# Services Area Report

## Sanjaya
## Services Area Director

# Key Deliverables

- Delivering Value
  - Resource delegation
  - Resource Quality Assurance
  - Member services
- Supporting Internet Development
  - DNSSEC
  - Root Server deployment

# Delivering Value

# IPv4 Exhaustion

- Now in Stage 3 as of 15 April 2011
- APNIC's last /8 block is 103.0.0.0/8
- Each account holder may receive a maximum of a /22 from APNIC's last /8 space
- From 15 April to 27 August 2011, made 583 delegations to 30 different economies

# IPv4 Exhaustion

- Returned IPv4 addresses will be redistributed under the last /8 policy

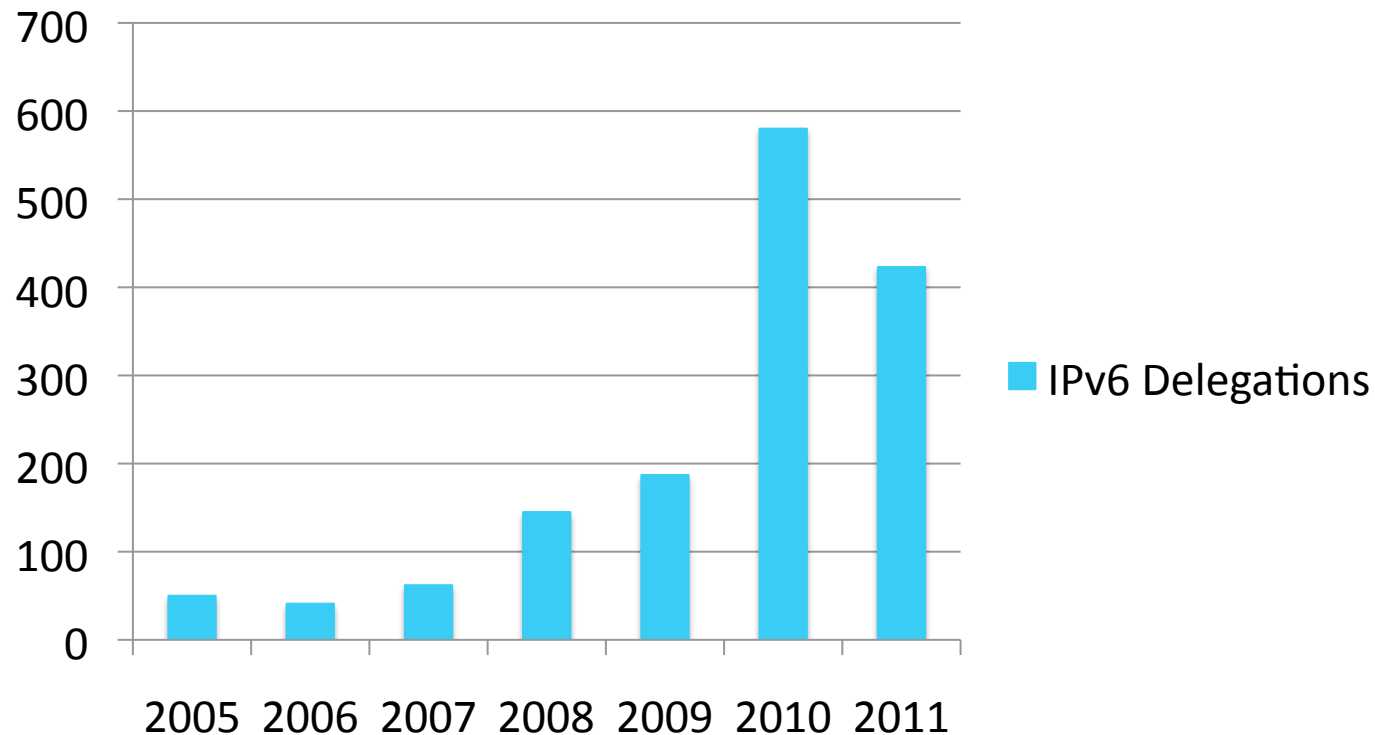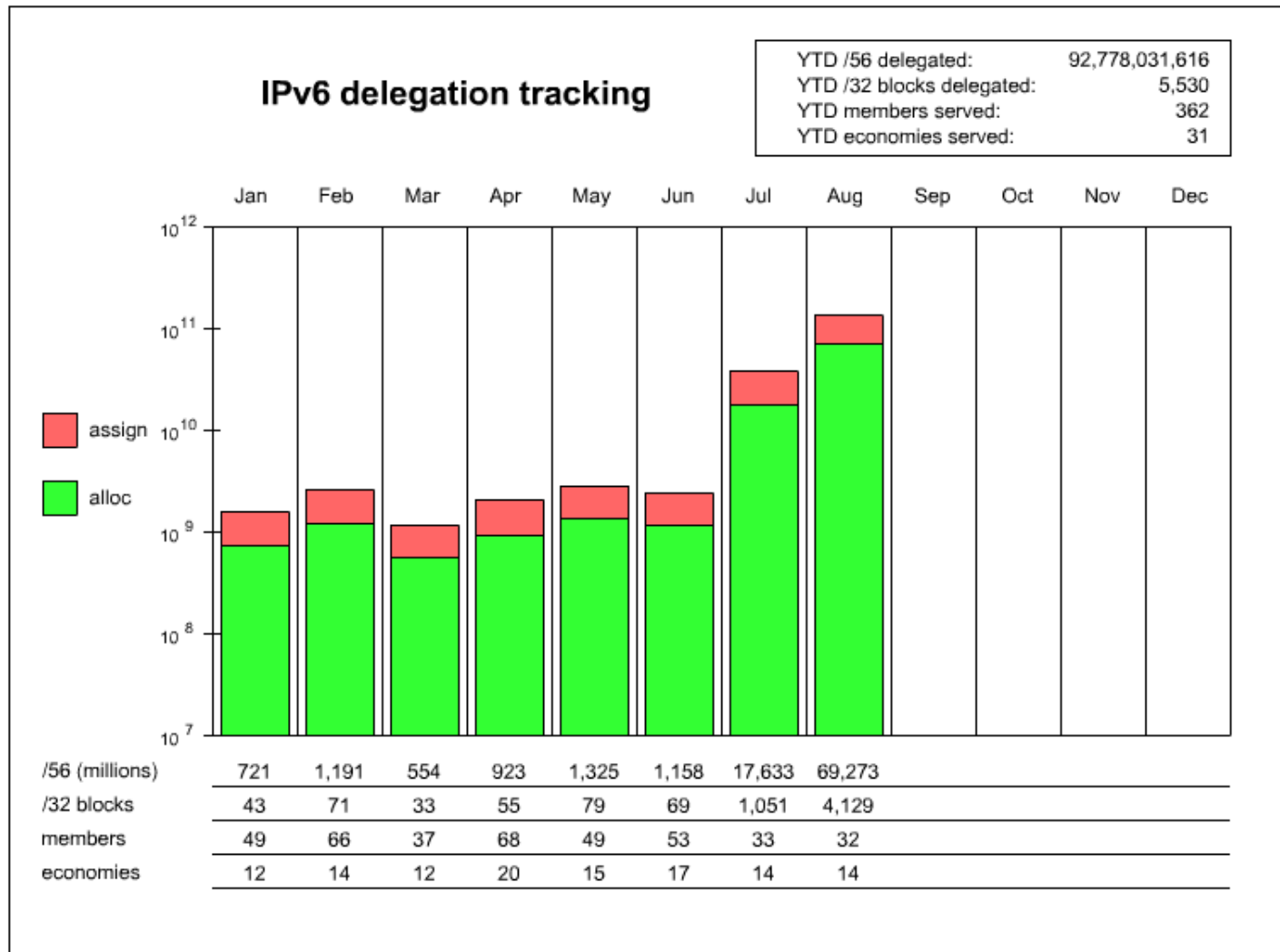- IPv4 addresses will be available in limited quantities for a long time

