APIX meeting #29

Mon 26 Feb 2024

Welcome to Bangkok!
Welcome to the APIX meeting #27!

APIX meeting #29

Registered attendees: 70
    APIX members: 52 in-person, 7 online
    Non-members: 11 in-person

What is APIX association?

- "Asia-Pacific Internet Exchange"

  – An association of Internet Exchange Providers in Asia-Pacific region
  – Established in 2010
    - Meets twice a year (usually along with APRICOT/APNIC meetings)

  – Objectives:
  To share information about
  technical, operational, and business issues and solutions regarding
  Internet Exchange

IXP associations in the world

Reference: Euro-IX Update at Euro-IX forum

APIX meeting

This is the meeting for APIX members and invited only

Acknowledgement

- APNIC supports our activities like our previous meetings
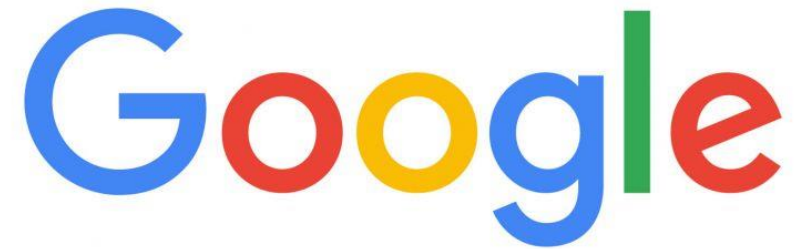- Meeting room and Zoom link is provided by courtesy of APNIC

Acknowledgement

- Sponsorship from the Internet Society (ISOC)

