APNIC Update

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ARIN 37

Tuesday, 19 April, 2016

APNIC's Vision

A global, open, stable and secure Internet that serves the entire Asia Pacific community

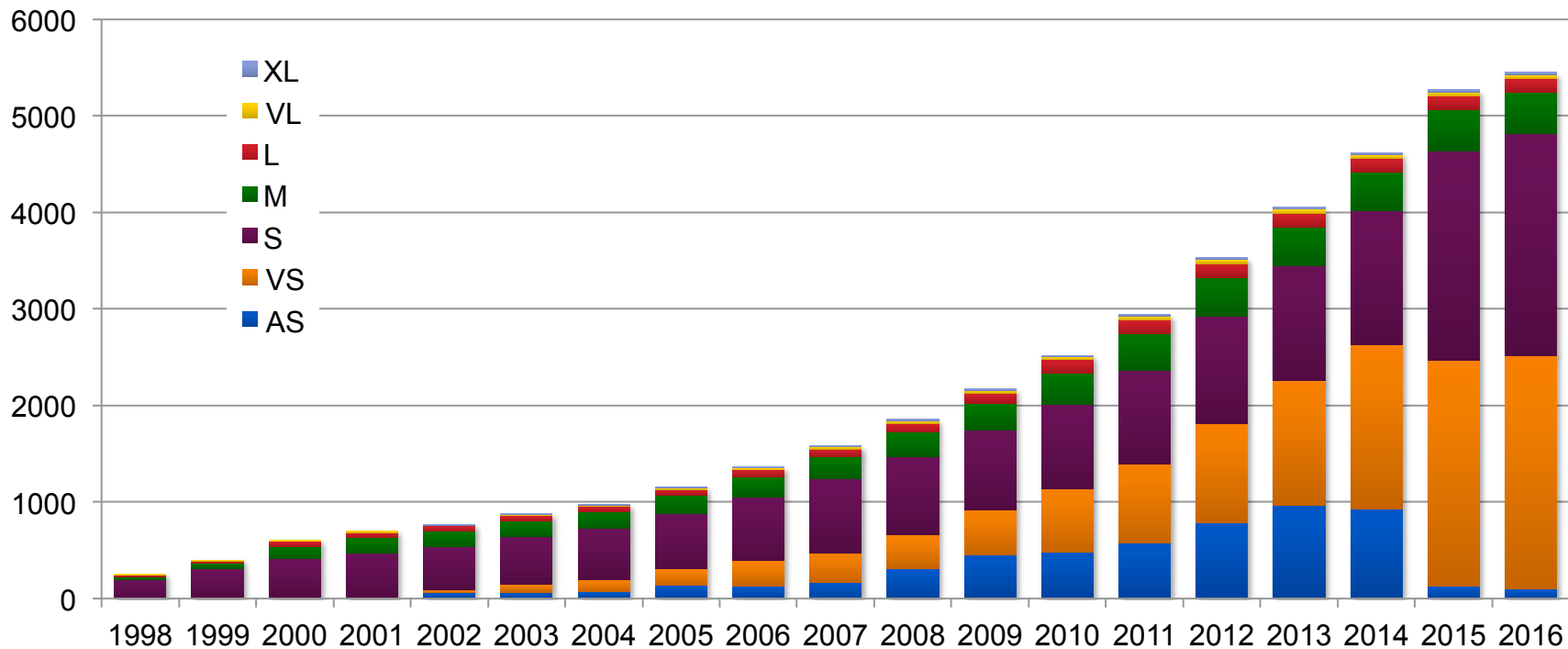# APNIC Activities

Serving

Supporting
