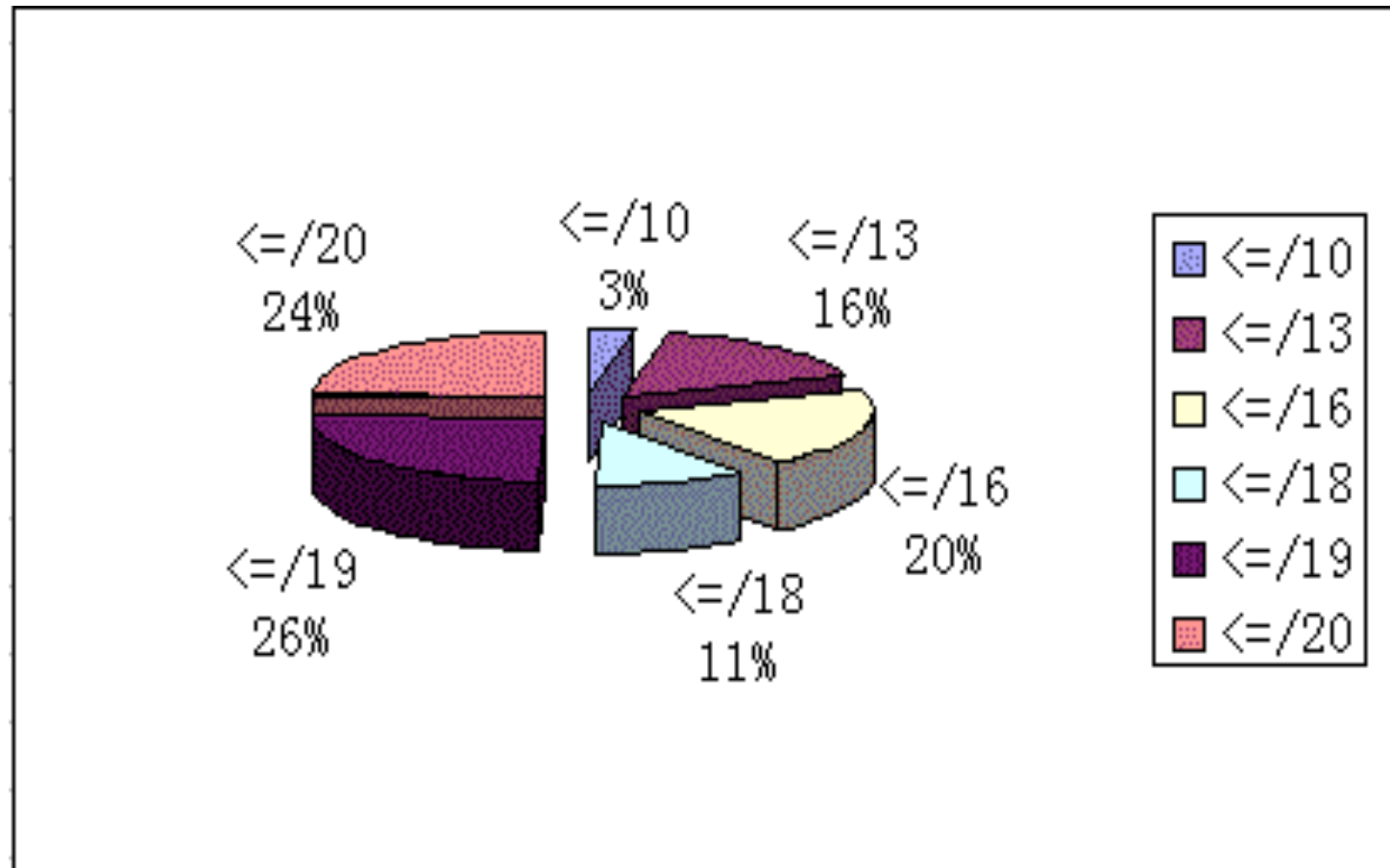
Outline

1. Update of CNNIC IP allocation work
2. Historical Resources Status in China Mainland
3. Our next plan

CNNIC has 188 members



The structure of CNNIC members



Some service are welcome by members

Local service: language, Chinese Whois registration

- Policy and application consultation
- Address planning
- Regular visiting, face to face:

