### **IPv6 Deployment in Asia Pacific**

**IGF** 14 September 2010



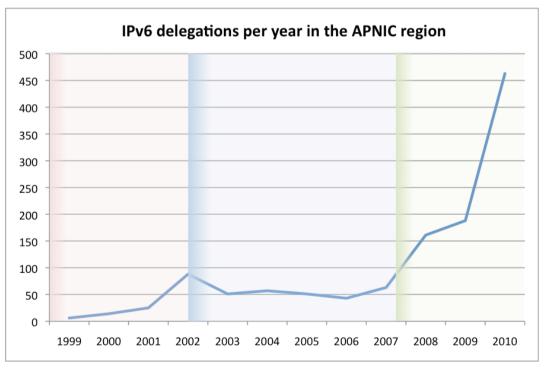
# What's driving IPv6 takeup in AP region?

- "One click" IPv6 kickstart policy
  - http://www.apnic.net/kickstartIPv6



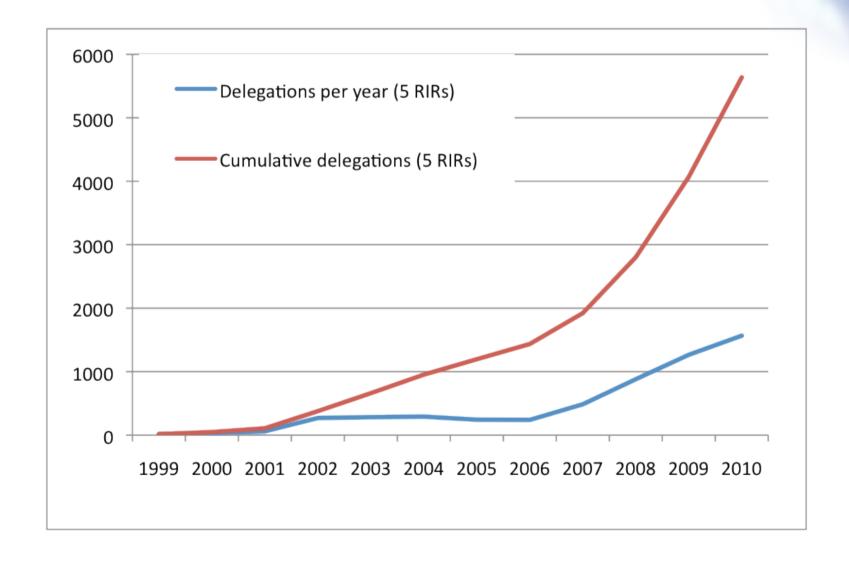
# What's driving IPv6 takeup in AP region?

- Almost a quarter of all APNIC account holders now have IPv6 addresses
  - An increase of over 150% in just over a year



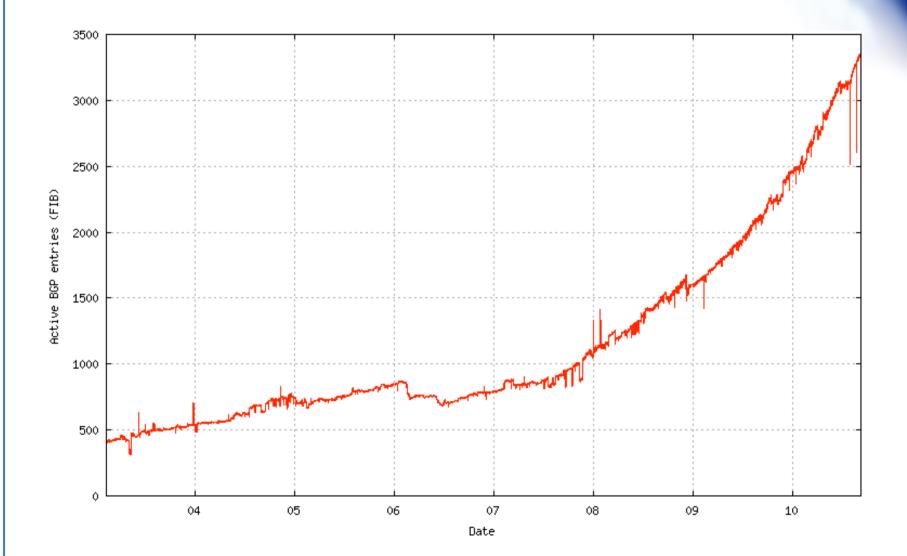
http://icons.apnic.net/display/IPv6/Three+phases+of+IPv6+allocations