- http://www.apnic.net/ipv4-stage3-faq

# IPv4 Delegations 2011
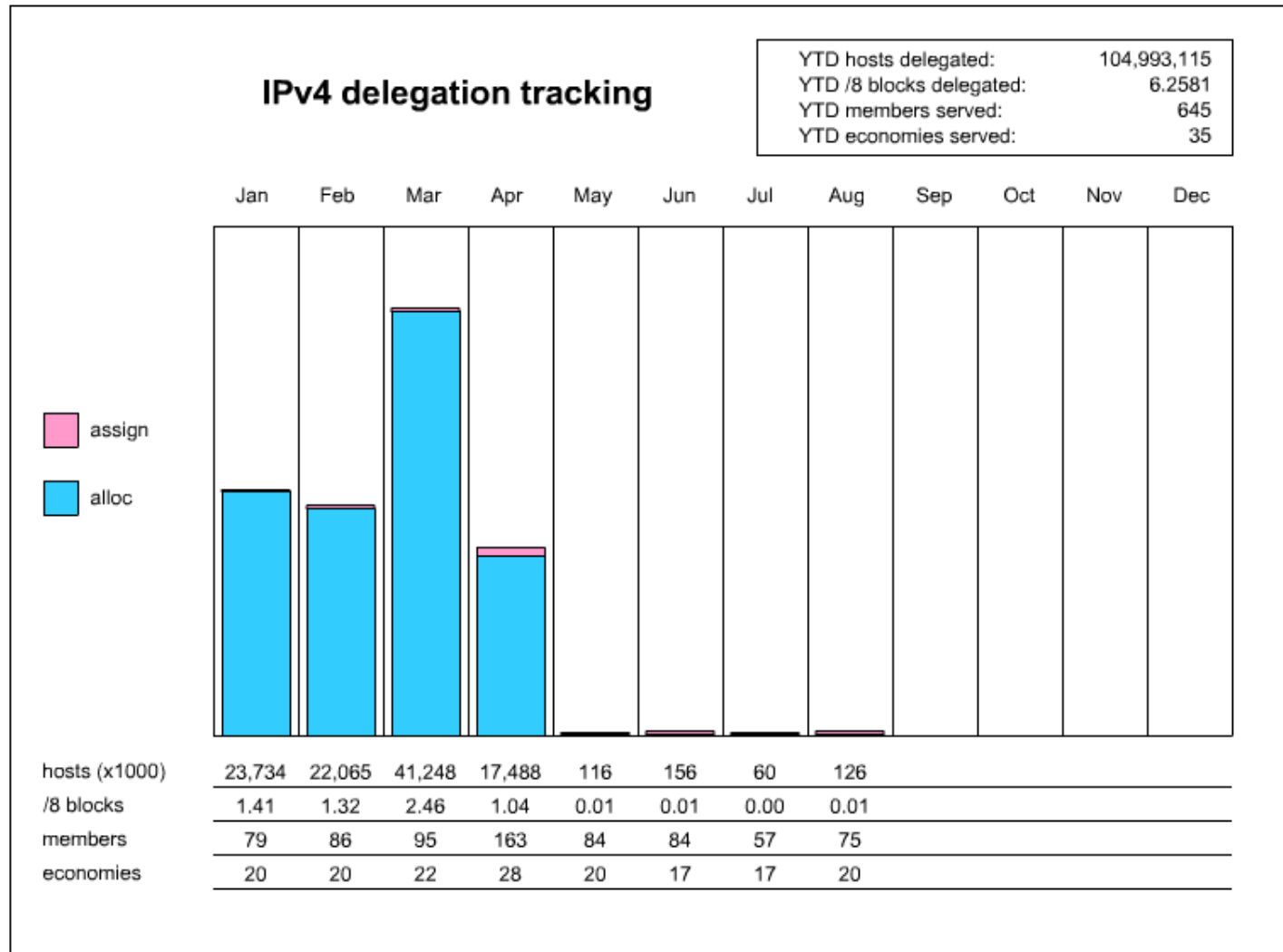


As of 26 August 2011

# IPv6 Delegations
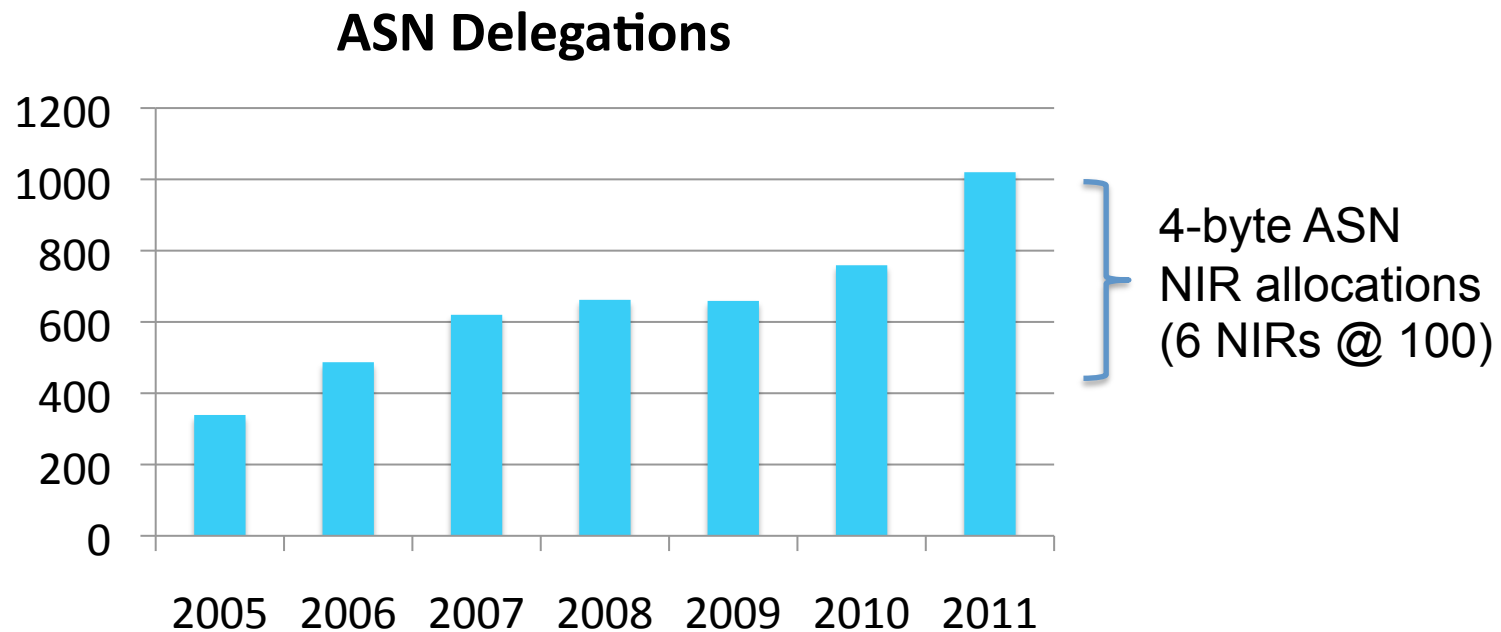
- Continued strong growth in IPv6

# IPv6 Delegations 2011

**IPv6 delegation tracking**

| | |
|---|---|
| YTD /56 delegated: | 92,778,031,616 |
| YTD /32 blocks delegated: | 5,530 |
| YTD members served: | 362 |
| YTD economies served: | 31 |