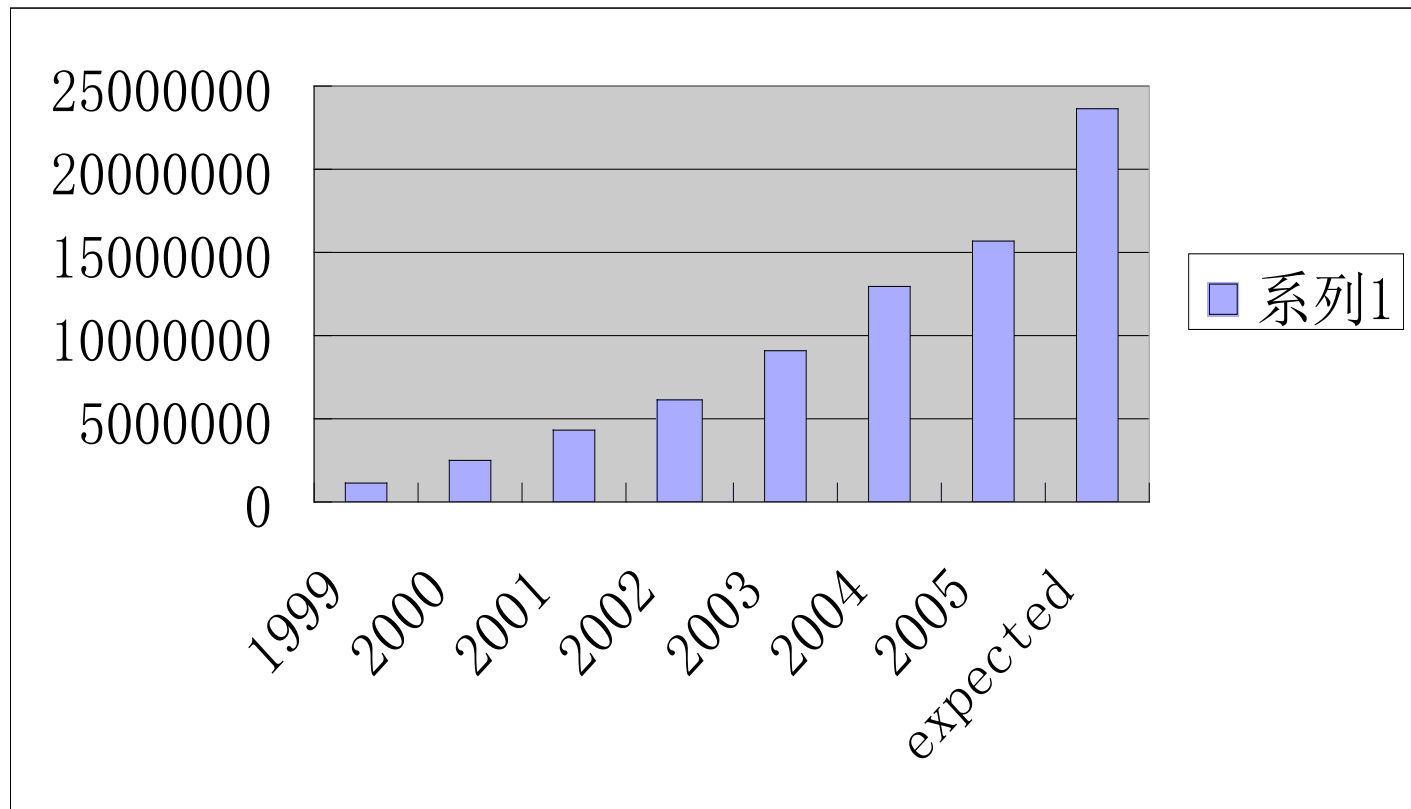
IP address application period, annual fee period


Get information about the utilization of

their IP and as, assist them with getting necessary new IP address

guide member how to deal with spam complaint

The growth of CNNIC IP addresses allocation





Historical Resources Status in China Mainland

What is Historical Resources?