Acknowledgement

- Sponsorship from Google

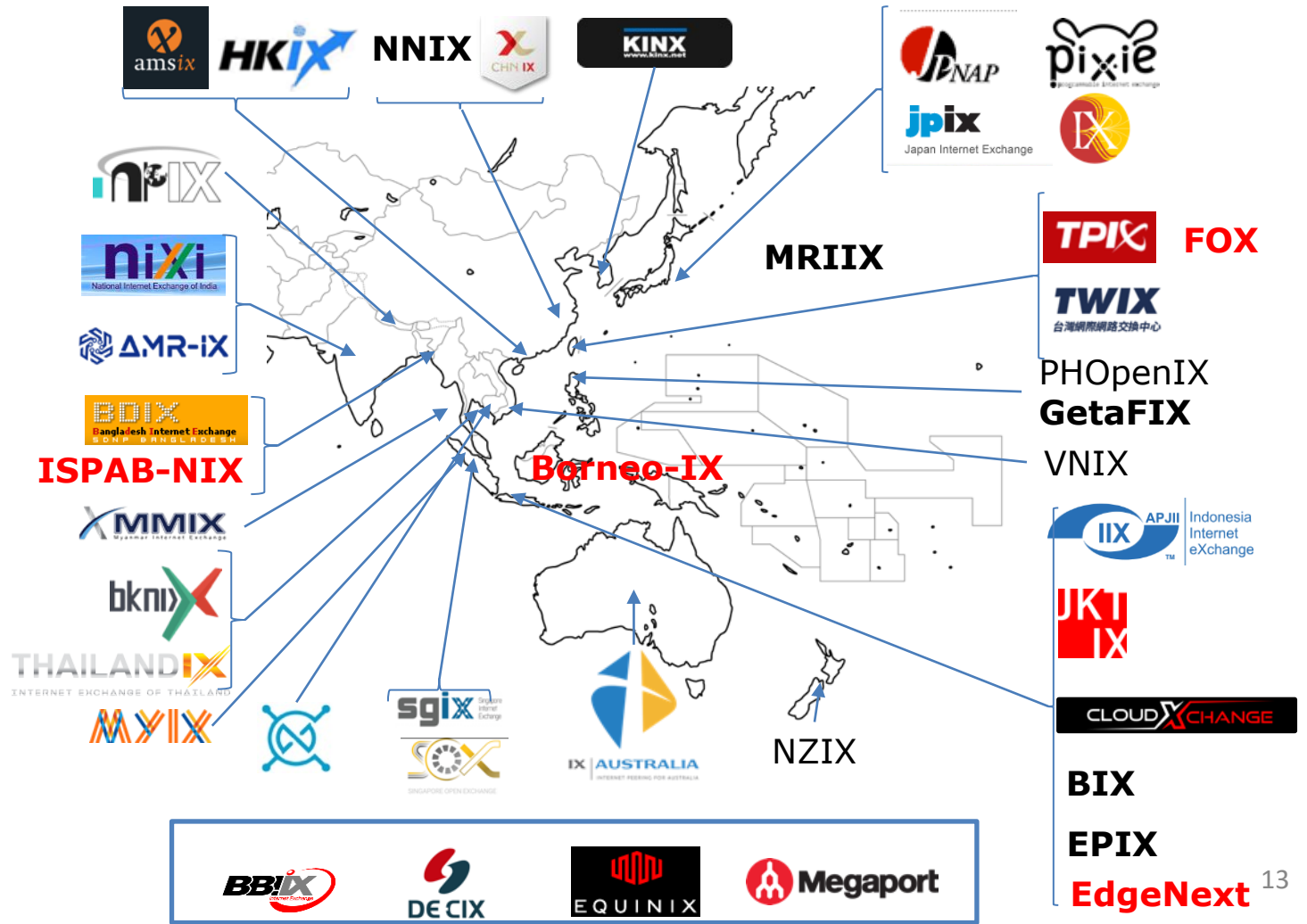# Roll Call

Please introduce yourself very briefly

APIX update

26 Feb 2024

APIX Steering Committee

APIX Members

- **Total 42 IXPs, from 20 countries and economies**
  - Australia, Bangladesh, **Borneo**, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea, Northern Mariana Island, Malaysia, Myanmar, Nepal, New Zealand, Philippine, Singapore, Taiwan, Thailand, Vietnam

APIX Steering Committee FY2023

Roles	Name	Organization
Chairperson	Katsuyasu Toyama	JPNAP (JP)
Secretary	Arnold Nipper	DE-CIX IN (IN)
Treasurer	Shicong Zhang	NNIX (CN)
	Abhishek Gautam	Grant Thornton (IN) (ex-NIXI)
	Masataka Mawatari	JPIX (JP)

Arnold   Abhishek   Shicong   Masataka   Toyama

Previous APIX meetings

- **New Challenges: two meetings in Autumn**
  - "APIX Workshop" in Kyoto, Japan
    - Mon 11 Sep 2023, collocating with APNIC

  - APIX meeting #28 in Seoul, Korea
    - Tue 31 Oct 2023
    - In the same week of Peering Asia 5.0 in Seoul

APIX Workshop

- **14:30 to 18:00 on Mon 11 Sep 2023**
  - (1) Introduction of APIX (10 min)
    - presented by Katsuyasu Toyama (APIX/JPNAP)
  - (2) Internet and peering landscape of Japan – from IXP perspective (20min)
    - presented by Katsuyasu Toyama (APIX/JPNAP)
  - (3) Discussion on the policy change in APNIC region regarding IPv4 assignment size to IXPs (30min)
    - moderator to be decided
  - (4) Collaboration between IXPs and content/CDN (30min)
    - moderated by Katsuyasu Toyama (APIX/JPNAP)
  - (5) Open Mic (30min)
    - Any suggestions or comments from a user (member/customer) of IXP

Policy change of IPv4 assignment size for IXP

- Discussion
  - Positive
    - Will save IPv4 space for future new IXPs
    - Small islands countries can save the cost for IPv4 address space (/24 costs much for them)
  - Negative
    - Renumbering by its members/customers is not so easy as people think (requires much resource)
      - For smooth migration, IXPs have to prepare and repeatedly announce in advance; route servers of the IXP have to be reconfigured
      - Its members/customers, Network side, have to prepare the reconfiguration (manually or by program)
      - If it grows more quickly than expected, IXP and members/customers have to repeat it three times (/26->/25->/24->/23)

