APNIC 34 CONFERENCE

PHNOM PENH
CAMBODIA

21 - 31 August 2012

Training Activities @ APNIC

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Training Objectives

- To expand the capabilities, knowledge, and understanding of Internet network operators, engineers, managers, educators, regulators etc.

- To make full use of Internet resources and to effectively apply relevant Internet technologies and techniques, best current practices.

- To teach participants to proficiently understand, configure, manage, and administer their Internet services and infrastructure.

Training Philosophy

- Accessibility
  - Participants throughout the region can more easily attend our training courses.
- Availability
  - More training courses are available for participants to attend.
- Continuity
  - Participants are able to update skills and knowledge as the industry develops and their needs change.

Face-to-Face Training Delivery

- Courses are conducted onsite in our member economies in a “classroom-based” environment
- Subsidized fee structure
- Tutorials
  - Includes presentations, demos and short exercises where applicable
  - Duration: 1-2 days
- Workshops
  - Includes Tutorials and hands–on practical ranging from intermediate to advance topics
  - Duration: 3-5 days

Face-to-Face Courses / Curriculum

- Offers courses on the following areas:
  - Internet Resource Management (IRM)
  - Internet Routing Registry (IRR)
  - IPv6
  - Routing (OSPF, BGP)
  - Domain Name System (DNS)
  - Internet Technologies
  - Network Security
- More information on Training website:
  - www.apnic.net/training

eLearning Delivery Format

- Interactive Web-Classes provide training regardless of
  - Geographical location
  - Time zone
- Modular Structure
  - 9 one hour sessions per month
- Session Times focus on different sub-regions
  - 10:30 – 11:30 (UTC+10) for Pacific and Oceania
  - 12:30 – 13:30 (UTC+10) for SouthEast and East Asia
  - 14:30 – 15:30 (UTC+10) for South Asia
- Offered for no Charge

eLearning WebClasses / Curriculum

- Internet Registry Policies
- Requesting IP Addresses
- Best Practice in Managing IP Resources
- DNS Concepts
- Reverse DNS Procedures
- Routing Basics
- OSPF Basics
- BGP Basics
- Using MyAPNIC
- Introduction to Autonomous System Numbers
- 4 Byte ASNs
- IPv6 Overview
- IPv6 Addressing and Subnetting
- IPv6 Address Planning
- IPv4 to IPv6 Transition Technologies
- APNIC Whois Database
- Network Security Fundamentals
- DNS Security

Tailored Training Courses

- To cover the training requests of a particular organisation
- Course built from APNIC training topics:
  - Modular structure
  - Customised contents based on organisation's request
- All the associated costs are covered by the training requestor
- Cost recovery business model
- Pilot training has been a success

Post-training Consultancy

- On completion of any training course, option available for trainees to request:
  - Further assistance from APNIC Training Team (e-mail, on-site)
  - On-site assistance or advice (eg IPv6 deployment, BGP etc)
- Cost recovery model:
  - Requesting organisation covers APNIC trainer costs
  - Entering pilot mode now

Cost Recovery Model

- Model covers:
  - Travel: return air fare from trainer's home base
  - Transportation: local transportation
  - Accommodation: hotel
  - Facilitation rate of the trainer
  - Preparation time for the trainer
- No allowance for variation between cost of living/incomes for LDCs, Developing or Developed Economies

Collaboration

- RIPE NCC
  - IPv6 Workshop materials development
- NSRC
  - Joint workshop efforts across the region (NOGs and standalone)
- Team Cymru
  - Security training
- Regional training partners
  - Roll out of IPv6 Workshops with partner organisations
  - Translation of materials and delivery in local language

Training Resources

- Physical Lab located in Brisbane Office
- Virtual Lab on MacMini Servers
  - Replicates layout of physical lab in a virtual environment
- Allows operation of parallel workshops
- No dependency on remote access to Physical Lab in regions of poor Internet connectivity

Training Resources – Physical Lab

- Accessed remotely
  - Cisco and Juniper network equipment
- Allows an available environment for other test scenarios
  - Network operations, Infrastructure and any other new services
- Various lab topologies
  - ISP Topology

    Transport Core
    POPs
    Upstream Connections
    Multiple Regions
    Customer Access Network
    Tunnels
  - IXP Topology

    Peering

Training Support Services

- APNIC Conference Remote Hubs
  - Conducting regular scheduled training courses
  - Facilitating the remote participation in Policy SIG
  - Conduct policy briefings
  - Aimed at prospective APNIC Conference locations

- Outreach activities across the Asia Pacific Region

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Any Questions?