

APNIC Open Policy Meeting Showcase

Welcome!

SANOG 9 14-24 Jan 2007 Colombo, Sri Lanka

Overview of today's session

- Speaker introductions ←
- What is APNIC?
- APNIC structure & APNIC Community
- Importance of SA in APNIC region
- Benefits of attending APNIC OPM
- Policy development process
- Participation at APNIC OPMs

Presenters

- Srinivas Chendi (Sunny)
 Online Services Officer
- Kapil Chawla
 Liaison Officer (South Asia)
- Champika Wijayatunga (Champ) Senior Training Specialist

Overview of today's session

- Speaker introductions
- What is APNIC? ←
- APNIC structure & APNIC Community
- Importance of SA in APNIC region
- Benefits of attending APNIC OPM
- Policy development process
- Participation at APNIC OPMs

About APNIC

- What is APNIC ?
 - The Regional Internet Registry (RIRs) for Asia Pacific region
 - One of five RIRs in world
- What are the core activities of APNIC?
 - IPv4 & IPv6 address and AS number distribution in the Asia Pacific
 - Resource database registration
 - Reverse DNS management

About APNIC

- Industry self-regulatory body

 Consensus-based, open, and transparent decision-making and policy development
 Non-profit, neutral, and independent
- Open membership-based
 - Open participation
 - -You don't have to be a member to participate
 - Everyone is welcome!



Where is the APNIC region?





APNIC is NOT

- A network operator
 - Does not provide networking services
 - Works closely with APRICOT
- A standards body
 - Does not develop technical standards
 - Works within IETF in relevant areas (IPv6 etc)
- A domain name registry or registrar
 Will refer queries to relevant parties
- **APNIC**

Centre

Pacific Network Information

Asia

Services - Resource management

A

Service

- IPv4
- IPv6
- Autonomous System Numbers (ASN)
- Reverse DNS
- Whois
- Internet Routing Registry (IRR)

Services – Member support



- Multilingual helpdesk
 - 61-7-38583188
 - helpdesk@apnic.net
- Live chat
 - http://www.apnic.net/helpdesk/index.html
- VoIP
 - helpdesk@yoip.apnic.net
- MyAPNIC
- ICONS

Please send all resource requests to hostmaster@apnic.net

APNIC

R

Services – Training and Education

- Core courses
 - IRM (Internet Resource Management)



- Tutorials
 - IRR, IPv6, SPAM, Security
- Workshops
 - DNS, Advance DNS, Routing, IPv6
- eLearning
- Online materials
- Online schedules







<u>"What is APNIC"</u> <u>The movie...</u>

Overview of today's session

- Speaker introductions
- What is APNIC?
- APNIC structure & APNIC Community ←
- Importance of SA in APNIC region
- Benefits of attending APNIC OPM
- Policy development process
- Participation at APNIC OPMs

APNIC structure

- Members
- Secretariat
- Executive Council
- Industry self-regulatory
 - Participation by those who use Internet resources
 - Consensus-based decision making
 - Eg. Policy changes, db requirements etc
 - Open and transparent

What is the APNIC community?

- **Open** forum in the Asia Pacific Open to any interested parties
- Voluntary participation
- Decisions made based on consensus
- Public meetings
- Mailing lists
 - web archived
- A voice in regional Internet operations through participation in APNIC activities













Quiz

What are the core activities of APNIC?

- Distribution of IPv4, IPv6 and ASNs
- Database registration
- Reverse DNS management



Next speaker : Champika

Background

- Senior Training Specialist

Topics

- Importance of SA in APNIC region



Overview of today's session

- Speaker introductions
- What is APNIC?
- APNIC structure & APNIC Community
- Importance of SA in APNIC region ←
- Benefits of attending APNIC OPM
- Policy development process
- Participation at APNIC OPMs



Importance of SA in APNIC region

Importance of SA in APNIC region

- Marked growth as seen in numbers
 Membership, IPv4, IPv6, ASN
- APNIC recognises growth in SA
- Recognition
 - More Collaborations
 - More support to SANOG
 - Root servers deployment
 - More training



🖉 APNIC

Data valid as of 31 Dec 2006





Data valid as of 31 Dec 2006

IPv6(/32) delegations in SA: 19

Economy	Number	
BD	1	
IN	14	
PK	4	
Total	19	

APNIC

Total IPv6(/32) delegations in AP : 8317

Data valid as of 31 Dec 2006

ASN assignments in SA : 292



Data valid as of 31 Dec 2006

Centre Asia Pacific Network Information

Collaboration

- MoUs with industry
 - ISPAs
 - ISPAB,ISPAI, LISPA, ISPAN, ISPAK
 - SANOG
 - NIXI
- Key areas of collaboration
 - Promoting infrastructure development
 - Exchange of information
 - Training programs
 - Training programs
 Universities











Asia Pacific Network Information Centre

Critical infrastructure deployments



Recent training activities in SA

Year 2006 / 2007		
Course	Date	Location
SANOG 7	16-24 Jan	Mumbai
IRME	25 Jan	Mumbai
SANOG 8	27-4 Aug	Karachi
IRME	8 Aug	Delhi
DNS workshop	10-12 Aug	Hyderabad
Routing Workshop	13-19 Oct	Dhaka
IPv6 Workshop	15-17 Oct	Colombo
IRME	19 Jan	Colombo

Other training options

- Webcast (New)
 - First IRME, 29th May
- eLearning

Asia Pacific Network Information Centre



http://www.apnic.net/training/schedule/index.html

APNIC

Quiz



How many IPv6 delegations have been made SA?

