

# APNIC Update

Vivek Nigam

SANOG 28

02 August 2016

# APNIC's Vision

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

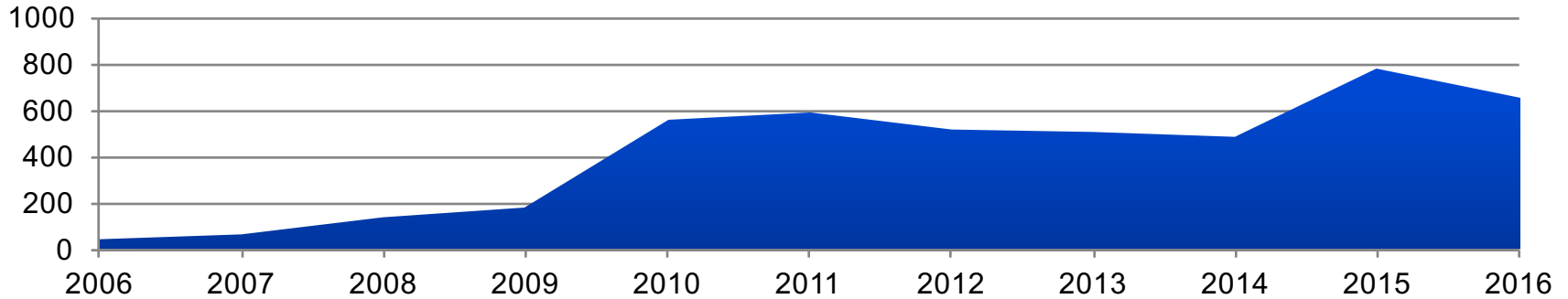
# APNIC Activities

Serving

Supporting

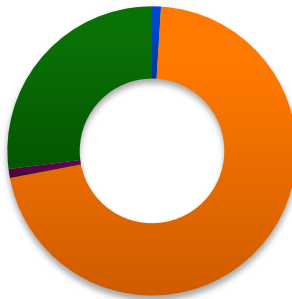
Cooperating

# Annual IPv6 Delegations



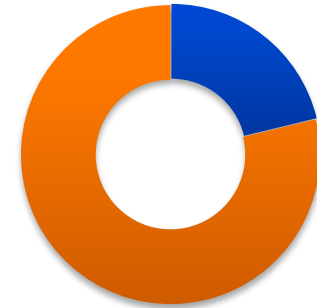
By delegation type

■ Allocation  
■ Assignment



By size

■  $\geq /31$   
■ /32  
■ /43-/47  
■ /48



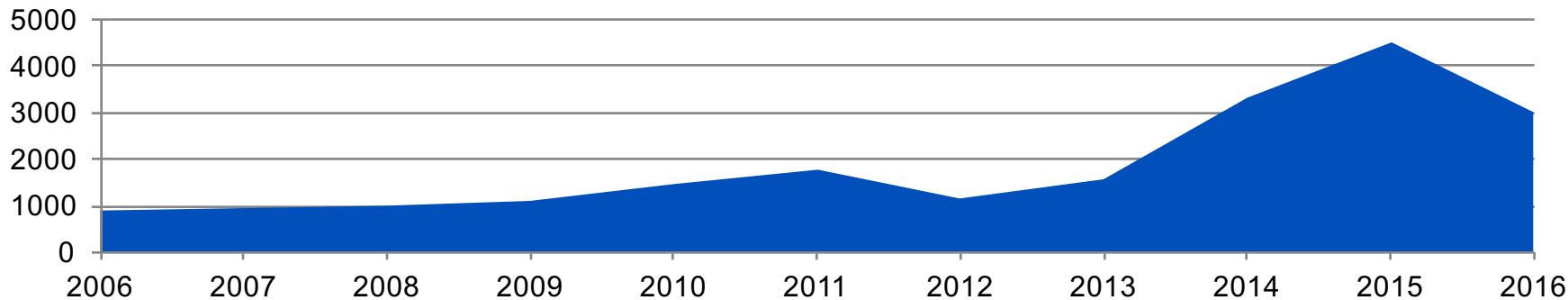
By request type

■ One-click  
■ Normal