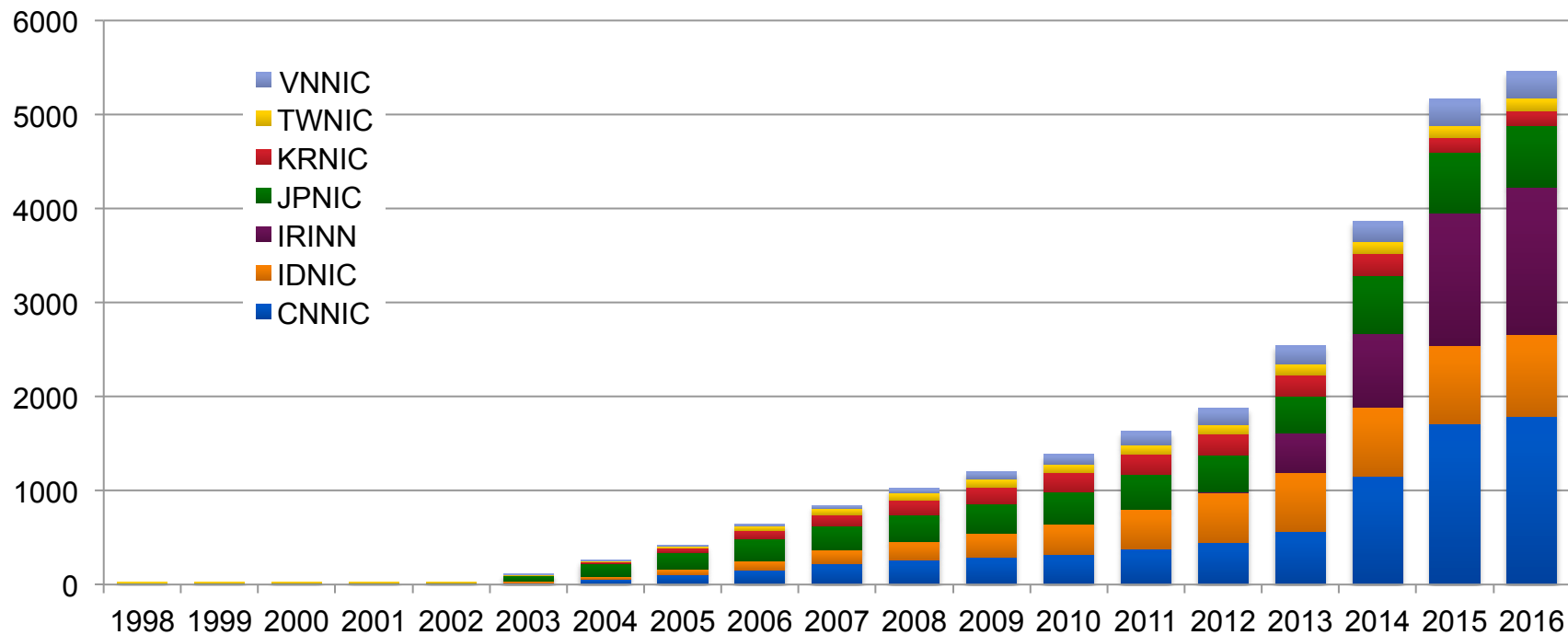
Cooperating

Serving the Region

Serving

Supporting

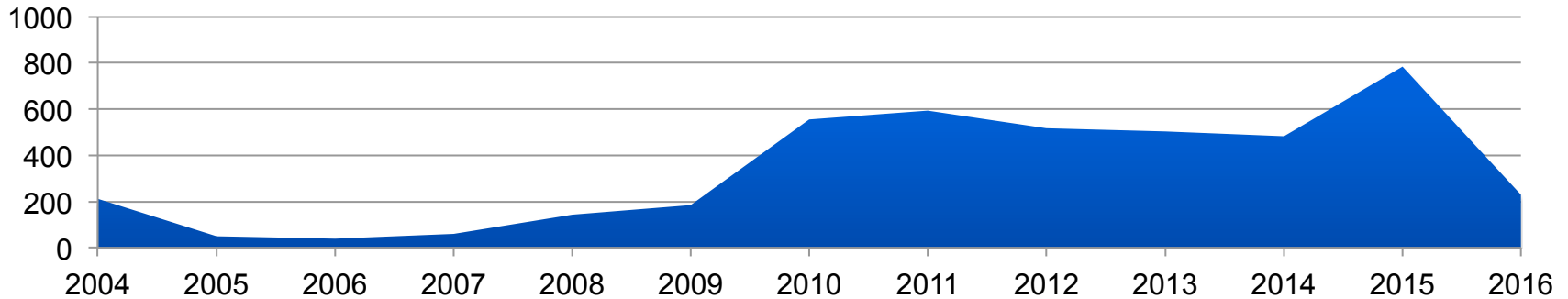Cooperating

APNIC Membership

As at 31 Mar

APNIC

5

Total NIR Sub-Accounts

As at 31 Mar

Annual IPv6 Delegations

By delegation type
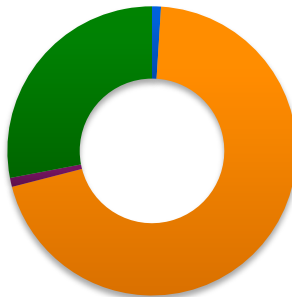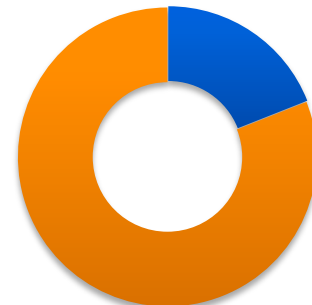
