APNIC Update

AfriNIC 15, Cameroon
Louise Flynn, Marketing and PR
APNIC

Overview

- IPv4 Exhaustion

- Allocations Statistics

- Learning and Development

- Policy Development

- Community Relations

- Research and Development

- Technical Development

- Communications

Overview

- Resource Services Update

- Policy Updates

- Learning and Development

- IPv6 Program

- Technical Developments

- Research & Development

- Public Affairs

- Organizational Changes

- Business Management

- ISIF

- New Corporate Identity

- Upcoming Conferences

IPv4 Exhaustion

- In stage 3 of IPv4 address allocations, as 15 April 2011

  - www.apnic.net/ipv4-exhaustion

- APNIC final block: 103.0.0.0/8

  - Each account holder may receive a max. of /22

- From 15 April to 27 August 2011, made 583 delegations to 30 economies

Allocation Statistics

Resource Delegations

IPv4: Use of Last /8

Member Services

Learning and Development

Learning and Development

- Training Lab infrastructure upgraded
  - Conducting advanced technical workshops focusing on IPv6, four-byte ASNs, and two parallel workshops (IXP, ISP)
  - More hands-on sessions for participants
- Collaborations
  - 6Deploy, intERlab, NIRs (APJII, TWNIC, and CNNIC)
- APNIC Conference Hubs
 - Jakarta and Port Moresby (Feb 2011); Phnom Penh (Aug 2011)

Training

- Philip Smith Ph.D. now Learning and Development Director

- As of September 2011, averaging 5 face-to-face training courses a month

  - 20 economies

  - More training courses (50% of total) offered with regional events, for example, NOGS, PITA, APRICOT, APNIC

- Sponsors

  - Around 45% training courses supported by Sponsors

eLearning

- Use of WebEX since January 2011

- Three one-hour sessions fortnightly

  - Focusing on three sub-regions (Oceania/Pacific, South East Asia, South Asia)

- Dedicated media room
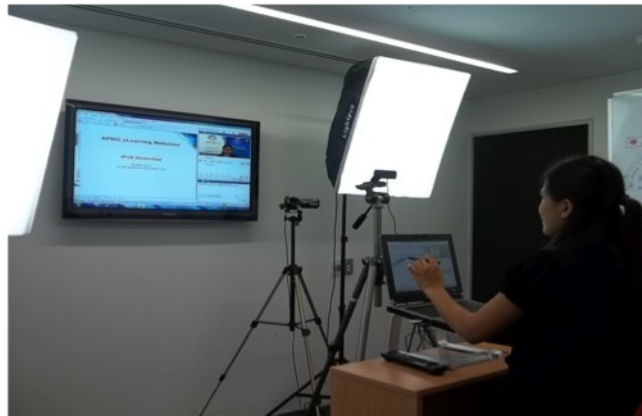
Other Training Activities

- NIXI RIR Training

  - In-depth, three-week training for technical staff

    - Comprehensive introduction to how a RIR operates and how an NIR interoperates with a RIR

  - High-level visit to Brisbane

    - Two-day visit from NIXI Board Members and government officials

Policy Development

Implemented Policies During 2011

- Implemented in May 2011

  - prop-088: Distribution of IPv4 addresses once the Final /8 period starts

  - prop-093: Reducing the minimum delegation size for the Final /8 policy

  - prop-094: Removing renumbering requirement from Final /8 policy

- Implemented in August 2011

  - prop-083: Alternative criteria for subsequent IPv6 allocations

  - prop-095: Inter-RIR IPv4 address transfer proposal

Policies at APNIC 32

- Reached consensus at APNIC 32:

  - prop-096: Maintaining Demonstrated Needs Requirement in Transfer Policy after the Final /8 Phase

- Did not reach consensus at APNIC 32 - returned to mailing list for further discussion:

  - prop-100: National IP Address Plan – Allocation of Country-wide IP Address Blocks

  - prop-099: IPv6 Reservation for Large Networks

  - prop-098: Optimizing IPv6 Allocation Strategies (simplified)

Community Relations

IPv6 Program

- Supporting IPv6 deployment strongly with a multi-stakeholder approach:
  - Organizing major IPv6 conferences in the region
    - IPv6 Transition Day at APRICOT 2011 and APNIC 32
    - IPv6 Deployment workshop at ICANN 41
  - Supporting regional IPv6 activities
    - Singapore NOG – inaugural session
    - China Global IPv6 Summit 2011
    - Pacific IGF (New Caledonia)
    - Asia Pacific IGF (Singapore)
    - Secretariat for APIPv6TF