As at 30 June

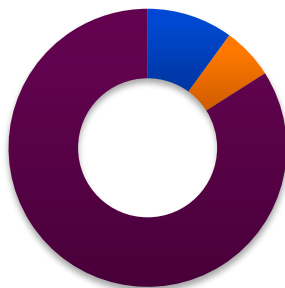


# Annual IPv4 Delegations



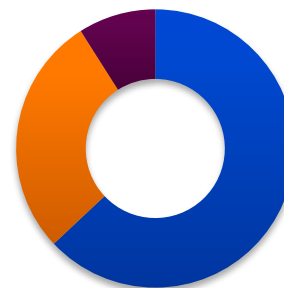
- From 103 pool
- From recovered pool

By pool



- /24
- /23
- /22

By size

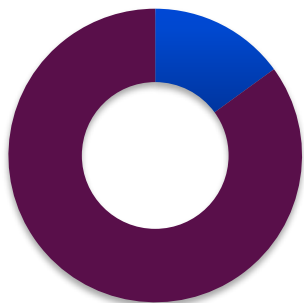
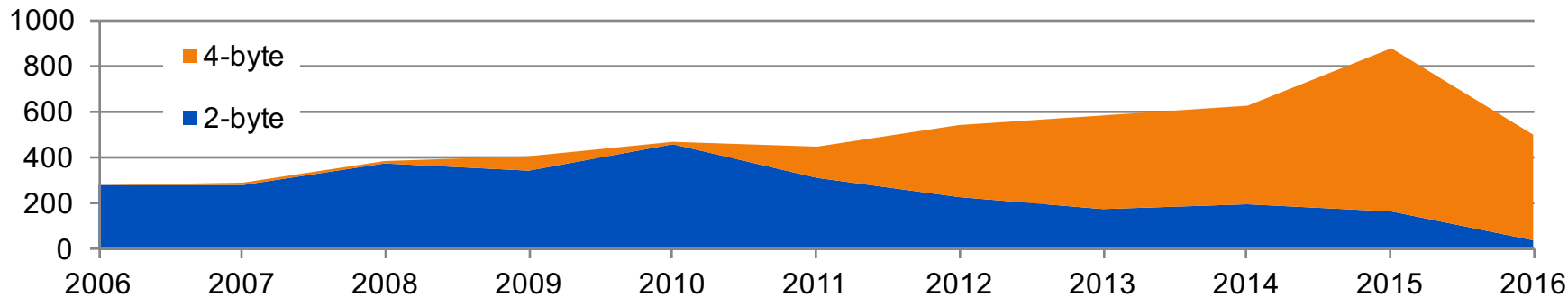


- NIR
- New
- Existing

By Member

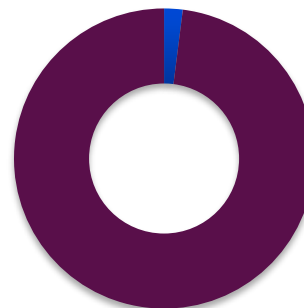
As at 30 June

# Annual ASN Assignments



By type

■ 2-byte  
■ 4-byte

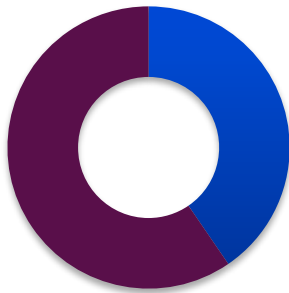
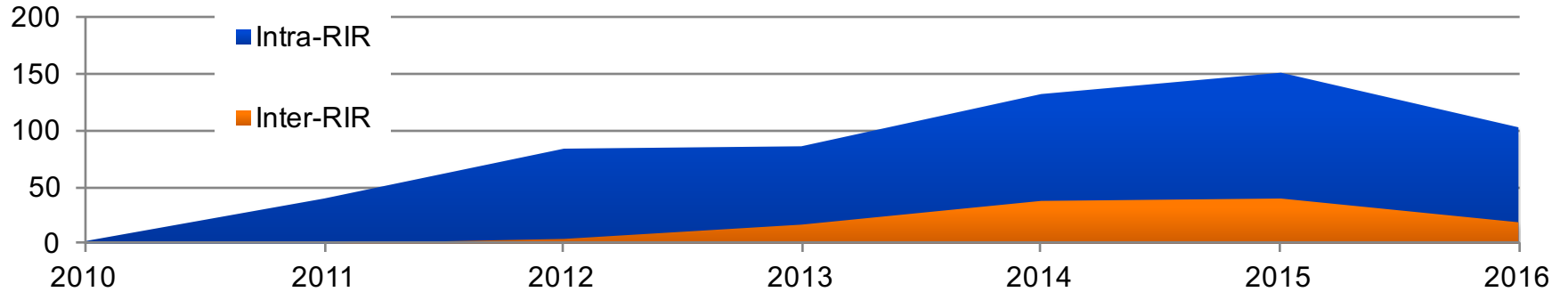