By size

By request type

As at 31 Mar

Annual IPv4 Delegations

By pool

By size

By Member

Annual IPv4 Transfers
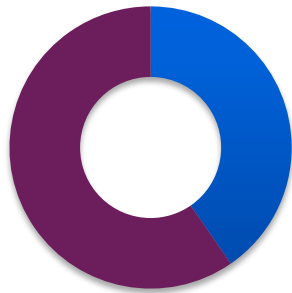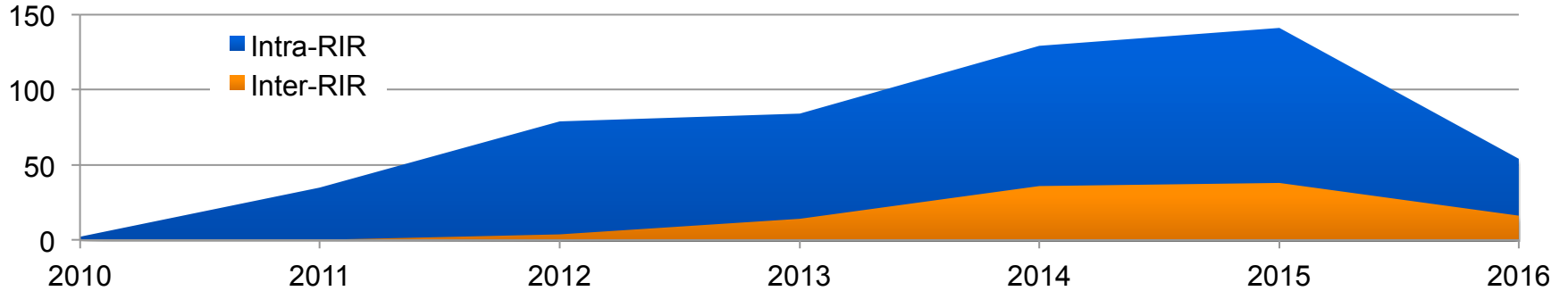
Using listing service
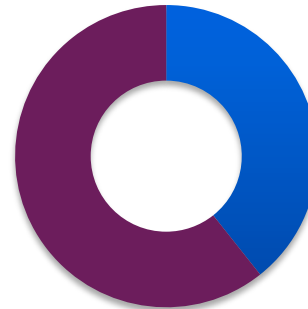
Pre-approval usage