## IPv6 delegations globally

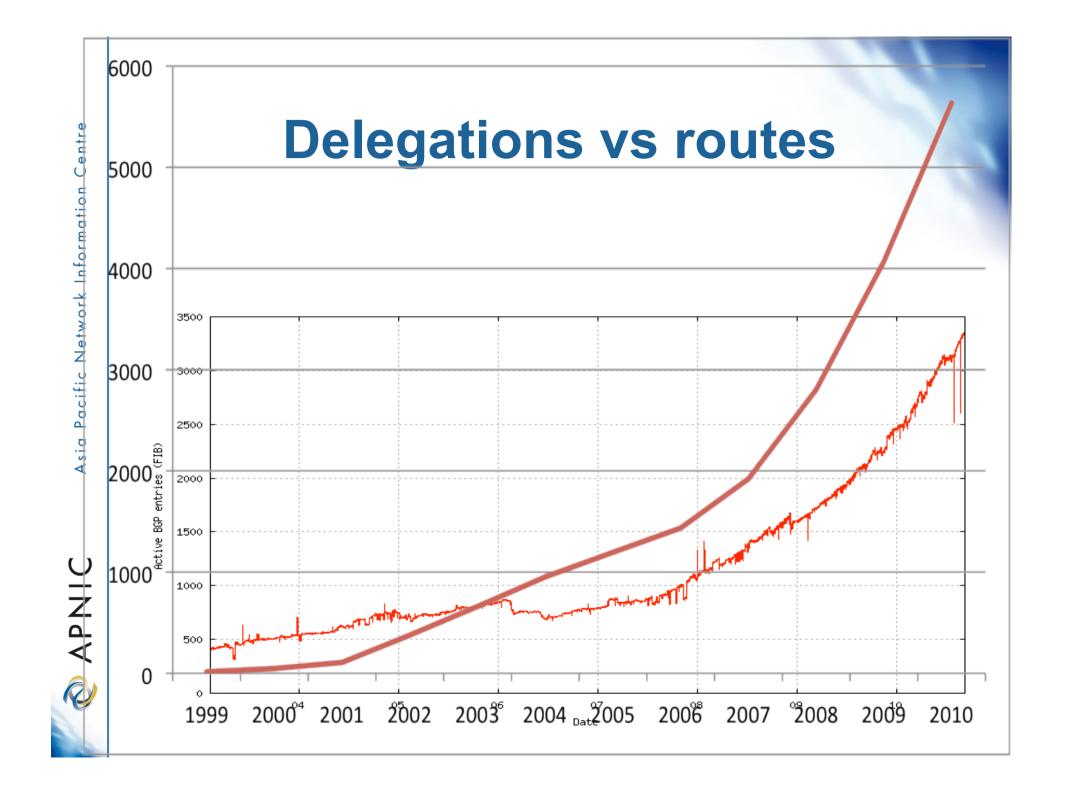




## **IPv6** routing table







#### **IPv6** in Bhutan

- 2010: Druknet (Bhutan Telecom) is using ISIF funding to deploy IPv6, first on its own infrastructure, then its customer networks, and finally assisting other ISPs
- Focus: web and mail servers

#### **IPv6** in the Pacific

- Most Pacific economies have sufficient IPv4 to last a while, but IPv6 preparations and deployment are underway
  - Avonsys, Fiji, has enabled IPv6 on mail server
  - Vodafone Fiji has purchased IPv6 equipment
  - Samoa preparing to deploy IPv6 (American Samoa already deployed)

## IPv6 plans

- Some government responses
  - Philippines and Australian targets to enable IPv6 on government networks by 2012
  - New Zealand hopes the government network's deployment of IPv6 will encourage private industry deployment
  - India targets IPv6 on all networks by 2012
  - Pakistan encouraging all networks to enable IPv6 before 2014

## **Awareness raising**

- APIPv6 Taskforce
  - To assist in IPv6 production-level deployment and promotion in economies in the Asia Pacific region
- APNIC has worked closely with APEC
  TEL WG to provide 3 IPv6 workshops
- APNIC IPv6 Program

## **IPv6 Deployment Monitoring** Survey

- 2010 first global survey
  - Previously in APNIC and RIPE NCC regions
- 1589 responses from 140 economies

• AfriNIC: 108

APNIC: 310

ARIN: 249

LACNIC: 138

• RIPE NCC: 766



## **IPv6 Deployment Monitoring** Survey

- 83.4% have/are considering requesting IPv6 addresses
- Reasons for having/considering IPv6
  - Want to be "ahead of the game"
  - Make sure IPv6 is supported in our products
  - IPv4 exhaustion
- Biggest hurdles deploying IPv6
  - Vendor support
  - Knowledgeable staff
  - Cost



# IPv6 Deployment Monitoring Survey

- IPv6 problems in production
  - Lack of user demand
  - No experience yet
  - Technical problems
- IPv6 setup: 87.1% dual stack