4-byte return rate

■ Rejected  
■ Accepted

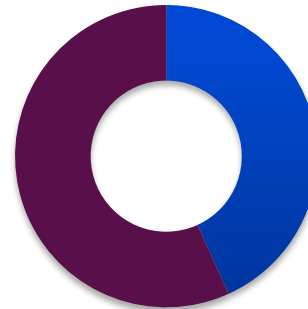
As at 30 June

# Annual IPv4 Transfers



Using listing service

■ Used  
■ Did not use

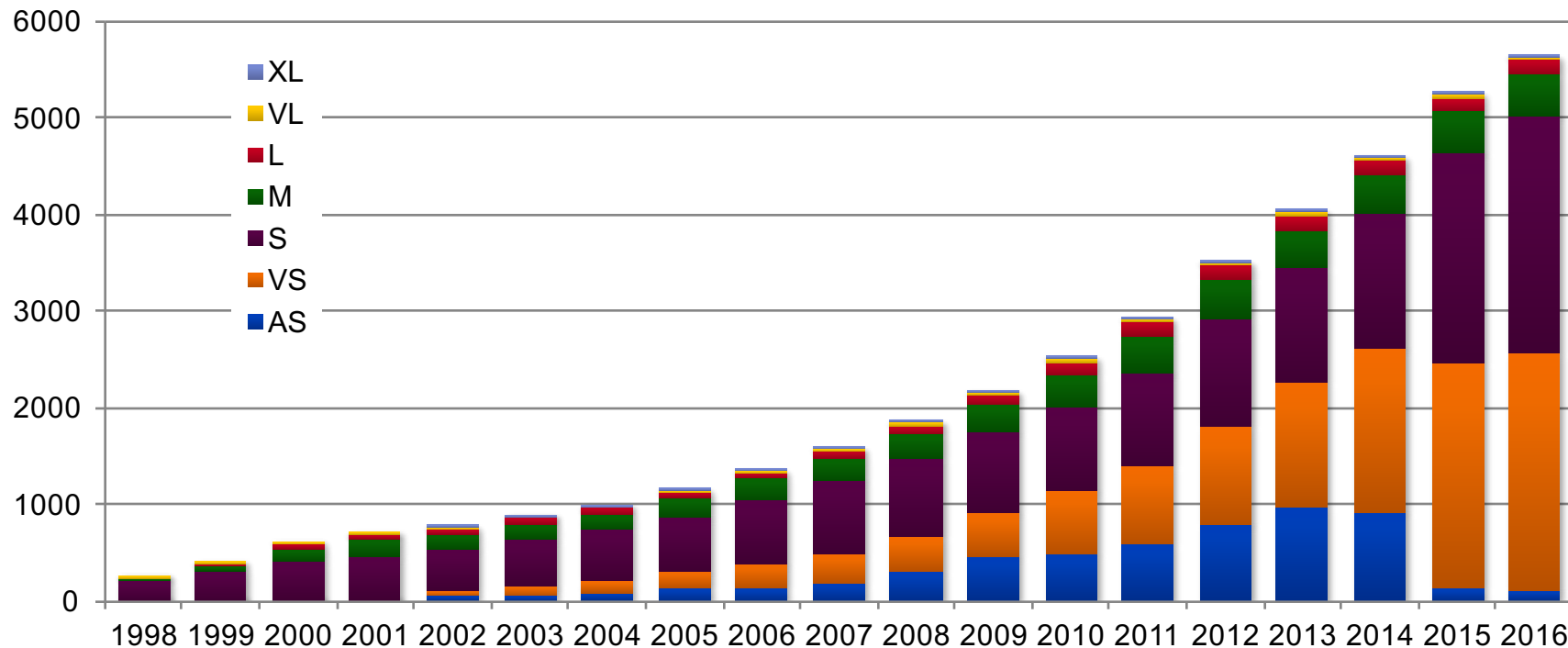


Pre-approval usage

■ Used  
■ Remaining

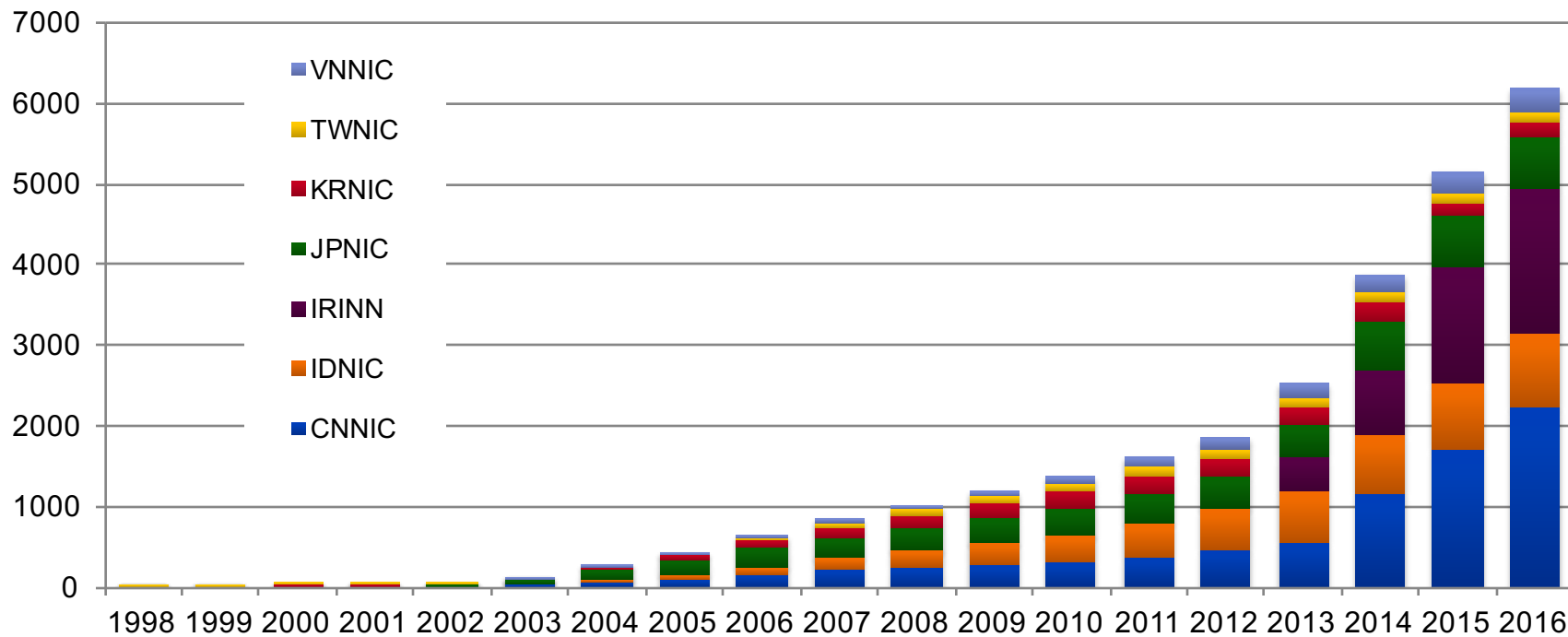
As at 30 June

# APNIC Membership



As at 30 June

# Total NIR Sub-Accounts



As at 30 June

# Registration Data Access Protocol

RDAP Deployed in  
production 2015

Solves a number of  
limitations to WHOIS  
protocol

[www.apnic.net/rdap](http://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**



“Ready to ROA” campaign – hands-on sessions to help Members create ROAs

Regional RPKI adoption growing: from 0.8% to 3.44% and rising over last 17 months

[www.apnic.net/roa](http://www.apnic.net/roa)

## ROA stats (to date)

Enabled ROA engine count	609
Numbers of ROAs created	409
Number of IPv4 addresses under ROAs (/32s)	7,508,736
Number of IPv6 addresses under ROAs (/56s)	1,998,555,200
% allocated space under ROAs (IPv4)	0.87
% allocated space under ROAs (IPv6)	0.24

# 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

Home / Resources / Whois Contact Details Update

## Whois Contact Details Update

This page allows you to update the person and role objects associated with a contact.