As at 31 Mar

Annual ASN Assignments
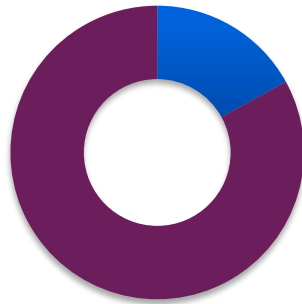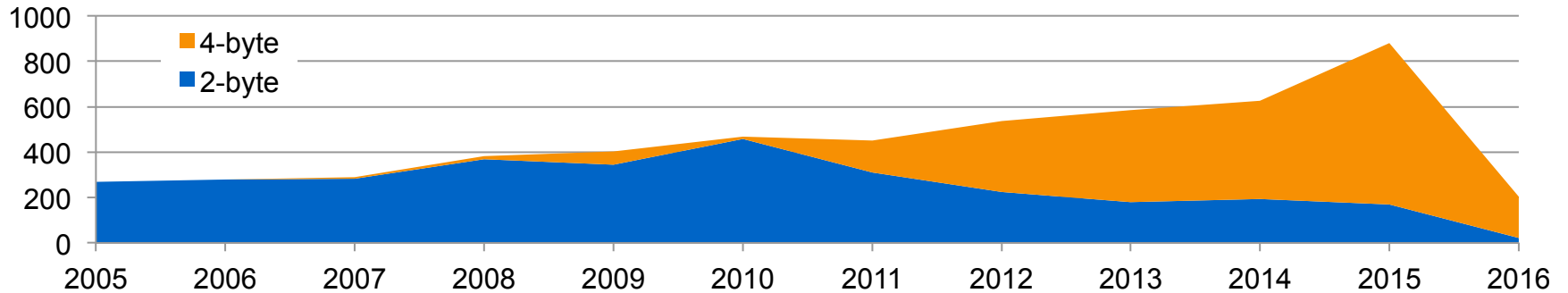
By type
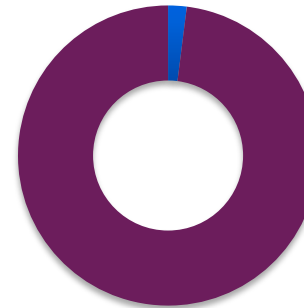
4-byte return rate

As at 31 Mar

Registration Data Access Protocol

RDAP Deployed in production 2015

Solves a number of limitations to WHOIS protocol

www.apnic.net/rdap

Standardized JSON query/response

RESTful web services over HTTP

Automatic inter-registry redirection

Authorization at attribute level

Internationalization using UTF-8

RPKI

READY TO ROA

- 10 face-to-face and eLearning RPKI training courses delivered in 2015
- Offline simulation of production system
- Create and revoke ROAs, observe changes to routing state in lab

RPKI presentations to NOGs and conferences

'Ready to ROA' Campaign – hands-on sessions to help Members create ROAs

Shirts, stickers, web content to promote campaign

Regional RPKI adoption grown rapidly in past 15 months – 0.8% to 3.24% and rising

www.apnic.net/roa

MyAPNIC Improvements

Improving major features of MyAPNIC

Authorized contact management

Route and ROA management

Whois records management

MyAPNIC speed improvement – 24% faster response time

Reverse DNS management

Simplified whois updates

Website Improvements

Navigation and usability improvements to home page and services pages

Training Needs Assessment

Topics	Key survey responses	APNIC actions
eLearning	Improve topics; alternative video hosting platform	• Reduced from 4 to 3 sessions • Changed time slots to 11:00; 13:00 and 15:00 – increased participation • Video-on-demand • Reviewing content
Self-paced learning	Support for online learning and certification	• Looking to partner with RIPE NCC on course development (Internet governance, whois)
Face-to-Face	Strong interests in advanced topics such as network security, IPv6, BGP, DNSSEC and SDN	• Reviewing and updating existing courses • Introduced Juniper-based materials and Juniper training lab
Capacity	Request for more and frequent training	• Third and fourth trainers started in October/ November 2015 to increase training capacity