- At the Policy WG meeting (on Thursday)
  - Comments were made by some attendees at the Workshop
  - As a result, the policy change was not accepted, but will be discussed on the mailing list

APIX members: 42

AMR-IX (IN)	EPIX (ID)	MM-IX (MM)
AMS-IX Hong Kong (HK)	Equinix AP (AU/HK/JP/SG)	MYIX (MY)
BBIX (HK/JP/SG/TH)	**FOX (TW)**	NIXI (IN)
BDIX (BD)	GetaFIX (PH)	NNIX (CN)
BIX (ID)	HKIX (HK)	NPIX (NP)
BKNIX (TH)	IIX (ID)	NZIX (NZ)
Borneo-IX (BN)	**ISPAB-NIX (BD)**	PhOpenIX (PH)
CHN-IX (CN)	IX Australia (AU)	Ryukyu-IX (JP)
CNX (KH)	JKT-IX (ID)	SGIX (SG)
CXC (ID)	JPIX (JP)	SOX (SG)
DE-CIX India (IN)	JPNAP (JP)	TH-IX (TH)
DE-CIX Malaysia (MY)	KINX (KR)	TPIX (TW)
Dix-ie (JP)	MARIIX (MP)	TWIX (TW)
EdgeNext (ID)	Mega-IX (AU/HK/SG)	VNIX (VN)

* IXP name changed: DE-CIX India (formerly MumbaiIX), DE-CIX Malaysia (formerly JBIX)

Collaboration between IXP and its members/customers

- Discussion
  - IXPs need collaboration with Content/Cloud/CDN
    - They are important to attract and increase its members/customers
  - Some Content/CDN providers have cache servers for a small/medium IXP
    - They can provide it if their criteria meets (estimated total traffic, hit-rate, etc)

Summary

- From both IXP attendees and Content/CDN/Network attendees, their reactions were positive
- In future, it will be possible to have both parts in APIX meeting; a closed part to IXP and open part to IXP members/customers

APIX meeting #28

- ## Tue 31 Oct 2023, in Seoul, South Korea
  - Admin Session 9:00-9:30 (KST/UTC+9)
    - Greetings & APIX update (Katsuyasu Toyama@APIX)
    - Short report: APIX Workshop & IGF2023: APIX booth (Katsuyasu Toyama@APIX)

  - Technical Session 9:30-12:00 (KST/UTC+9)
    - Korean Internet Landscape (Kwanwoo@KINX)
    - MMIX extension (Thein Myint Khine@MMIX)
    - Survey result on RPKI & discussion at IGF Workshop on global routing security (Katsuyasu Toyama@APIX/JPNAP)
    - IPv4 address assignment size at IXP discussion (Masataka Mawatari@APIX/JPIX)

APIX BOOTH AT IGF KYOTO 2023

Background

- IGF = Internet Governance Forum
  - IGF is hosted by United Nations
  - The 18th IGF was organized by Japanese Government and held in Kyoto
    - MIC = Ministry of Internal affairs and Communications
      - taking charge of telecommunication market including the Internet

- The MIC provided some booths in IGF Village (exhibition area)
  - The purpose is to demonstrate the Internet business/technologies by Japanese company/ organization
  - We proposed that APIX could demonstrate their activities
 - JPNAP/JPIX/BBIX volunteered the exhibition

APIX booth

- Cost
  - Booth: 0 JPY (covered by MIC)
  - Panels: 50,000 JPY
  - Table&Chairs: 40,000 JPY

- Human resources
  - volunteers from BBIX/JPIX/JPNAP

JPNAP

JPIX

BBIX

Visitors to the APIX booth

- Government
  - Deputy Minister for Internal Affairs and Communication
  - Parliamentary Vice-Minister for Internal Affairs and Communication
- Local Government