16 IPv6 delegations have been in SA

Quiz



How many root servers were installed in SA with assistance from APNIC?

APNIC assisted in installing **5** root servers in SA.





Next speaker : Kapil

- Background
 - Liaison Officer (South Asia)
- Topics
 - Benefits of attending APNIC OPM
 - Policy development process
Overview of today's session

- Speaker introductions
- What is APNIC?
- APNIC structure & APNIC Community
- Importance of SA in APNIC region
- Benefits of attending APNIC OPM ←
- Policy development process
- Participation at APNIC OPMs



Benefits of attending APNIC OPM

APNIC



Have you been to an APNIC meeting before?

Did you know that fellowships are available?



Overview

- Professional & career development benefits
- Educational benefits
- Understand the APNIC OPM processes
- Business benefits
- Social benefits





Professional & career benefits

- Stay abreast with developments in Internet and network technologies
- Acquire & develop new skills
- Learn hot tips on network operations & management





Educational benefits

- Attend
 - Workshops
 - Tutorials
 - Presentations



- Exchange information & knowledge with
 - Other network operators
 - Vendors
 - Academics
 - Researchers

Understand the OPM processes

- Meeting activities
 - Member meeting & keynote address
 - SIGs (Special Interest Groups)
 - EC elections
 - -BOFs (Birds Of a Feather)
 - Present & listen to proposals & reports
- Provide your input on matters important to you

Business benefits

- Developing contacts & partnerships
- Business development
- Sponsorship opportunities
- Low cost training by industry experts
- Learning hot tips reduces operational costs
- Access to APNIC helpdesk

Social benefits

- Make new acquaintances
- Renew ties with old acquaintances
- Meet APNIC staff and EC
- Meet industry experts
- Exposure to different Internet cultures
- Attend social events
- Newcomers programme for first time attendees

What do APNIC meetings look like?



What do APNIC meetings look like?



OPM Movie

Overview of today's session

- Speaker introductions
- What is APNIC?
- APNIC structure & APNIC Community
- Importance of SA in APNIC region
- Benefits of attending APNIC OPM
- Policy development process ←
- Participation at APNIC OPMs



Policy development process



APNIC policy can impact your business... positively

Why you should participate?

- Business reasons
 - Policies affect your business operating environment and are constantly changing
 - Ensure your 'needs' are met
- Responsibility as APNIC member
 - Understand the current policies for managing your IP address space
- Educational reasons
 - -Learn and share experiences
 - Stay abreast with Internet 'current best practice'



- Policy changes are also driven by changes in industry
- Policy development open to all







🗞 APNIC

APNIC

Case studies

Case 1: Changes to the minimum allocation size

- 1998
 - Your IPv4 request for a /21 would have been declined
 - Why ?
 - Must satisfy criteria for a /19 minimum allocation
 - Instead you would have to go to your upstream
- Problem!!
 - Small independent networks were having problems obtaining IP addresses from their upstream ISPs
- Solution
 - Policy modified via policy development process
 - Criteria changes and lowering of minimum allocation size

Case 1: Changes to the minimum allocation size

- 1998
 - If you can not satisfy a /19 address (8192 IP addresses) allocation requirements you won't be able to get IP addresses from APNIC
 - Instead you would have to go to your upstream
- Problem!!
 - Small independent networks were having problems obtaining IP addresses from their upstream ISPs
- Solution
 - Policy modified via policy development process
 - Criteria changes and lowering of minimum allocation size

Case 1 – IPv4 allocation size



Case 2: Minimum IPv6 allocation size

- IPv6 min allocation changed from /35 to /32
 - Discussed global-ipv6, Dec 2001
 - Implemented July 2002
- Motivation
 - -/32 sufficient for first deployment
 - Ease of reverse DNS delegation

Internet policy - what about you?