APNIC Training

2015

- 77 F2F courses held in 20 locations

- 2,194 F2F trainees

- 726 trainees in 117 eLearning sessions

- Video archives: 80 videos; 138,319 views

2016

- 10 F2F courses held in 7 locations

- 291 F2F trainees

- 323 trainees in 39 eLearning sessions

- Video archives: 85 videos; 265,708 views

Technical Assistance

Support for scalable and resilient networks and best practices in network operations

www.apnic.net/tas

- Distribution and registration of resources
- Supporting reverse DNS delegation
- Managing whois and IRR
- Resource Certification
- IPv6 deployment
- Internet infrastructure security

TAS - Thailand

TAS - Bangladesh

2015 Outreach in Sri Lanka (8 Members), Bangladesh (13 Members), Thailand (10 Members)

Supporting the Region

Serving

Supporting

Cooperating

2015 Policy Implementations

Proposals approved at APNIC 40 Policy SIG

prop-113: Modification in the IPv4 eligibility criteria

prop-114: Modification in the ASN eligibility criteria

www.apnic.net/policy

NOG outreach
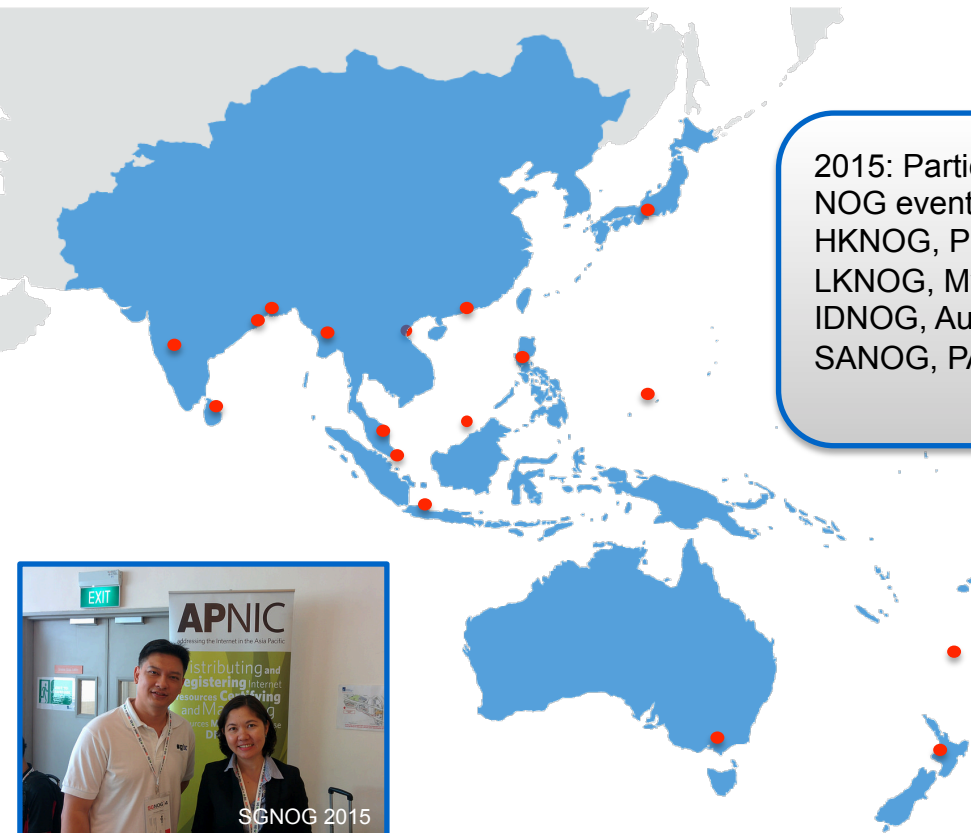
2016: JANOG (Jan), PHNOG (Jan), SANOG (Jan), bdNOG 5 (Apr), PACNOG (Jul), IDNOG (Jul), SANOG (Aug), AusNOG (Sep), HKNOG (Sep)