IPv6 Program

- Activities with inter-governmental organizations
  - Asia Pacific Economic Cooperation (APEC TEL)
    - Continuous engagement with IPv6 information
  - Asia Pacific Telecommunity (APT)
    - APT Policy and Regulatory Forum (PRF) and Pacific PRF
  - Secretariat of Pacific Community (SPC)
    - MoU on IPv6 deployment in the Pacific
  - Pacific ICT Ministers Meeting
    - APNIC's recommendations in the ministerial communiqué
  - ITU Asia Pacific collaboration
    - IPv6 capacity-building worksh

Public Affairs

- IGF related events
  - Second APrIGF in Singapore
  - First PacIGF in New Caledonia
  - APIL in China
- NRO
  - Public affairs coordination
  - Renewal of IANA contract (comments FNOI)
- OECD
  - High-level meeting on Internet Economy

Root Server Deployment

- Bhutan
    - Operator: I-root
    - Local host: Bhutan Telecom
    - Location: Thimphu

- Mongolia
    - Operator: F-root
    - Local host: ICTPA & Mobinet
    - Location: Ulaanbaatar

Root Server Map

Information Society Innovation Fund

- ISIF is a small grants and awards program aimed at stimulating creative solutions to ICT development needs in the Asia Pacific region

- 23 projects from 12 AP economies, showcasing innovation, cooperation, and technical knowledge. Reports available for download

- ISIF Award ceremony held at 2011 IGF in Nairobi on 28 September 2011

- APNIC, LACNIC, AfriNIC and IDRC to launch a global alliance to start early in 2012

Research and Development

APNIC Labs

- Supporting R&D with remote measurement techniques

  - Software expertise provided for client-side IPv6 capability measurements

- Google analytics measurements for IPv6 client capability targeted at website owners
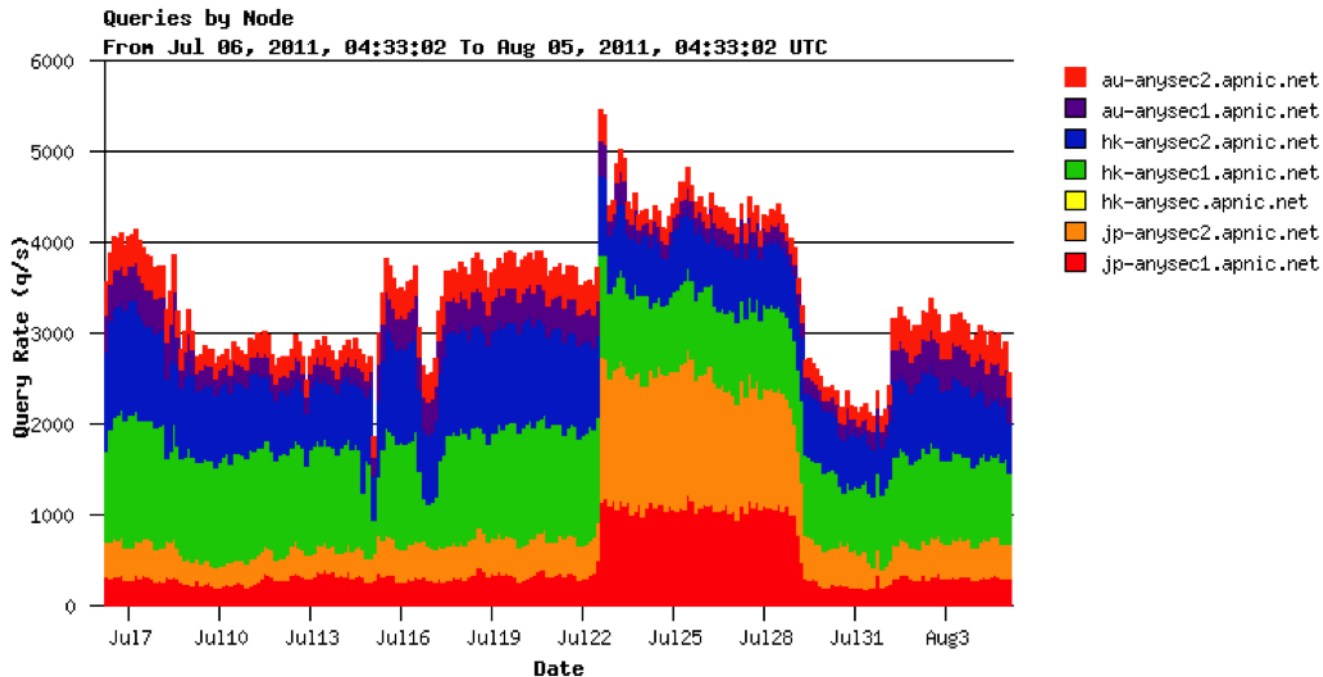
- http://labs.apnic.net

