

Asia Pacific IPv6 Task Force Update

23rd February 2014

APStar Retreat

By Michael Biber and Miwa Fujii

Agenda

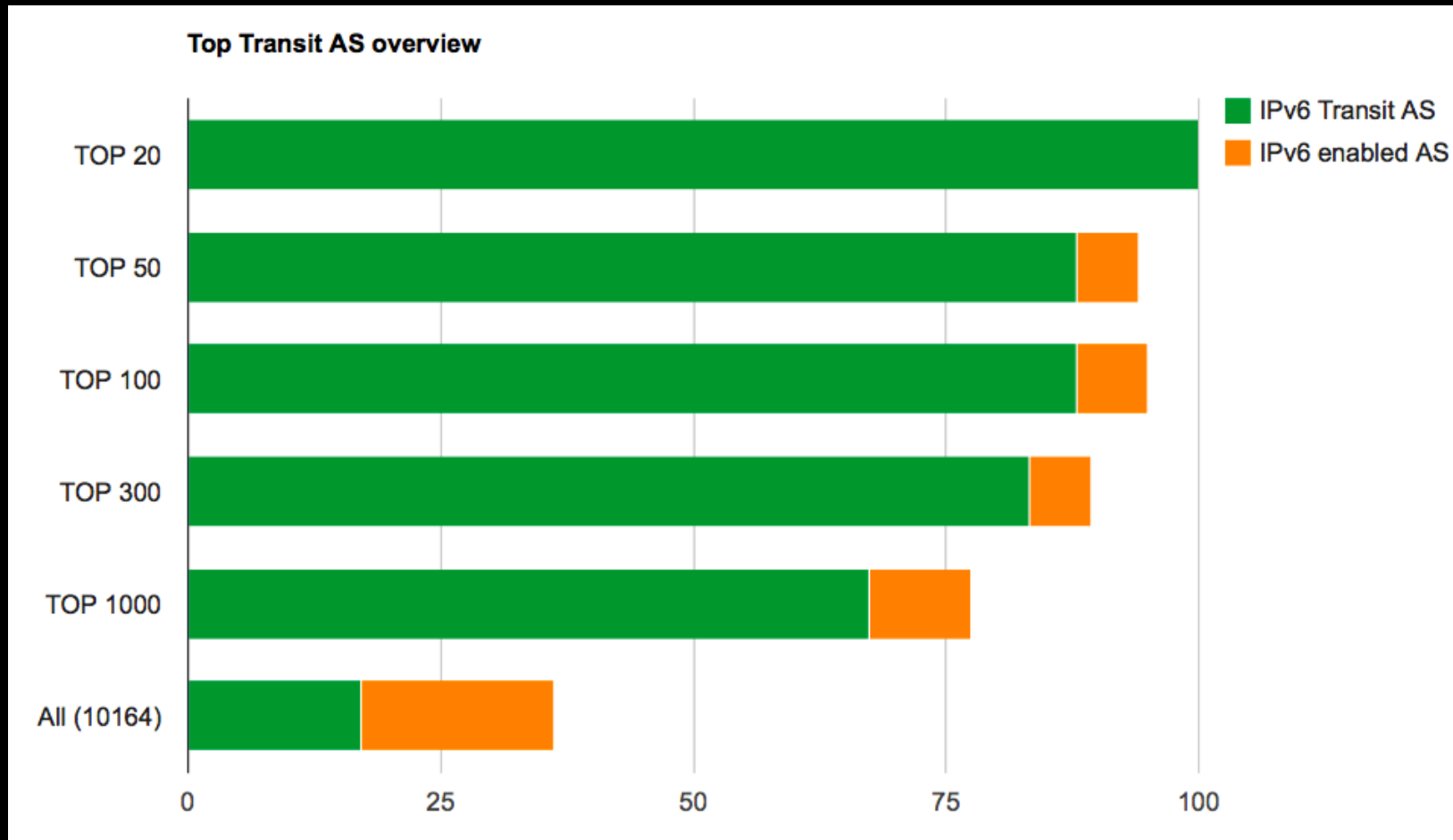
- APIIPv6TF @APNIC36 Aug 2013
- IPv6 deployment status update
 - IPv6 deployment statistics
- APIIPv6TF @APNIC37 Feb 2014