Existing contact(s) that you wish to replace:

Show 1 to 10 of 101 entries

Nic Hdl Email Whois Object

Services Alternate

Services Alternate

Services Alternate

Services Alternate

person APNIC Member Services Alternate

person APNIC Member Services Alternate

Showing 1 to 10 of 101 entries

Replace contact(s) with:

Existing Person/Role  New Person  New Role

Next



# Whois Accuracy Project

Improving database and information accuracy to provide better user experience

Clearer information about PoC in IP address object

Monthly cleanup program on referenced objects (12 months+)

Guidelines on using and updating information in whois

Easily report invalid contacts

Simplifying contact update process

Assisting with IRT registration process

APNIC

APNIC Whois Search

Exact match only

Associated reverse domain

For more information see:

- Using Whois
- Report invalid contact
- Update your Whois records via MyAPNIC

# Website Improvements

APNIC  
CONTACT US WHOIS & WEBSITE  
Advanced Whois search

Get IP Manage IP Training Events Research Community Blog About

Your IP address: 2001:dc0:a000:4:bccd:a04e:ef5f:9949

- GET IP ADDRESSES
- TRANSFER IP ADDRESSES
- GO IPv6
- PARTICIPATE
- WHAT IS APNIC?

APNIC is the Regional Internet Registry administering IP addresses for the Asia Pacific

Community

**NZ Internet Ahead**

NZSeries: Light-bulb moment allows research community to make a difference

By Robbie Mitchell

John Hine takes us back to where the Internet all began in New Zealand - inside its universities.

Community

**NZSeries: Internet helping NZ retain and attract talent**

By Robbie Mitchell

As we count down to APRICOT 2016, we speak to some local Internet champions to learn about the history, challenges and opportunities of the Internet in New Zealand.

Highlight

**APRICOT 2016**  
APNIC 41

**Online voting and proxy appointment now open for APNIC EC election**

You have until 09:00 (UTC +13), Wednesday, 24 February 2016 to vote online or appoint a proxy for the APNIC 41 EC election. [Click here to see the nominees.](#)

Tech matters

Policy

Community, Events

**YOUR VOTE**

APNIC

CONTACT US WHOIS & WEBSITE  
Advanced Whois search

Get IP Manage IP Training Events Research Community Blog About

Manage IP

**APNIC Services Roadmap**

APNIC Services Roadmap aims to better inform APNIC Members of service development plans and provide Members the opportunity to give feedback.

APNIC will publish future Services Roadmap items as soon as they are announced at the Services session during each APNIC conference. APNIC Members are invited to provide feedback on the latest Services Roadmap.

Complete - In progress - Not started

APNIC

CONTACT US WHOIS & WEBSITE  
Advanced Whois search

Get IP Manage IP Training Events Research Community Blog About

Get IP

**Membership and Internet Resource Application Process**

1 Application

Average time: 20 minutes to complete the form

Before you start, it may be helpful to have the following information:

- Company Registration Number
- Certificate of incorporation or other relevant documentation that verifies the establishment and existence of your organization
- Network abuse email
- Network information such as implementation date, equipment and network topology diagram

Complete the New Member and Internet Resource Application Form.

2 Evaluation

Average time: 2 to 5 working days

The information you provide in your application will be evaluated. APNIC will contact you regarding approval or if additional information is required.