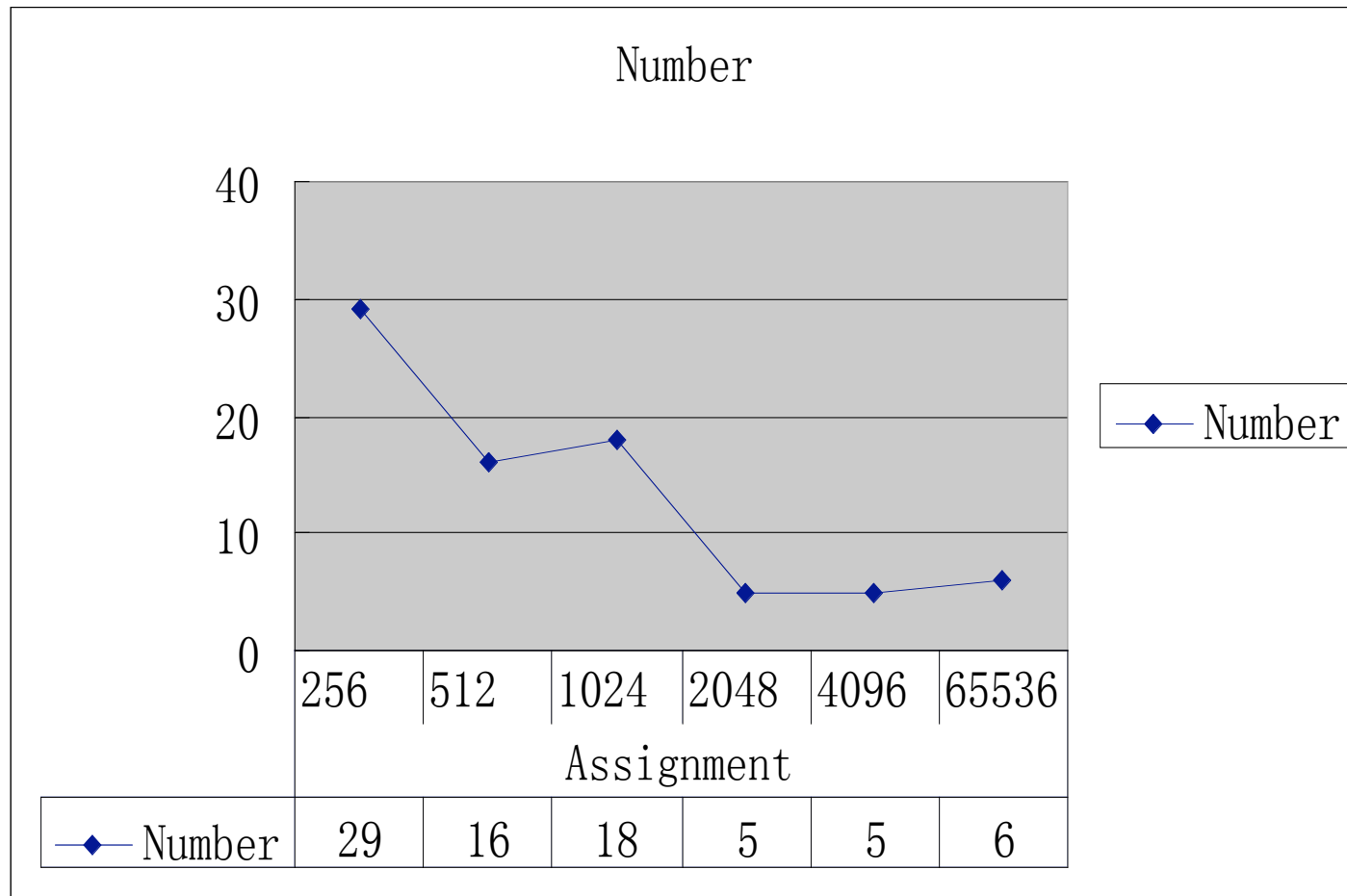
- Allocated before APNIC establishment
- Early Registration Transfer (ERX) completed in February 2005
- Assisting holders to reclaim HRs

Historical Resources Status in China

- Historical Resources
 - IPv4: 7 /16s
 - AS: none
- Enterprises holding Historical Resources
 - 59

Historical Resources Status in China

Assignment Distributing Condition



How we did the Transfer Project?