APIPv6TF @APNIC36 Aug 2013

- APIPv6TF meeting at APNIC36
 - Supporting the AP community's IPv6 deployment by sharing up to date IPv6 case studies, economy and industry update
 - Input from Vietnam and New Zealand
 - Input from industries etc.
 - Mark Townsley (about MAP)
 - Lee Howard (TWC)
 - Byron Ellacott (APNIC)
 - Liu Yu (ChinaNetCenter)
 - Input from IPv6 Readiness Measurement BoF
 - Shian-Shyong Tseng (TWNIC)











IPv6 adoption in Internet core networks

<http://6lab.cisco.com/stats/cible.php?country=world>



World ranking

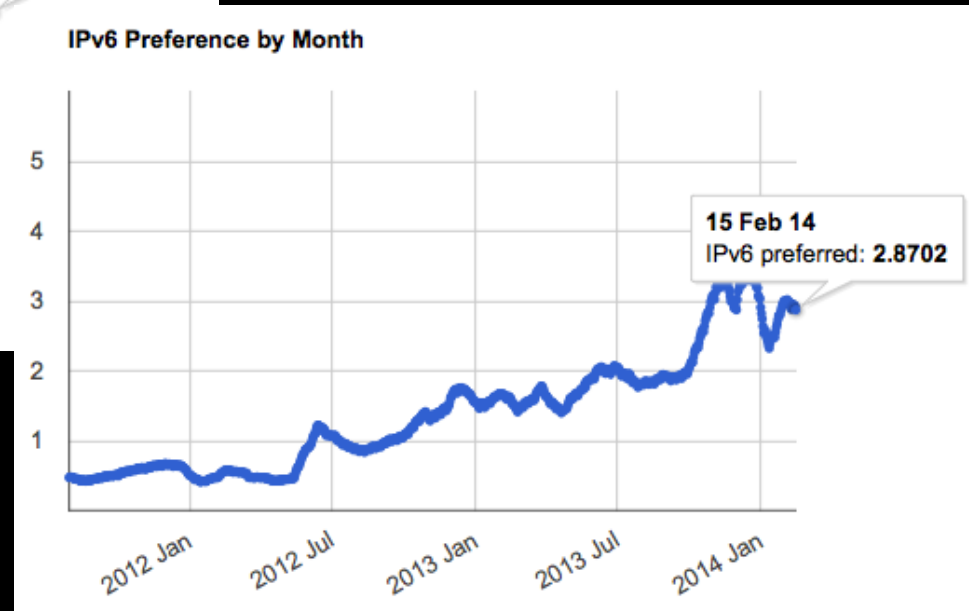
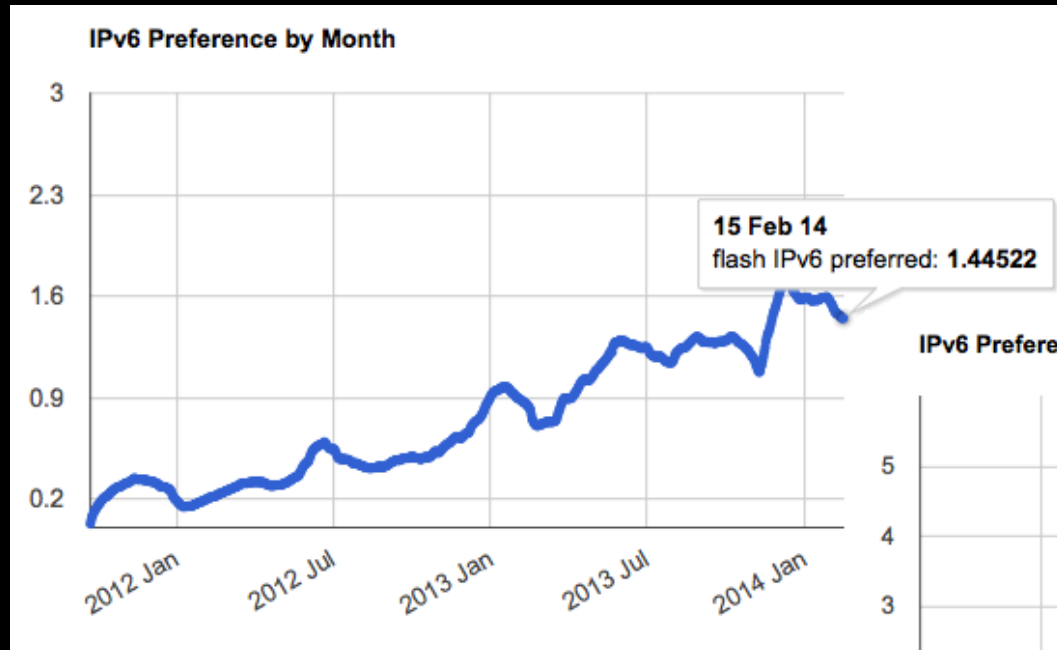
IPv6 ready web sites <http://www.vyncke.org/ipv6status/>

