



# CNNIC UPDATE

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NIR SIG, APNIC 44, Taichung

# Outline

Internet Development in China

Membership Growth

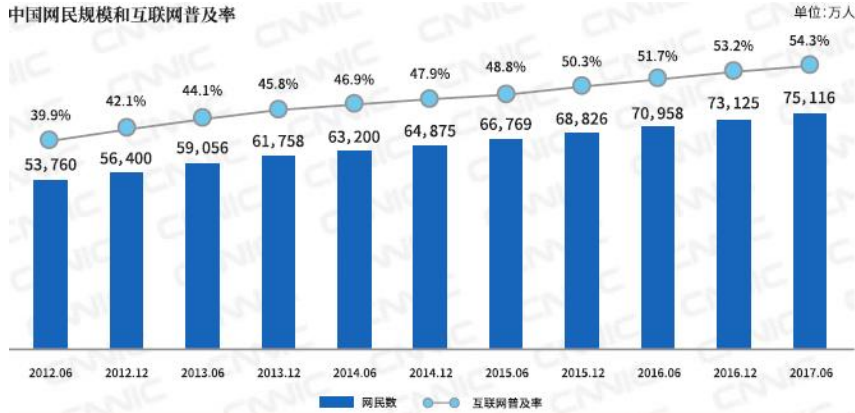
IPAS allocation

2017 IP Alliance Conference

RPKI in CNNIC



中国网民规模和互联网普及率

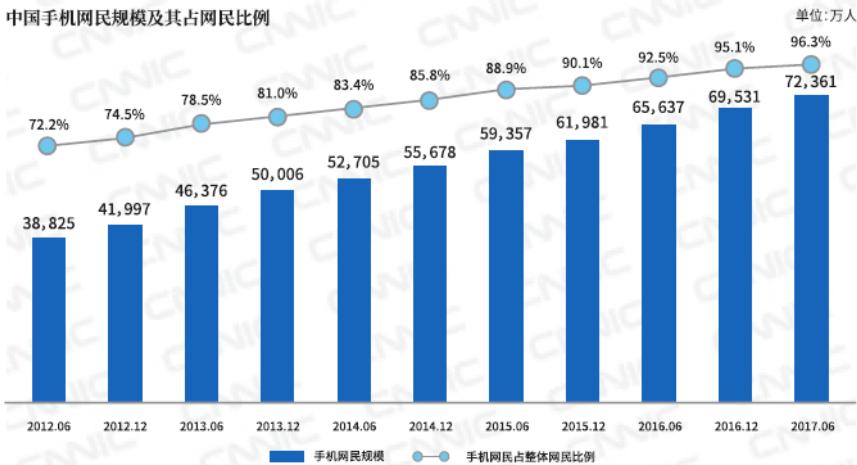


来源: CNNIC 中国互联网络发展状况统计调查

2017.06

■ Internet users 751 million, Internet penetration rate 54.3%,

中国手机网民规模及其占网民比例



来源: CNNIC 中国互联网络发展状况统计调查

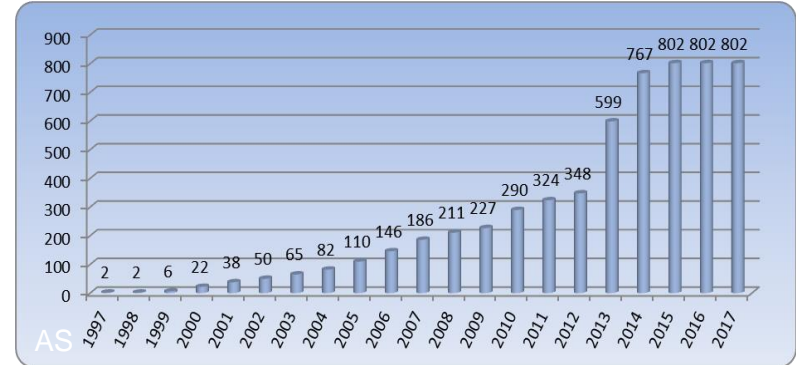
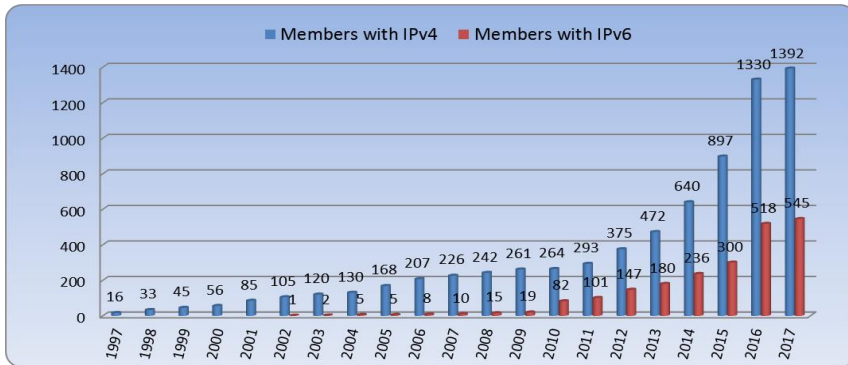
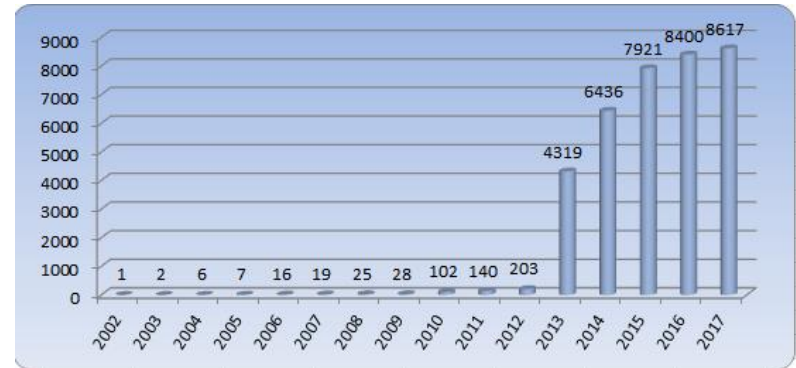
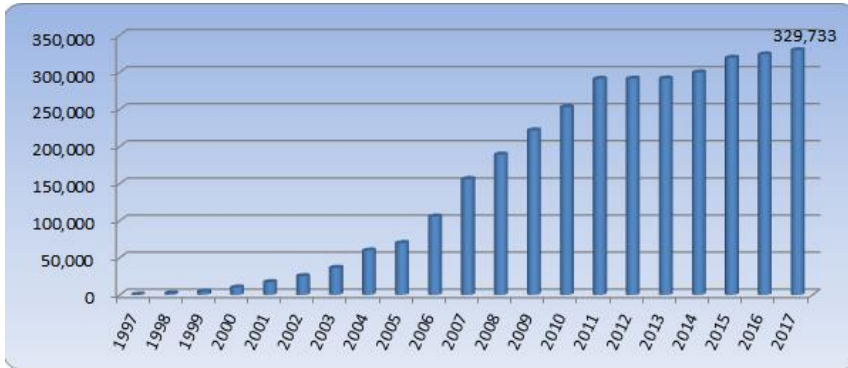
2017.06