- Time

May 2006 - Now

- Procedure

How we did the Transfer Project?

List of HRs in China



Sort out contacts of HRs
through WHOIS



Contact relative persons



Discussion



Transfer their
HRs to CNNIC



Not plan to transfer
at this time

Results

Results until now:

- Hold Historical Resources: 59
- Contact available: 12
- Have intent to transfer: 7
(in discussion now)

Problems

- Fail to contact many HRs holders
- Some HRs holders think there is no necessity to transfer the HRs
- Some HRs holders are reluctant to pay maintenance fee for HRs,
we hope to adopt flexible fee policy for them

Our next plan

- Improving member service platform reverse delegation function, utilization rate etc
- Member meeting
- IP policy training meeting for China ISP

How many IP addresses does China
mainland need in near future?

9/7/06

Background

- The research indicates that the IANA and RIR free pool of IPv4 addresses may run out between 2009–2012.
- CNNIC made a projection on IP address in China mainland as a part of CNGI project research.

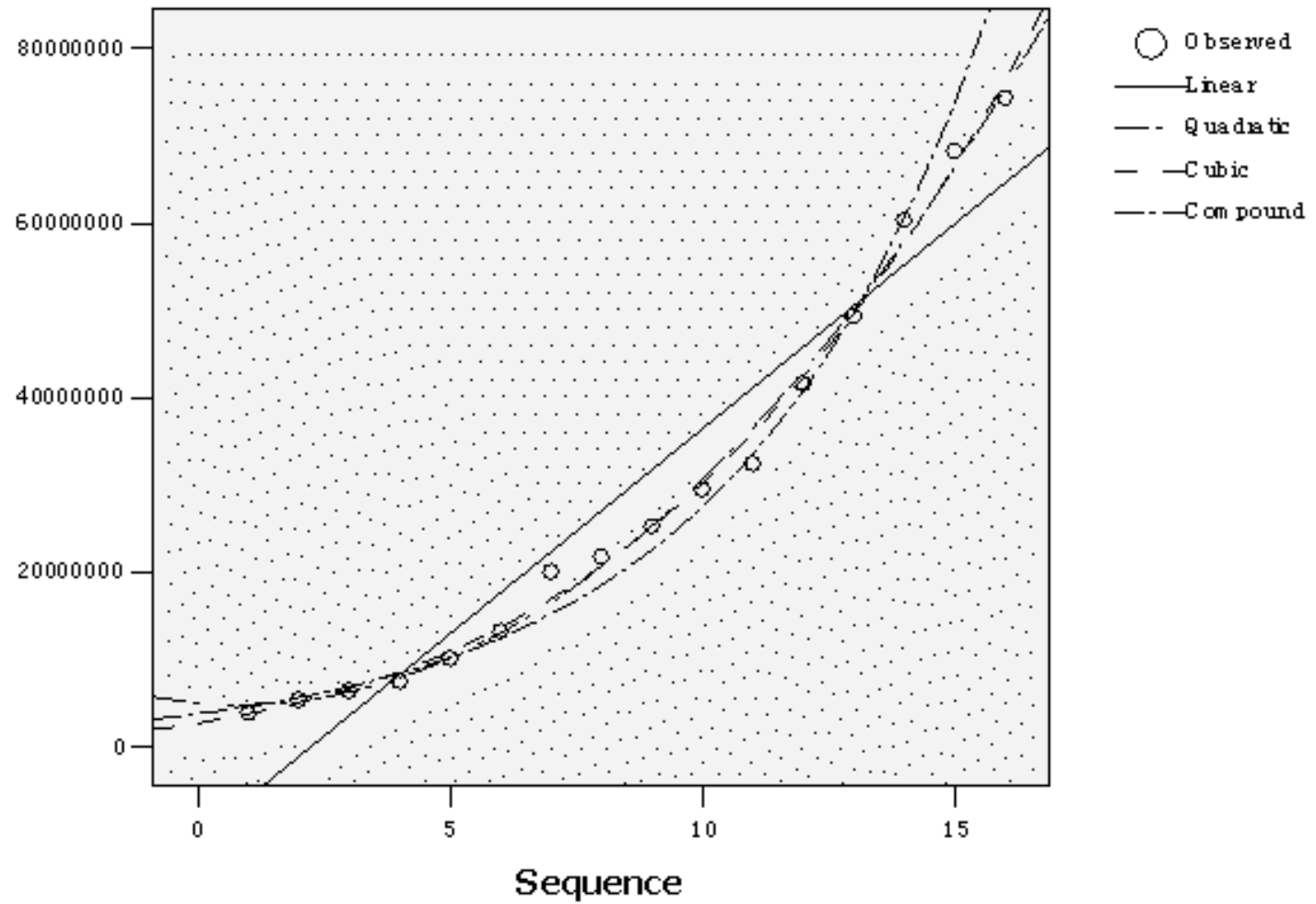
Two method

- 1. using historical IP addresses data
stable growth period: 1998 - 2005