2015: Participated in 17 NOG events: JANOG, HKNOG, PHNOG, bdNOG, LKNOG, MyNOG, SGNOC, IDNOG, AusNOG, NZNOG, SANOG, PACNOG, MMNOG

- Technical and APNIC updates
- Hostmaster consultations
- Training sessions
- Sponsorship and logistical support

SGNOG 2015

MMNOG 2015

www.apnic.net/nog

Community Development

RIPE Atlas anchor deployment in Maldives – Dhiraagu staff

Probe hosts in the Philippines

PacNOG 18

MoU signing for L-root

Supported 5 RIPE Anchor deployments; distributed 120 RIPE Atlas probes

24 fellowships for APNIC 40 including 6 youth fellowships; 24 for APRICOT 2016

Supporting new L-root (ICANN) server instance in Apia, Samoa

Working with NSRC in New Caledonia and Samoa on IXP support

IPv6 Outreach

ITU/APNIC IPv6 workshop

ITU/APNIC IPv6 workshop

2015
- 539 trainees in 13 economies

- IPv6 presentations at 14 events

- IPv6 workshop with ITU in TH and TAS in MN

- Supporting APIPv6TF Secretariat

www.apnic.net/ipv6

Security Outreach

Adli Wahid

Craig Ng

NOGs, CSIRTS and LEA events
PK, CN, HK, KR, JP, PH, SG, MY, ID, AU, LK, MV, TW

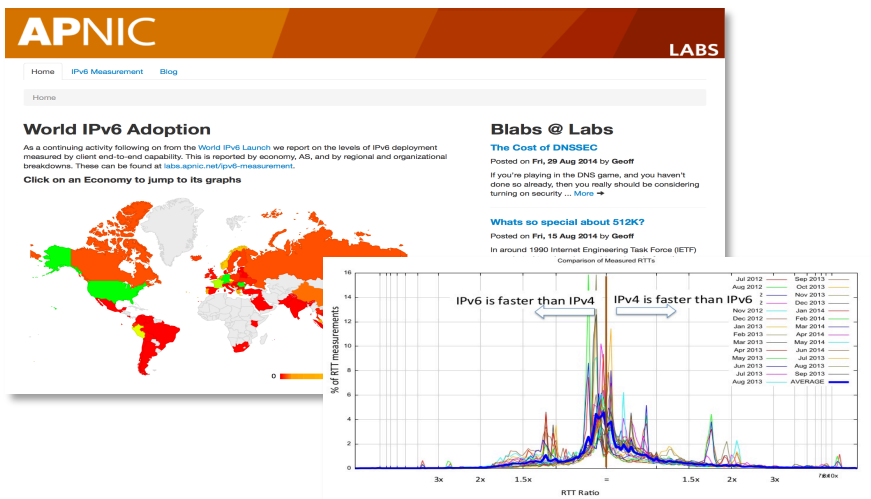Collaboration with JICA and KISA to deliver regional CERT training

Geoff Huston member of ICANN SSAC

Adli Wahid member of FIRST Board; invited to join INTERPOL Global Cybercrime Expert Group

www.apnic.net/security

APNIC Labs

Research statistics and evidence to help the APNIC community make informed technical decisions