- Telecommunication policy makers/regulators
- People interested in Policy/regulation (RIR or NIR)

- ISP/IXP people all over the world

- International Students staying at colleges/universities in Kyoto

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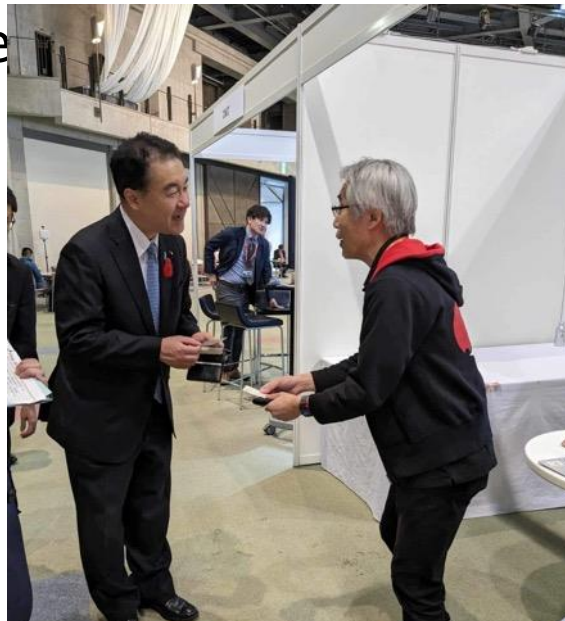
APIX meeting #29

- Topics
  - Steering Committee election

  - The agenda is made by Program Committee, a group of volunteers

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Finishing the Terms of Office

Arnold   Abhishek   Shicong   Masataka   Toyama

Program Committee

- **Narelle Clark (IX Australia) – Chairperson of PC**
- **Naveed Haq (ISOC)**
- **Soumen Bhowmik (NIXI)**

- and the Steering Committee members

Very much appreciate to their great contributions!!

Today's agenda

Session #1   (09:30-11:00)

 - Session Chair: Katsuyasu Toyama (APIX-SC)

 - Greetings, Roll call, Agenda bashing, APIX update by Toyama@APIX-SC)
 - Election of Steering Committee members by Shane@Election Committee
    -- Nominees' speech (2 min per nominee)
 - "APIX association, where shall we go?" by Arnold Nipper@APIX-SC

Session #2   (11:30-13:00)

 - Session Chair: Naveed Haq (ISOC)

 - Panel discussion: "Regulatory issues at an IXP"

  - "Secure Inter-domain routing" by Prof. Hui Wang @ Capital Normal Unversity

  - "M-Root DNS Deployment Update" by Kazuhiro Kitamura @ JPRS

Session #3   (14:30-16:00)
 - Session Chair: Narelle Clark (IX Australia)

 - Panel discussion: "Promotion&Outreach Interactive"

 - "Guam Exchange" by Jose Santiago @ Guam Exchange
 - "Cybersecurity for IXP" by Abhishek Gautam @ Grant Thornton

Session #4   (16:30-18:00)
 - Session Chair: Soumen Bhowmik (NIXI)

 - "The Novel Integrated IX Switch" by Shicong Zhang @ NNIX
 - Anonymising *flow information   by Nishal Goburdhan @ INX-ZA
 - The result of SC Election by Shane@Election Committee

 - Open Mic, Closing + Group Photo by Toyama@APIX-SC

APIX Dinner

Time: 19:00 -

Place: **Prai Raya ปรายระย้า**

Pre-registered people only

- Prai Raya, a "Michelin Guide" Bib Gourmand award-winning restaurant, is an excellent quality Southern Thai restaurant from the very famous Raya restaurant in Phuket Town

The restaurant is reserved by **Mr. Trirat Charoensak** of Thailand-IX. **Thank you very much!**

APIX Dinner is sponsored by: BBIX, JPIX, JPNAP, and NNIX.cn

Prai Raya   ปรายระย้า

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Coffee break

Lunch