# **APNIC Update**

VNNIC Members Meeting Guangliang Pan Registration Services Manager





#### **Overview**

- Post IPv4
- IPv6 in Vietnam
- Policy update
- Training update
- Internet governance landscape
- NIR engagement
- APNIC 36





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## **IPv4 transfers**

### APNIC



#### **APNIC facilitates IPv4 transfers**

- All current APNIC accountholders can still get small, rationed portions from the "last /8"
- IPv4 address transfer services
  - Support for intra- and inter-RIR transfers
  - 13 inter-RIR transfers so far from ARIN to APNIC (Nov 2012-Jun 2013)
  - Transfer fee applied (20% of the transferred block's annual fee)
- Pre-approval service, with opt-in anonymous listing
- Broker listing; mailing list to enable discussion on topics relevant to transfers

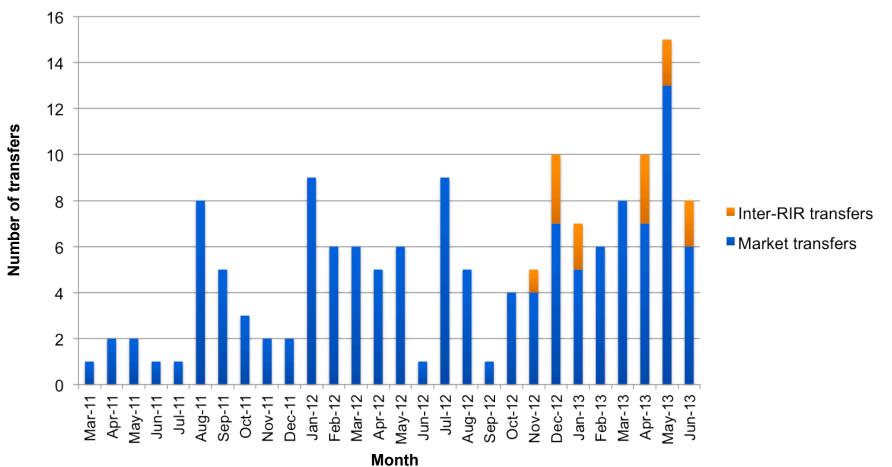
apnic-transfers@apnic.net





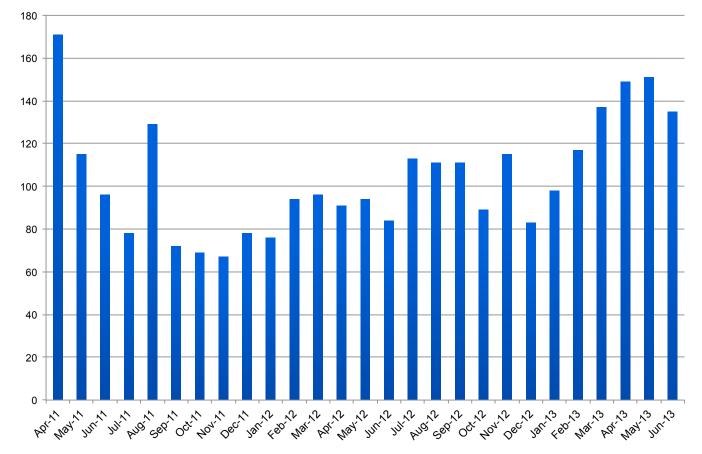
#### **IPv4 market transfers**

APN



As at 30 June 2013

#### Last /8 delegations



Month

As at 30 June 2013



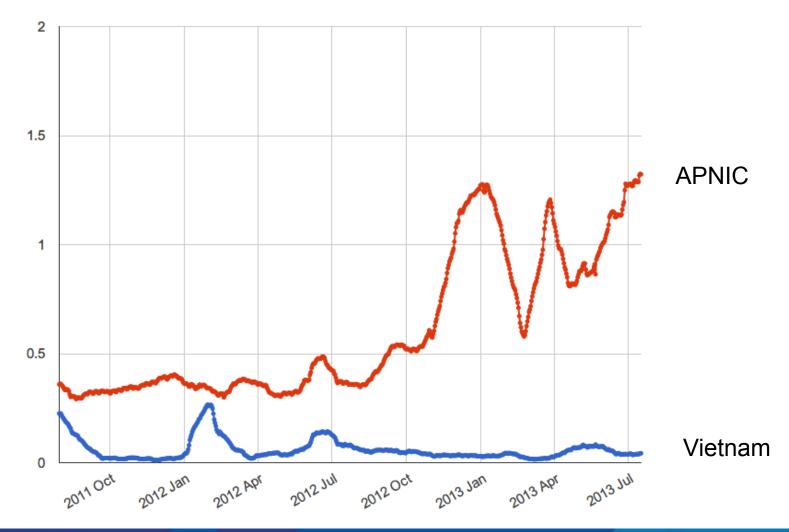
Delegations

## **IPv6 in Vietnam**





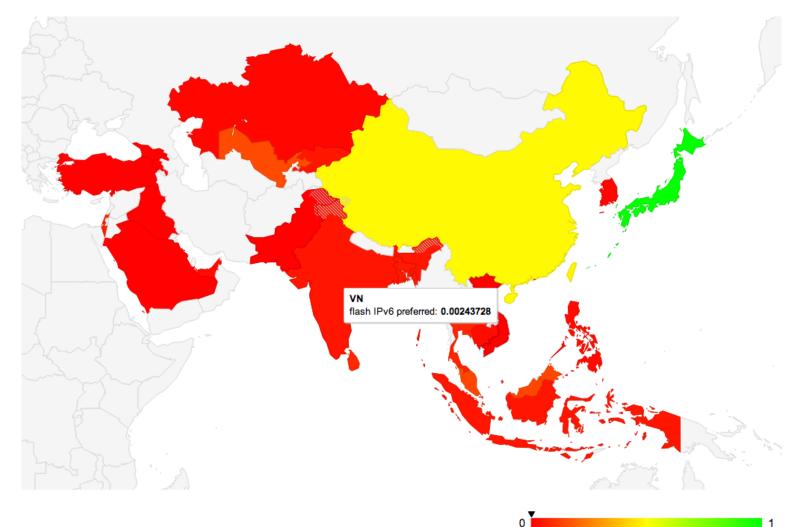
#### **IPv6 preference by month**







#### **IPv6 preferred in Vietnam**







#### **Top 25 and Vietnam**

#### World rankings by IPv6 Preference

APNIC

Economy	v6pref v	3month avg hits/month
CH	10.18%	7702
RO	9.48%	328985
LU	6.82%	2269
FR	5.32%	302158
BE	4.44%	51128
JP	4.43%	320583
DE	3.43%	63951
US	3.09%	445928
PE	3.03%	149687
CZ	1.90%	55256
SG	1.62%	13570
NO	0.96%	8273
GR	0.86%	120580
NL	0.79%	63340
PT	0.78%	27836
<u>SE</u>	0.63%	14274
CN	0.62%	112932
<u>SI</u>	0.61%	14979
TW	0.60%	90952
<u>SK</u>	0.50%	36564

VN ranks in 93<sup>rd</sup> position with below 0.1% preference



#### **Vietnam IPv6 in context**

Class	ASNs assigned	Seen in BGP routing IPv4 or IPv6 (% assigned)	Seen by measurement (% seen BGP)	Routing IPv6 in BGP (% seen BGP)	Routing IPv6, seen in measurement (% routing)
Vietnam	227	126 (55%)	98 (77%)	14 (11%)	10 (71%)
March 2013	227	123 (54%)	91 (74%)	15 (12%)	7 (46%)
APNIC	8802	5393 (61%)	5208 (96%)	1094 (20%)	486 (44%)

- Constant participation in global BGP IPv6 since March 2013
  - Roughly the same BGP-active ASNs in Vietnam are now seen in the measurement
  - Variances probably reflect BGP and sampling differences
- VN ASN participation in global IPv6 BGP remains slight compared to the region