Technical Development

Technical Developments

- APNIC now serving e.in-addr-servers.arpa and e.ip6-servers.arpa. labels

Continuous Improvement

- Improved software testing practices

  - Automated unit testing and reporting improvements

- Improvements to change management practices

  - Following industry best practice

- Adoption of Agile software development methodologies

  - Guided by continuous integration principles

Agile Status Board

DNS Anycast Node

- Successfully built rapid deployment DNS anycast node in Australia
  - In response to Japan disaster
  - Completed in less than two weeks

Resource Quality Assurance

- Minimizing routability problems through communication, testing, and training

  - Network Abuse BoF held at APNIC 32

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

  - Quarantined blocks retested every three months

- Responsible filtering

  - Keeping ACLs and filters updated to stop any form of bogon filtering

DNSSEC

- Domain Name Security Extensions

  - 3 May 2011, DNSSEC Delegation Signer (DS) records submitted to IANA

    - Allows validation to occur from root down to APNIC's reverse zones

- Users can update reverse DNS DS record through MyAPNIC

  - Single zone via whois domain objects

  - Multiple zones via zone file upload

Operations

Organizational Changes

- New Directors:
    - Public Affairs – Pablo Hinojosa
    - Human Resources – Louise Tromp
- New appointments:
    - Learning and Development Director – Philip Smith
    - General Counsel – Craig Ng

Business Management

- Business Continuity Planning (BCP)
  - Ongoing and regular review and scenario testing
  - Audit plan to be completed in Q4
- Review of insurances
  - Ongoing risk management program
- Sourcing an Enterprise Resource Management (ERM) solution to align strategy, processes, people, technology, and knowledge
- Operational Plan Development
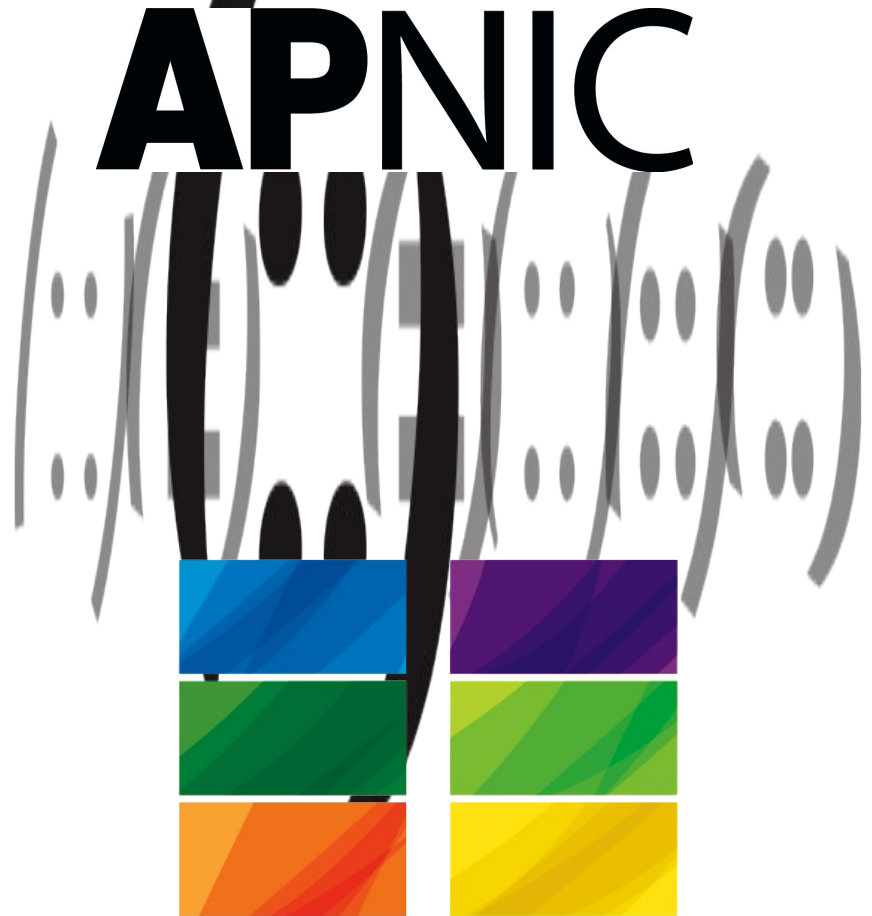 - Drilling down into individual performance targets

Communications

New Corporate Identity

- New image for a new era

- :: representing our new IPv6 world

- () representing our collaborative community

- Changing icon represents our dynamic and diverse community

Next Conference – APNIC 33

- Where: Delhi, India

- When: 27 February – 2 March 2012

Following Conferences

- APNIC 34:
  - Where: Phnom Penh, Cambodia
  - When: 27 – 31 August 2012
- APNIC 35:
  - Where: Singapore, Singapore
  - When: 20 February – 1 March 2013 (with APRICOT)

Questions?

lou@apnic.net