Rank	Country	Sample	Green	Orange
1	 Slovenia	50	34.0% (17)	0.0% (0)
2	 Czech Republic	50	30.0% (15)	0.0% (0)
3	 Vanuatu	28	28.6% (8)	0.0% (0)
4	 Maldives	14	28.6% (4)	0.0% (0)
5	 Brazil	50	24.0% (12)	0.0% (0)
6	 Singapore	50	22.0% (11)	0.0% (0)
7	 United States of America	50	20.0% (10)	2.0% (1)
8	 Netherlands	50	18.0% (9)	4.0% (2)
9	 Hong Kong	50	16.0% (8)	2.0% (1)
10	 Switzerland	50	16.0% (8)	0.0% (0)

<http://www.vyncke.org/ipv6status/> 06/02/2014

IPv6 measurement

End user readiness: World



Data source from "flash" and "JavaScript"
and including viewers from mobile devices

<http://labs.apnic.net/ipv6-measurement/Regions/001%20World/> as of 6/2/2014

IPv6 traffic measurement by Google



<http://www.google.com/intl/en/ipv6/statistics.html>

IPv6 deployment leaderboard in the World (commercial operators)

ASN	Entity	Economy	IPv6 preferred rate
22394	Cellco Verizon Wireless	US	44.90
55430	STARHUBINTERNET-AS-NGNBN Starhub Internet Pte Ltd	SG	30.72
18126	CTCX Chubu Telecommunications Company; Inc.	JP	29.24
2516	KDDI CORPORATION	JP	27.20
8708	RSC & RDS SA	RO	23.88
3303	Swisscom (Switzerland)	CH	23.60
12322	PROXAD Free SAS	FR	20.98
20825	Unitymedia NRW GmbH	DE	18.51
4739	INTERNODE-AS Internode Pty Ltd	AU	16.55
6389	Bellsouth net Inc.	US	15.94
7922	Comcast Cable Communications	US	15.01
7018	AT&T Services Inc.	US	14.43
23655	Snap Internet Limited	NZ	12.20
4773	MobileOne Ltd Mobile/Internet Service Provider	SG	9.20

<http://labs.apnic.net/ipv6-measurement/AS/18/11//2013>

Observation

- IPv6 deployment status is varied among regions, economies and individual ASN (network operators)
 - IPv6 deployment is not happening all at once
 - Some economies have been very active in terms of IPv6 deployment
 - Some ASNs have been very active in terms of IPv6

Way forward

- International knowledge and information sharing
 - Especially IPv6 in Mobile Networks
 - LTE related services – e.g., VoLTE
 - IPv6 infrastructure security
- Avoid reinventing the wheel
 - Including reaching out to other stakeholders than the technical stakeholder
- Possible international collaboration, e.g.,
 - Support economies without IPv6 organizations such as IPv6 TF
- FYI: ISOC's prediction
 - IPv6 deployment will keep its momentum strongly
 - 10% (Google IPv6 traffic measurement) is within reach in 2014

APIPv6TF + IPv6 Readiness Measurement BoF @APNIC37

- Co-hosing this meeting by APIPv6TF and IPv6 Readiness Measurement BoF in order to maximize benefits for participants by avoiding reinventing the wheel
 - First half APIPv6TF Meeting
 - Pv6 deployment road map review and updates by economy
 - IPv6 deployment road map review and update by organization
 - Sharing IPv6 deployment experience lessons learned
 - Status update (including any survey/statistical analysis) on IPv6 enabled CPE
 - IPv6 in mobile networks
 - Update on IETF IPv6 activities
 - IPv6 network infrastructure security
 - IPv6 deployment in the frontier of the Interment of Everything

APIIPv6TF + IPv6 Readiness Measurement BoF @APNIC37

- The second half is IPv6 Readiness Measurement BoF
- The objective of the BoF:
 - To encourage organizations that have been working on IPv6 deployment
 - To share IPv6 readiness measurement methods, criteria, and outcomes
- 26th Feb 2014 (Wed) 16:00 – 19:00
 - Grand Caymans, Level 10

Thank you!

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