- 2. using the historical number of
netizen and online computer

Sample data: the data of stable growth period of China Internet

1998	4056832
1998	5429760
1999	6494720
1999	7576064
2000	10205696
2000	13289984
2001	20096512
2001	21816832
2002	25321984
2002	29518336
2003	32485888
2003	41677312
2004	49413632
2004	60370432
2005	68291072
2005	74386944


First method: function fitting



Quadratic and cubic function are suitable

Equation ⁺	Model Summary ⁺					Parameter Estimates ⁺			
	R. Square ⁺	F ⁺	df1 ⁺	df2 ⁺	Sig. ⁺	Constant ⁺	b1 ⁺	b2 ⁺	b3 ⁺
Linear ⁺	.928 ⁺	180.541 ⁺	1 ⁺	14 ⁺	.000 ⁺	-10497907.200 ⁺	4693142.965 ⁺		
Quadratic ⁺	.994 ⁺	1134.518 ⁺	2 ⁺	13 ⁺	.000 ⁺	5106524.800 ⁺	-508334.369 ⁺	305969.255 ⁺	
Cubic ⁺	.995 ⁺	801.533 ⁺	3 ⁺	12 ⁺	.000 ⁺	2762141.538 ⁺	932812.136 ⁺	100321.600 ⁺	8064.614 ⁺
Compound ⁺	.984 ⁺	860.027 ⁺	1 ⁺	14 ⁺	.000 ⁺	3832761.067 ⁺	1.218 ⁺		

表4 模型分析和参数预估表⁺



The second method: Multiple Linear Regression analysis

- The number of IPv4 has strong pertinence with netizen and online computer

Model Summary^f


Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.993 ^a	.987	.986	2759456.09
2	.996 ^b	.992	.991	2239538.81