Over 3 million measurements per day

Measuring IPv6, DNSSEC, DNS

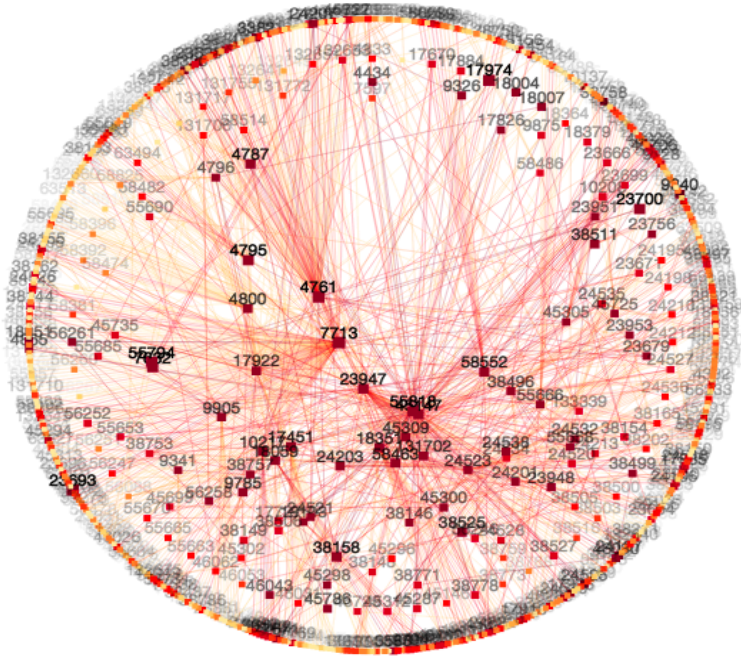HTML5 allows measurements on mobile devices (replacing Flash)

Critical data for DNS Root Zone key roll and ICANN's Universal Acceptance (IDN) program

Research presentations at 18 forums including IETF, RIRs, ICANN, DNS OARC, NOGs, OECD

labs.apnic.net
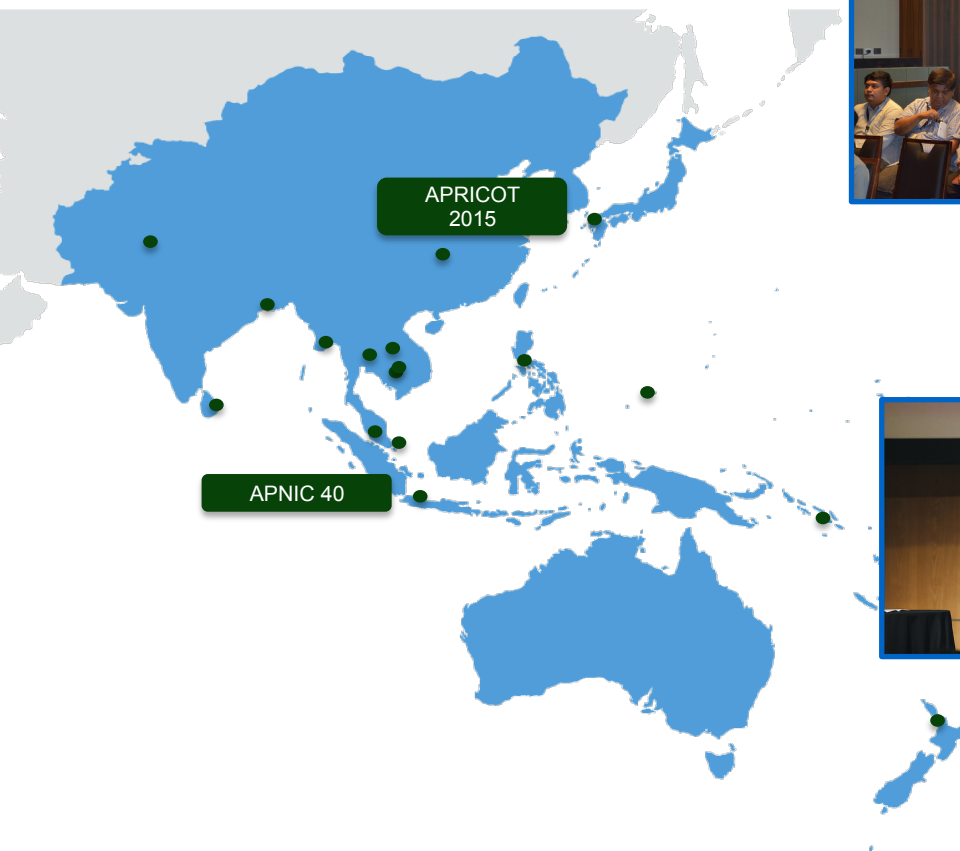
ASN Visual Exploration: vizAS

labs.apnic.net/vizas

Graphical display of BGP paths within a single economy

Relationships between service and transit ASNs identified

Public tool – Have a go!