Navigation and usability improvements to home page and services pages

# 2015 Policy Implementations

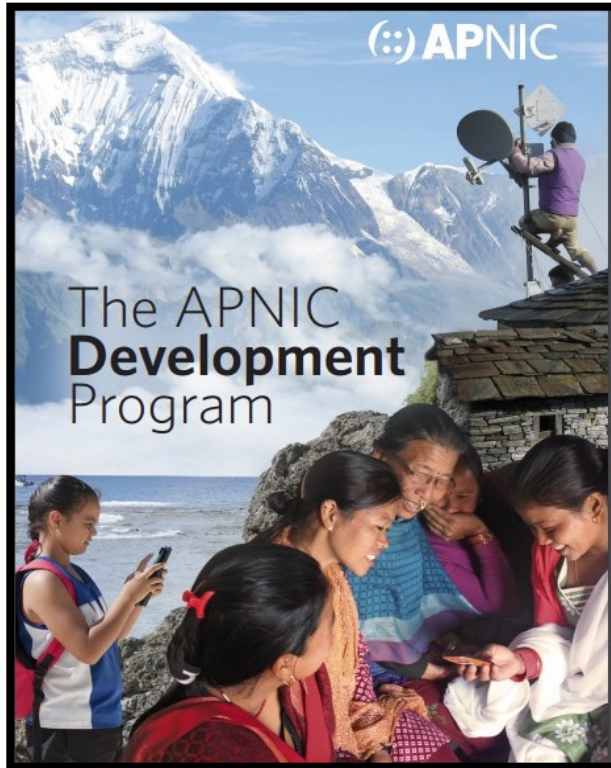
Proposals approved at  
APNIC 40 Policy SIG

prop-113: Modification in  
the IPv4 eligibility criteria

prop-114: Modification in  
the ASN eligibility criteria

[www.apnic.net/policy](http://www.apnic.net/policy)

# The APNIC Development Program



Supports the growth of the Asia Pacific community by providing:

- Training and technical assistance
- Infrastructure support
- Grants and awards
- Research

# APNIC Training



2016  
(to date)

- 30 F2F courses held in 15 locations
- 915 F2F trainees
- 529 trainees in 69 eLearning sessions
- Video archives:  
101 videos;  
389,060 views



# NOG Outreach



**2016:** JANOG  
(Jan), PHNOG  
(Jan), SANOG  
(Jan), bdNOG  
(Apr), TWNOG  
(Jun)

... and many more  
to come!

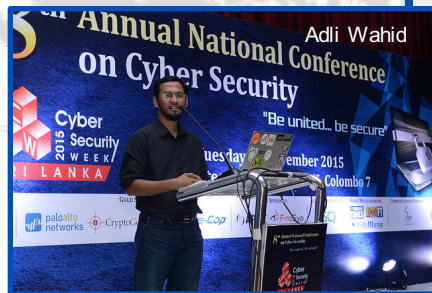
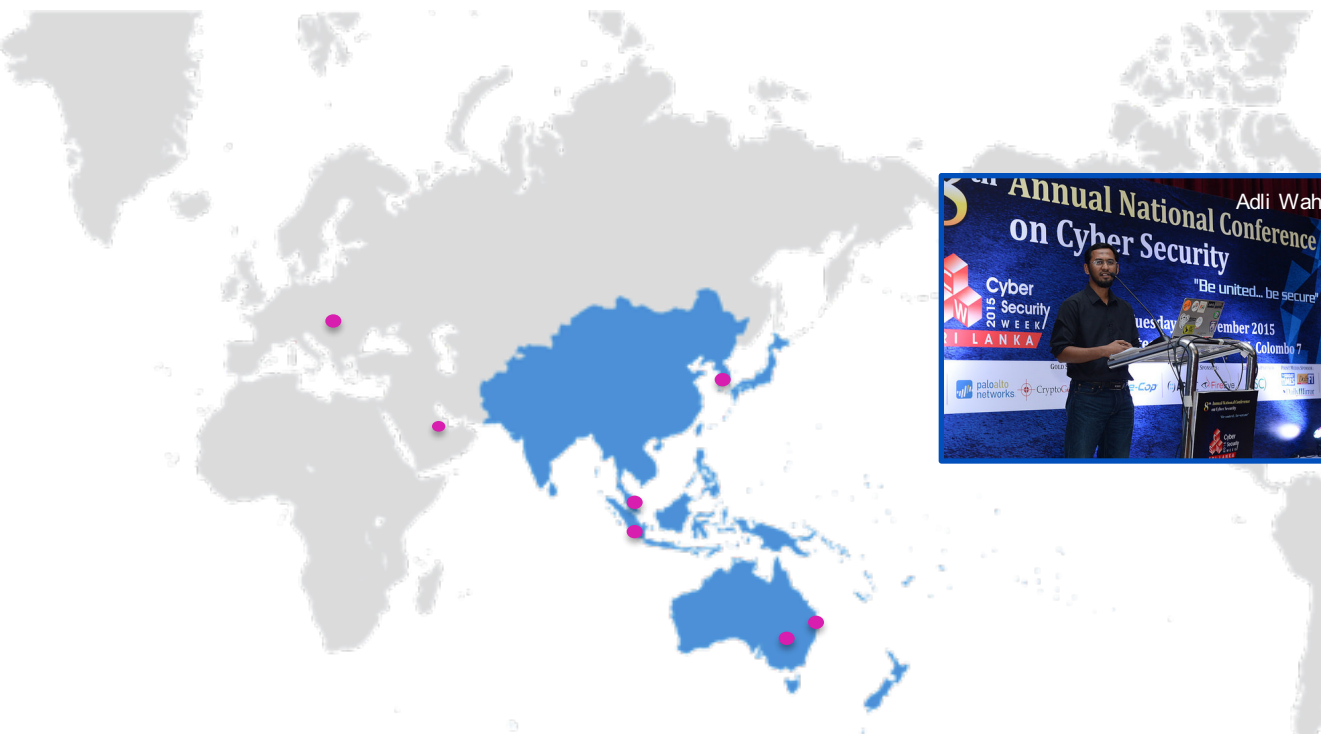
- Technical and APNIC updates
- Hostmaster consultations
- Training sessions
- Sponsorship and logistical support