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

$10^{12}$

$10^{11}$

assign $10^{10}$

alloc

$10^9$

$10^8$

$10^7$

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
|---|---|---|---|---|---|---|---|---|
| /56 (millions) | 721 | 1,191 | 554 | 923 | 1,325 | 1,158 | 17,633 | 69,273 |
| /32 blocks | 43 | 71 | 33 | 55 | 79 | 69 | 1,051 | 4,129 |
| members | 49 | 66 | 37 | 68 | 49 | 53 | 33 | 32 |
| economies | 12 | 14 | 12 | 20 | 15 | 17 | 14 | 14 |

As of 26 August 2011

# AS Number Delegations

- Steady growth of AS delegations

**ASN Delegations**



4-byte ASN
NIR allocations
(6 NIRs @ 100)

# Resource Quality Assurance



- Minimizing routability problems

- Reachability testing designed by R&D to identify problems with blocks

  - Quarantined blocks retested every three months

- Responsibly filtering – keeping ACLs and filters updated

# Network Abuse BoF

- Held on Monday, 29 August 18:00 – 19:30
- Topic: Sharing information on activities to address concerns about Internet Resource Management and Quality Assurance of IP addresses with an emphasis on Network Abuse
- Great turn out with 47 people attending
- Speakers in order of presentation:
    - Izumi Okutani, JPNIC
    - Elise Gerich, IANA
    - Sofia Silva, LACNIC
    - Frank Salanitri, APNIC
    - Sanjaya, APNIC, on behalf of ID-CERT
    - Paul Vixie & Peter Losher, ISC

http://meetings.apnic.net/32/program/bof

# Member Services

**Membership Growth**
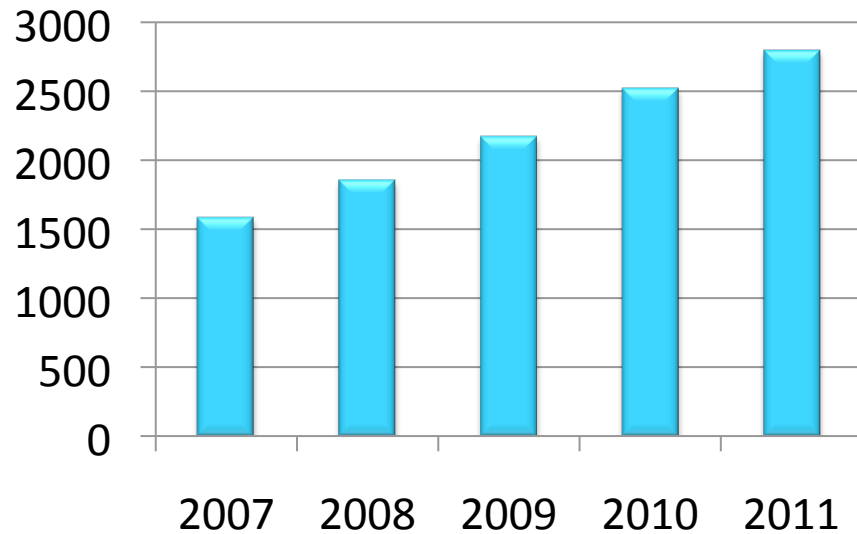


| SUPPORT | 2011 | |
| --- | --- | --- |
| | Q1 | Q2 |
| E-mail | 4,171 | 2,661 |
| Phone | 571 | 510 |
| Chat | 523 | 429 |
| New Members | 129 | 163 |
| Mergers & Trf. | 13 | 20 |

# DNSSEC

- Domain Name Security Extensions
  - 3 May 2011 DNSSEC Delegation Signer (DS) records submitted to IANA allowing DNSSEC validation to occur from root zones down to APNIC's reverse zones
  - Users can now update their reverse DNS DS record through MyAPNIC
    - Single zone updates via Whois domain objects
    - Multiple zones updates via zone file upload

# Root Server Deployment

- Bhutan
  - Operator: I-root
  - Local host: Bhutan Telecom
  - Location: Thimphu
  - Status: Inaugurated 14 April 2011

- Mongolia
  - Operator: F-root
  - Local host: ICTPA & Mobinet
  - Location: Ulaanbaatar
  - Status: Shipped, target operational August 2011

# Thank You