APNIC Events

ARM, Philippines

APRICOT 2015

APNIC 40

APRICOT 2016

2015
16 economies: PK, BD, LK, MM, KH, TH, MY, SG, PH, ID, SB, JP, MN, GU, LA, MG

Attendance
- Conferences: 1,364
- Member outreach events: 614

2016 so far
- Conference: 531 (NZ)
- Member outreach events: 186 (NP)

Improving Communication

blog.apnic.net

Blog and social media provide day-to-day insight into APNIC and community

Great community content – 60 Guest Posts – thank you

629 blog posts
125 event wrap reports
175,489 views

Award winning!

Internet Operational Research Grants

New fund supporting the Internet research community in the Asia Pacific

Research to improve availability, reliability, and security of the Internet in the Asia Pacific

Network measurement and analysis

IPv6 deployment

BGP Routing

Network Security

isif asia

Awards 2015	78 nominees from 12 AP economies; 5 awarded	India: I Change My City, www.ichangemycity.com Indonesia: Batik Fractal, www.batikfractal.com Pakistan: doctHERs, www.docthers.com Pakistan: Jaroka Tele-Healthcare, www.umtrust.org
Grants 2015	4 projects in progress	Pacific Islands: Peer strategy, NSRC/Telco2 Nepal: TV White spaces deployment, NepalWireless Bangladesh: Mobile and diagnostic devices, UniDhaka India: Carrier access in rural emergencies, InnovadorsLab
Grants 2016 launched until 31 May 2016	Largest pool ever of AUD 386,000 available	Opportunity to secure seed or supporting funds for those addressing local and regional issues using Internet technologies innovatively: • APNIC Internet Operations Research Grants • Internet Society Cybersecurity Grant • Community Impact Grants • Technical Innovation Grants

Collaborating Globally

Serving

Supporting

Cooperating

Global Cooperation

IPv6 advocacy

Coordination with RIRs and Internet organizations

Engaging with government agencies in training and skills development

Supporting IANA Transition

Promoting the RIR model

IANA Stewardship Transition

IANA Stewardship Transition Coordination Group (ICG)

IANA Stewardship Transition Proposal and Enhancing ICANN Accountability Recommendations transmitted to NTIA by ICANN Board at ICANN 55 in Marrakech, 10 Mar 2016

Service Level Agreement (SLA)

Fifth draft SLA open for public comments until 15 April Review Committee: 3 members from each region (APNIC appointments confirmed)

Intellectual Property Rights (IPRs)

IANA IPRs - transfer to IETF Trust, terms under development

RIR Collaboration

RSM meeting, ARIN 35

AFRINIC 23

George Michaelson

RIR Stability Fund established

RIR Transparency matrix available on NRO website

APNIC Labs research collaboration with RIPE NCC and LACNIC

Event support for AFRINIC 23

Active NRO Coordination Group participation – engineering, registry, communications, finance, HR

RIR staff visits to APNIC – LACNIC, AFRINIC, RIPE NCC

Coming next

APNIC 42 (with bdNOG 6),
Dhaka, Bangladesh
29 Sep - 6 Oct 2016

conference.apnic.net/42

Coming later

- APRICOT 2017, Ho Chi Minh City, Vietnam
  - 20 February to 3 March 2017

- APNIC 44, Taichung, Taiwan
  - 7 to 14 September 2017

Coming soon: APNIC Survey 2016

We want your views on APNIC!

Survey open July – more details soon

Stay in touch!

blog.apnic.net

apnic.net/social

THANK YOU