SGNOG 2015

[www.apnic.net/nog](http://www.apnic.net/nog)

# Security Outreach



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](http://www.apnic.net/security)



# IPv6 Outreach



2016 (to date)

- 232 trainees in 6 economies
- IPv6 presentations at 7 events
- IPv6 workshop with ITU in TH & KH
- Supporting APIIPv6TF Secretariat



[www.apnic.net/ipv6](http://www.apnic.net/ipv6)



# The APNIC Foundation

Established in Hong Kong to support and expand the APNIC Development Program



**APNIC**  
FOUNDATION

# Next APNIC Conference

APNIC 42

**Colombo, Sri Lanka**

Workshop: 28 Sep to 2 Oct

Conference: 3 to 5 Oct

**[conference.apnic.net/42](https://conference.apnic.net/42)**



# Later Conferences

- APRICOT 2017, Ho Chi Minh City, Vietnam
  - 20 February to 2 March 2017
- APNIC 44, Taichung, Taiwan
  - 7 to 14 September 2017

# Your views matter!

Take the

○ **APNIC Survey**

○ **2016**

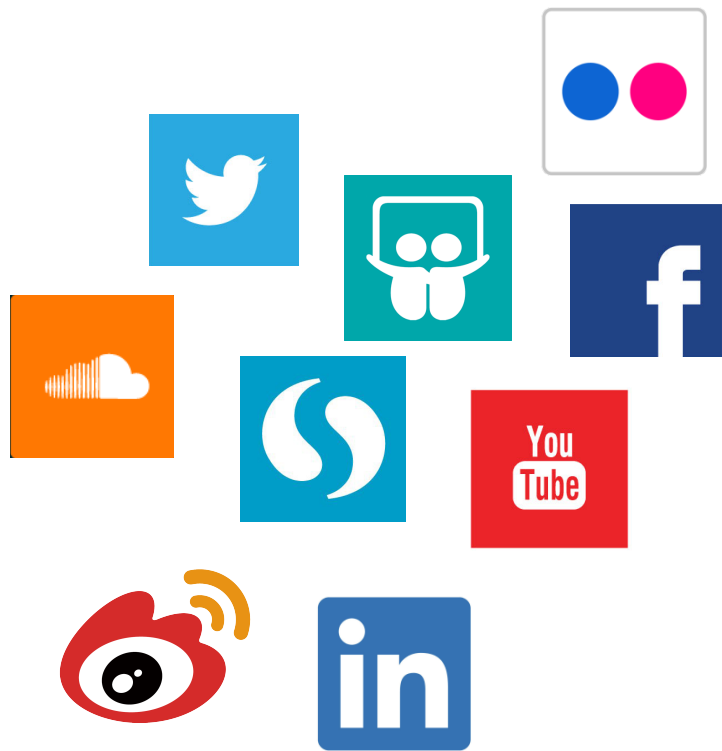
YOU COULD  
**WIN...**

Apple Watch Sport  
or a  
Microsoft Surface  
Pro 4



<https://survey.apnic.net>

# Stay in Touch!



[blog.apnic.net](http://blog.apnic.net)  
[apnic.net/social](http://apnic.net/social)

# THANK YOU