APIX update

APIX Steering Committee

What is APIX?

- "Asia-Pacific Internet Exchange"

    – An association of Internet Exchange Providers in Asia-Pacific region.
        - just like Euro-IX in Europe

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

APIX Members

- **16 IXPs**
  - BD: BDIX(Dhaka)
  - HK: HKIX(Hong Kong)
  - JP: BBIX, Dix-ie, JPIX, JPNAP
  - KR: KINX(Seoul)
  - ID: IIX
  - IN: NIXI
  - MY: MyIX (KL)
  - NP: NP-IX(Katmandu)
  - NZ: NZIX
  - SG: SGIX(Singapore), SOX(Singapore)
  - VN: VNIX(Hanoi/HCMC)
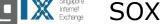 - AP: Equinix (Hong Kong, Singapore, Tokyo, Sydney)

Steering Committee

- Steering Committee (SC) members
  - Katsuyasu Toyama (Chairperson) --JPNAP
  - Che-Hoo Cheng (Secretary) --HKIX
  - Raphael Ho (Treasurer)   --Equinix

  - Two seats of Steering Committee are vacant, and will be selected at the next General Meeting.

Meeting history

#	Date	Place	Attendees	IXPs in AP
8th	25 Aug. 2013 Sunday	Xi'an (China)	26 people (19 from IXPs)	13 IXPs in AP
7th	24 Feb. 2013 Sunday	Singapore (Singapore)	40 people (36 from IXPs)	14 IXPs in AP
6th	29 Aug. 2012 Wednesday	Phnom Penh (Cambodia)	26 people (24 from IXPs)	12 IXPs in AP (1 remotely)
5th	26 Feb. 2012 Sunday	New Delhi (India)	27 people (22 from IXPs)	11 IXPs in AP (2 remotely)
4th	30 Aug. 2011 Tuesday	Busan (Korea)	23 people (21 from IXPs)	12 IXPs in AP
3rd	20 Feb. 2011 Sunday	Hong Kong (Hong Kong)	31 people (23 from IXPs)	10 IXPs in AP
2nd	23 Aug. 2010 Monday	Gold Coast (Australia)	11 people (9 from IXPs)	7 IXPs in AP
1st	1 Mar. 2010 Monday	Kuala Lumpur (Malaysia)	15 people (14 from IXPs)	7 IXPs in AP
Pre-liminary	25 Aug. 2009 Tuesday	Beijing (China)	14 people (8 from IXPs)	

Attendees

Attend

- BBIX
- Dix-ie
- Equinix
- HKIX
- IIX
- JPIX
- JPNAP
- NIXI
- NP-IX
- NZIX
- SGIX
- SOX
- VNIX

Not attend

- BDIX
- KINX
- MYIX

(Potential) Patrons

- APNIC
- Alcatel-Lucent
- Juniper
- Google

Agenda of this meeting

- Technical Session
  - (1) Security for IXPs (Che-Hoo Cheng, HKIX)
  - (2) SLA for IXPs (Raphael Ho, Equinix)
  - (3) Route server by CISCO (Dr. Yoshiki Ishida, JPIX)
  - (4) Presentations from potential patrons
  -    - Alcatel-Lucent (Alastair Johnson)
  -    - Juniper (Ian Quinn)
  -    - Google (Vincent)
  - (5) IXP updates   (only IXPs that have update)
  -    VNIX, IIX, NZIX, NIXI, NP-IX, HKIX

- Administrative session
  - (1) Report on Steering Committee meeting
  - (2) Report on global IX federation
  - (3) Discussion on legal entity and membership fees
  - (4) APIX Website

Technical session 1

- Security for IXPs (Che-Hoo Cheng)
  - Che-Hoo raised concerns about tapping or backdoor at IXP infrastructure, and we discussed various perspectives of security at IXPs.
  - Will document a guideline for IXP security.
- SLA for IXPs (Raphael Ho)
  - Raf asked questions regarding SLA of each IXP, and we discussed whether SLA is measured or not, what and how to measure, and how to visualize.
  - Will document the criteria for measurement and SLA
- Experience of CISCO router as a route server (Yoshiki Ishida)
  - JPIX replaced its route servers from Quagga to CISCO IOS-XE.

Technical Session 2

- Presentation from potential patrons
  - AJ of Alcatel-Lucent presented IXP architecture using MPLS technology, and its example (DE-CIX)
  - Iann of Juniper introduced IXP architecture using MPLS-TE/VPLS, and its example (LINX)
  - Vincent of Google gave a talk on their vision and the reasons to promote IXPs.

- IXP updates
  - VNIX, IIX, NZIX, NIXI, NPIX, HKIX

Administrative session

- Legal entity of APIX
  - Rough consensus on exploring the possibilities that our legal entity is under APIA
- APIX website
  - Does not work well now, needs improvement.
  - Discuss with Euro-IX, whether to use their software or to store our data on their platform as well as their data.

- ITU's definition of IXP
  - At IX-F (Global IX Federation), ITU's activity to define IXP was introduced. Here we also discussed their purposes and intention.
  - Will investigate it, and make comments if necessary.

Next meeting

- APIX meeting #9
  - Co-locating with APRICOT 2014
  - Bangkok, Thailand
  - Sunday, 23 Feb. 2014

Acknowledgement

- We appreciate very much for APNIC's support on APIX activities.

Thank you!

- Contact: sc_at_apix.asia