

WORKSHOP AGENDA

IPv6 Economics and Implementation Workshop

Venue : Kuala Lumpur Convention Centre (KLCC) Room406

Date : 2nd March 2010

Time : 14:00 – 17:30

Workshop Theme

The workshop is focusing on the strategic thinking of IPv6 production networks from economic perspective and implementation perspective. It is a critical moment for transition to IPv6 production networks. The workshop is exploring the driving force of the decision making and real-world IPv6 experience sharing.

Contact : Dr. Kenny Huang

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Speakers of Workshop

- ▶ Geoff Huston, Asia Pacific Network Information Centre (APNIC), Australia
- ▶ Lorenzo Colitti, Google, USA
- ▶ Prof. Xing LI, CERNET / Tsinghua University, China
- ▶ Prof. Yan MA, CERNET / Beijing University of Posts and Telecommunications, China
- ▶ Che-Hoo CHENG, Hong Kong Internet Exchange (HKIX), Hong Kong SAR, China
- ▶ Joonhyung Lim, Korea Internet & Security Agency (KISA), Korea
- ▶ Takashi Arano, Inetcore Inc, Japan
- ▶ Dr. Kenny Huang, Taiwan Network Information Centre (TWNIC), Taiwan

Supporting Organizations:

- ▶ Google, USA
- ▶ Tsinghua University, China
- ▶ Beijing University of Posts and Telecommunications, China
- ▶ National Cheng Chi University, Taiwan
- ▶ Asia University, Taiwan
- ▶ Hong Kong Internet Exchange, Hong Kong
- ▶ National Information Infrastructure Enterprise Promotion Association, Taiwan

- ▶ Internet Society Taiwan Chapter, Taiwan

Agenda

IPv6 Economic Session

- ▶ An economic perspective on the transition to IPv6
Geoff Huston, APNIC
- ▶ IPv6 Evaluation Framework
Dr. Kenny Huang, TWNIC , Taiwan

IPv6 Implementation Session

- ▶ IPv6 Deployment at Google
Lorenzo Colitti, Google
- ▶ The CNGI IPv6 Experience and Ipv4-IPv6 Transition Plan
Prof. Xing LI, CERNET / Tsinghua University, China
- ▶ Construction of CNGI-CERNET2 CPN
Prof. Yan MA, CERNET / Beijing University of Posts and Telecommunications,
China
- ▶ IPv6 in Hong Kong
Che-Hoo CHENG, Hong Kong Internet Exchange (HKIX), Hong Kong SAR, China
- ▶ IPv6 Deployment Experience Sharing and Current Strategy in Korea
Joonhyung Lim, KISA
- ▶ IPv6 Deployment Strategy – Action Plan and Milestones Towards IPv4 Address
Exhaustion in Japan
Takashi Arano, Inetcore Inc, Japan

Panel Discussion: All speakers

Topic : Production IPv6 - Missing gap between anticipation and reality

Chair : Dr. Kenny Huang

ABSTRACT/OUTLINE:

An economic perspective on the transition to IPv6 (Geoff Huston):

According to the technologists the transition to IPv6 should've been largely completed by now, However, industry players are not acting according to that script and the measurements of IPv6 deployment indicate deployment levels that are still

at around 1% - 2% of the size of the IPv4 Internet. This presentation looks at this situation from an economic perspective, and poses the question as to whether this IPv6 transition is an instance of a market failure. If that is the case, then the transition to IPv6 may require external impetus of a form of public intervention.

IPv6 Evaluation Framework (Kenny Huang):

- ▶ Business vs. disruptive innovation matrix
- ▶ Purpose of disruptive innovation
- ▶ IPv6 : greenfield vs. brownfield strategy
- ▶ When to do what
- ▶ How to respond to IPv6 innovation

The CNGI IPv6 Experience and Ipv4-IPv6 Transition Plan (Xing Li):

This presentation discusses the design and operation experiences of a single-stack IPv6 backbone (CNGI-CERNET2). It connects more than 200 university campus networks in mainland China. The IPv4/IPv6 transition plan with the IVI translation technology is also presented in detail.

Construction of CNGI-CERNET2 CPN (Yan Ma):

- ▶ General information on CNGI CPNs
- ▶ Objectives of CNGI-CERNET2 CPN
- ▶ Tasks of CNGI-CERNET2 CPN construction
- ▶ Major applications and Key technologies deployed
- ▶ Looking into the future

IPv6 in Hong Kong (Che Hoo Chen):

Che-Hoo will talk about the IPv6 development status in HK. HK is lagging behind very much in IPv6 development and is catching up. Che-Hoo will share with the audience what is being planned and done over there. His key message is "Take Action Now"

IPv6 Deployment Experience Sharing and Current Strategy in Korea. (Joonhyung Lim)

During 2009, 3 major ISPs and several players in private and public sector have been working together to verify end-to-end communications through part of ISP's commercial backbone network having IPv4/IPv6 dual stack capability. This presentaiton show you project's deatil and what we learn from this collaboration work, on the perspective of IPv6 adoption and preparation in production network.

IPv6 Deployment Strategy – Action Plan and Milestones Towards IPv4 Address Exhaustion in Japan (Takashi Arano):

To overcome IPv4 address exhaustion problem and promote IPv6, we have established “Task Force on IPv4 Address Exhaustion, Japan.” Objectives and recent results of the task force will be reported. “Action Plan and Milestones” is a strategic document which suggests IPv6 action plan with timeline for various players including ASP/CSPs and SIs. So far, this action plan approach looks working well.