

APRICOT 2013 @ Singapore

Lightning Talk IPv4 over IPv6 in the Venue

Japan Internet Exchange Co., Ltd.

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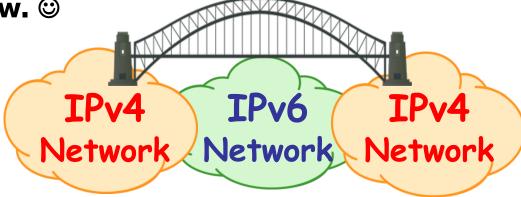
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Motivation for this trial



- IPv4 address exhausion currently
 - We, especially ISPs in APNIC region, already do not have enough global IPv4 addresses.
- Demands of IPv4 over IPv6 experiences
 - Conference network is very appropriate to share and gather good experiences.
- Encouraging IPv6 deployment
 - IPv4 over IPv6 is one of catalysts to deploy IPv6, as you all know. ☺





Reasons we chose 464XLAT in this time

The Core of Internet Community

Limited IPv4 address

- Available IPv4 address pool size is generally small in the conference network.
- 464XLAT is one of stateful solutions.

Many selections of products and codes

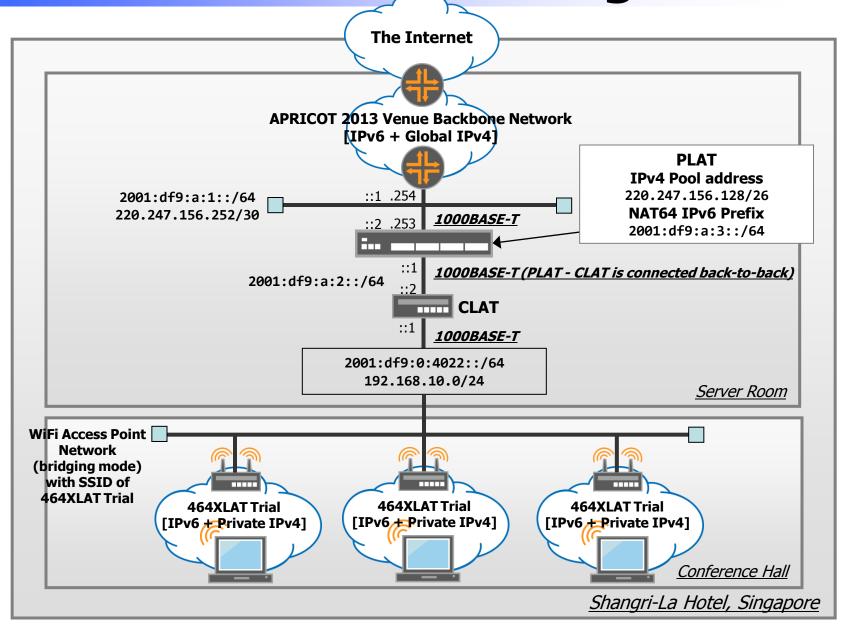
- Products: Cisco, Juniper, A10, ... etc
- OSS: ASAMAP(Vyatta), Linuxnat64,
 Ecdysis NAT64, ... etc
- 464XLAT is combination of existing things.

Easy troubleshooting

- During troubleshooting, figuring out IPv4
 address from translated IPv6 packet header is
 practicable without deep packet inspection.
- 464XLAT is not an encap/decap method.



464XLAT network design

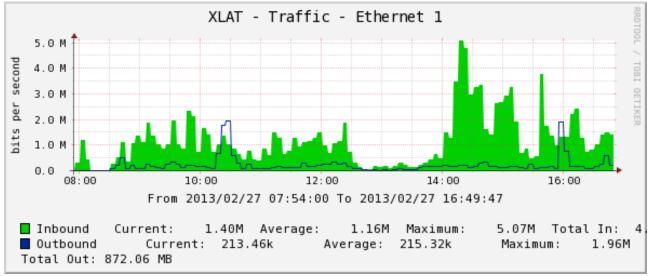




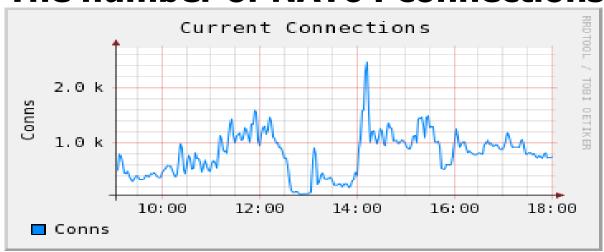
464XLAT statistics so far



Traffic volume at uplink interface of PLAT



The number of NAT64 connections

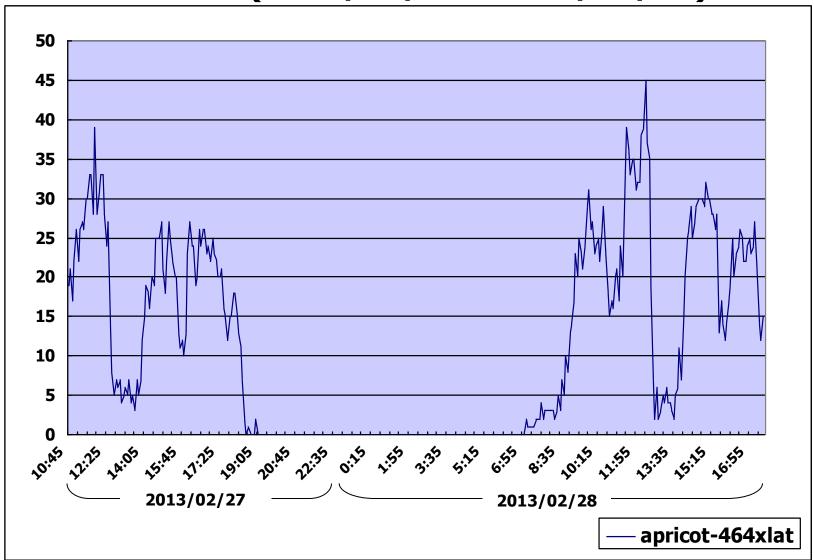




464XLAT statistics so far



Wi-Fi association (2013/02/27 - 2013/02/28)





Conclusion



IPv4 over IPv6 is ...

- already existing here!
- available to introduce in your network too!

Firstly, please try to connect to apricot-464xlat SSID ©



Special Thanks (in alphabetical order)



 Gaurab Raj Upadhaya, Miwa Fujii, Shin Shirahata, Yoshinobu "maz" Matsuzaki, and APRICOT 2013 NOC members for cooperative support and operation

A10 Networks, NEC AccessTechnica for good gears



NEC AccessTechnica WR9500N (Prototype)