- Have an awareness of current discussions
 - Operational
 - SANOG, IETF, RIR meetings, ICONS, etc
 - Policy
 - Internet resource management
- Participate in APNIC meetings
 - Get involved in discussions
 - Create policies that work for you

Facilitating the process

- Policy development facilitation
 - APNIC secretariat is first contact
 - SIG chairs check suitability
 - Discussion in appropriate mailing list
 - Discussion in upcoming SIG and AMM
 - Decision by consensus
- Want a policy change?
 - Discuss with peers
 - Have your say
 - Secretariat happy to assist if needed



Policy page http://www.apn

http://www.apnic.net/docs/policy/index

000	APNIC policie	es and policy development		
< ► C + ☆	Shttp://www.apnic.net/policy/index.html		Q < Q	0
APNIC policies and policy d.				
6		A	sia Pacific Network Information Centre	
APNIC	You're here: Home » APNIC policies and policy de	velopment	Quick Links	
MyAPNIC +	APNIC policies and policy developme	ent		
Info & FAQ		APNIC's policies are developed by the membership and the broader Internet community through a bottom-up process of consultation and consensus.		
Training +	APNIC policies	Policy development	prop-030-v001 Deprecation of	
MeetingsMembership>Policy>Internet community>Search>Home	 Major policies Corporate documents Translated policies Draft documents Compare APNIC policies to other RIR policies 	 How APNIC policies are developed APNIC policy proposals Special Interest Groups (SIGs) Birds of a Feather (BoF) 	ip6.int reverse DNS service in APNIC prop-025-v001 Proposal on IPv6 IRR service at APNIC Upcoming policy changes prop-032-v002 4-byte AS number policy proposal	j,
	 Why policies are important IP addresses and AS numbers are shared resources, available for use by anyone who needs them. APNIC policies ensure that these resources are distributed fairly and consistently across the whole Asia Pacific region. But over time, technology improvements change the needs of the Internet community. If APNIC's policies don't meet your needs, you can propose changes to existing policies or suggest new policies. How you can participate Anyone can submit a policy proposal using the online policy proposal form. Policies are discussed at face-to-face <u>APNIC Open Policy Meetings</u>, which are held twice per year. If you can't attend APNIC meetings in person, you can always <u>participate remotely</u>. Between meetings, policies are discussed on APNIC's public <u>mailing lists</u>. 		Proposals at APNIC 22	
			assignment for multihoming prop-034-v001 IPv6 portable	
			S How policies are developed	4 *

What's next?

- Subscribe to APNIC SIG mailing lists if you haven't done so
 - Follow the discussions
 - Become spokesperson/representative for your organisation in the policy process
 - Contribute to the community, share your thoughts



- Participate in discussions
 - Attend APNIC 23
 - Remotely using available access tools
 - Meet and discuss with APNIC staff



Policy Development Flash



Quiz

Who can be involved in policy development in the AP region?

• Anyone can be involved!

• APNIC members, members of the Internet community, or anyone interested in Internet policy!





Next speaker : Philip Smith

- Background
 - Consulting Engineer, Cisco
- Topics
 - -SIGs (Special Interest Group)
 - -BOFs (Birds of a Feather)

🙋 APNIC

Next speaker : Champika

- Background
 - Senior Training Specialist
- Topics
 - How to participate in the APNIC OPM process
 - Fellowships
 - How to influence the policy making
 - Remote participation

Overview of today's session

- Speaker introductions
- What is APNIC?
- APNIC structure & APNIC Community
- Importance of SA in APNIC region
- Benefits of attending APNIC OPM
- Policy development process
- Participation at APNIC OPMs ←



Importance in participating in the policy making process and the APNIC OPM


Why participate?

🖉 APNIC

You can INFLUENCE policies!



IT IMPACTS YOUR BUSINESS

Onsite participation

- You can participate as a speaker
 - Policy proposals, informational presentations or resource person
 - Complimentary registration
- Or as a regular attendee
 - APNIC meeting registration fee is subsidised for members
- Also as a fellow
 - Fellowships offered for both members and non members (SA economies fall into priority list)

🖉 APNIC

Fellowships

- Why?
 - Enable Internet community in the developing economies of the AP region to attend APNIC meetings
- What?
 - Free registration for all tutorial and meeting sessions
 - Daily allowance for accommodation, meal and incidental expenses

🖉 APNIC

Fellowships

- Who?
 - N/W providers in developing economies
 - Staff managing and operating networks
- How?
 - Residency in a developing economy of the AP
 - Demonstrated ability to utilise the experience gained from APNIC meeting
 - Offered on equal opportunity basis
- Where?
 - http://www.apnic.net/meetings

🖉 APNIC

Remote participation

• Why?



- -You may not be able to physically participate
 - Time constraints
 - Budget constraints
- How?
 - -Jabber chat
 - Discuss issues with others in the chat room
 - Have your questions or comments read out and discussed at the meeting
 - Webcasts / Video streaming
 - -Audio stream (for low bandwidth users)
 - Live transcripts

📀 APNIC

APNIC meeting website is your

http://www.apnic.net/meetings

reference point







Summary

- What is APNIC?
- Importance of SA in APNIC region
- Policy process
- How & why to participate in APNIC OPM

Welcome to APNIC 23

23rd APNIC Open Policy Meeting 27 February - 2 March 2007 Bali, Indonesia

APNIC

Welcome to APNIC 24 !!!

- APNIC 24 India
- In conjunction with SANOG 10
- 29 Aug 7 Sept, 2007
- All are invited



Thank you