■ Mobile Internet users 724 million, 96.3% of the total Internet users

■ 1,392 CNNIC IP members, by the end of August 2017



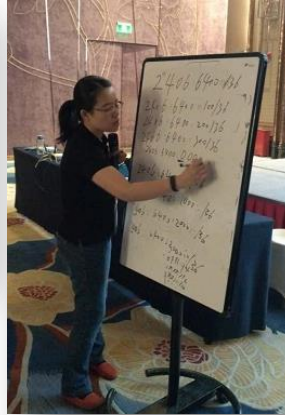
- CNNIC has allocated 329,733 /24s IPv4 addresses, 8,617 /32 IPv6 blocks and 802 AS numbers



## ■ 2017 IP Alliance Conference on 13<sup>th</sup> June in Kunming



## ■ IPv6 Workshop in Kunming



## Service

- In the IP Alliance Meeting 2017, we released the CNNIC- RPKI service.
- Currently, it works well but has no active child user yet:

**会员资源管理系统**  
中国互联网络信息中心  
China Internet Network Information Center

退出系统

会员主页 | Whois注册信息维护 | 反向域名解析 | **RPKI服务** | 系统工具 | 证书查看/下载

**ROA配置**

路由IP地址, 如: 207.6.8. | IP地址前缀, 如: 24 | AS号, 如: 1023 | 最大宣告长度, 如: 3

签发 清空

IP地址段	AS号	最大宣告长度	操作
提交			

已签发IPv4-ROA

每页 10 条记录 搜索: \_\_\_\_\_

IP地址段	AS号	最大宣告长度	签发时间	操作
没有找到记录				

无记录 第一页 上一页 下一页 最后一页

已签发IPv6-ROA

每页 10 条记录 搜索: \_\_\_\_\_

IP地址段	AS号	最大宣告长度	签发时间	操作
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**CA授权证书**

Validity: 2018-07-11T07:41:20.000Z-2017-08-17T02:44:52.000Z  
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## Service...

*Special thanks to:*

*Randy Bush*

*George Michaelson*

*Taiji Kimura*

*Rob Austein*

*Tom Harrison*

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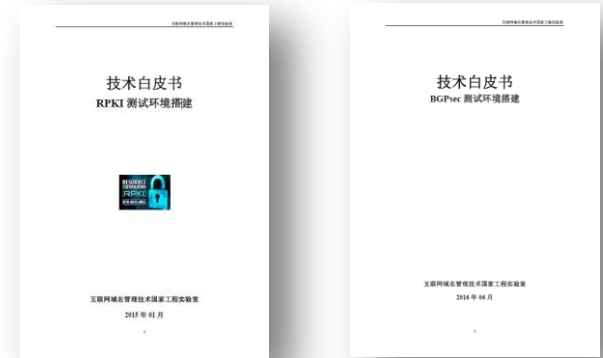
- Compatibility between Up/Down CA systems.
- Enhance training and outreach.

## Localization

■ ~2015, we started to introduce the basic RPKI RFCs to China community.

- RPKI Architecture
- Repository Structure
- to BGP Router protocol
- X.509-Resource certificate
- Guestbusters records

- Provisioning protocol
- Trust anchor locator
- Manifests
- BGPsec
- .....



## Research

■ Z. W. Yan, Y. Fu, et.al., Problem Statement and Considerations for ROAs issued with Multiple Prefixes, draft-yan-sidrops-roa-considerations-00, August 2017.

The total number of ROAs	The number of ROAs with a single prefix	The number of ROAs with multiple prefixes	The number of prefixes	The number of ROAs	The average number of prefixes in each ROA
7166	3307	3859	37367	3859	9.68

ROA types	ROA with 2-10 prefixes	ROA with 11-50 prefixes	ROA with 51-100 prefixes	ROA with >100 prefixes	Total
The number of ROAs	3263	496	60	40	3859
The ratio of ROAs	84.56%	12.85%	1.55%	1.04%	100.00%
The number of prefixes	12442	10365	4125	10435	37367
The ratio of prefixes	33.30%	27.74%	11.04%	27.93%	100.00%

*\*Date: July 4, 2017*

**Safeguard of RPKI:**  
**Avoiding potential risks brought by this security solution.**

# THANKS!

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