a. Predictors: (Constant), 上网计算机

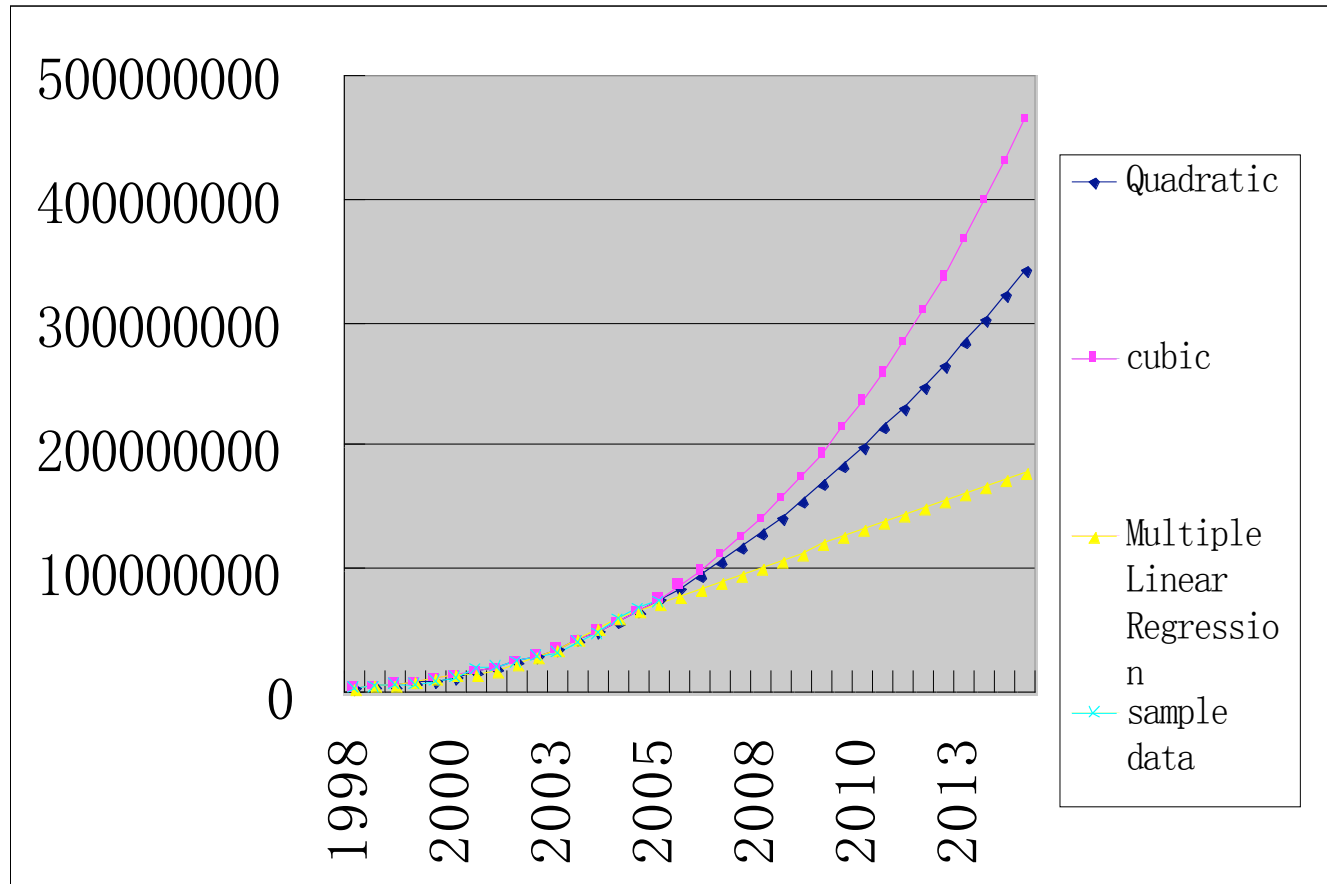
b. Predictors: (Constant), 上网计算机, 网民

c. Dependent Variable: IP

表5 相关性分析表^d

- 
- We expect the number of netizen will increase by 16,000,000 and the online computer will increase by 8,000,000 each year in order to project the number of IPv4 required by China mainland

IP address projection



conclusion

1. Multiple Linear Regression give a conservative projection, but linear function do not fit the growth trend, it neglects new network application and other factors, so we adopt Quadratic and cubic function to make projection.

Using this first method, china mainland needs other 10 A - 15A class IP addresses by the end of 2012. We will assist APNIC to allocate the enough IP address for China ISP.

CNNIC

中国互联网络信息中心
CHINA INTERNET NETWORK INFORMATION CENTER

Thank You!

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