- ASNs with end-user active IPv6 in Vietnam has not significantly advanced since earlier in 2013





#### **VN ASNs active with IPv6**

ASN	Net Name	Entity
7552	VIETEL-AS-AP	Vietel Corporation
7602	SPT-AS-VN	Saigon Postel Corporation
18403	FPT-AS-AP	The Corporation for Financing & Promoting Technology
23902	VNNIC-AS-VN	Vietnam Internet network information center (VNNIC)
24066	VNNIC-AS-VN	Vietnam Internet Network Information Center
24173	NETNAM-AS-AP	Netnam Company
24176	NETNAMHCMC-AS-AP	Branch of Netnam Company in Ho Chi Minh City
45543	SCTV-AS-VN	SaiGon Tourist cable Televition Company
45899	VNPT-AS-VN	VNPT Corp
131415	VNNIC-AS-VN	Vietnam Internet network information center (VNNIC)





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#### **APNIC Policies in 2013**

- Implemented:
  - prop-104: Clarifying demonstrated needs requirement in IPv4 transfer policy (Feb 2013)
  - prop-101: Removing multihoming requirement for IPv6 portable assignments (Feb 2013)
- Did not reach consensus at APNIC 35:
  - prop-105: Distribution of returned IPv4 address (modification of prop-088)
    - Returned to author for further development
  - prop-106: Restricting excessive IPv4 address transfers under the final /8 block
    - Abandoned





#### **New proposals for APNIC 36**

 prop-105-v002: Distribution of returned IPv4 address blocks (Modification of prop-088)

www.apnic.net/policy/proposals/prop-105

 This policy proposes to define a separate distribution policy for all non-103 IPv4 address blocks in the APNIC pool, to start the distributions once "Global policy for post exhaustion IPv4 allocation mechanisms by the IANA" is activated.





#### **New proposals for APNIC 36**

- prop-107-v001: AS number transfer policy proposal www.apnic.net/policy/proposals/prop-107
  - This policy would permit the transfer of Autonomous System Numbers (ASNs) within the APNIC region and between regions with compatible inter-regional ASN transfer policies.
- prop-108-v001: Suggested changes to the APNIC Policy Development Process

www.apnic.net/policy/proposals/prop-108

 A proposal to optimize and/or disambiguate procedures carried out under the current APNIC PDP.





#### **Training update**

- Continuing focus on IPv6 deployment
  - Comprehensive face-to-face and eLearning sessions
  - IPv6 eLearning day (first Wednesday of every month)
- eLearning
  - Every Wednesday in three time zones
  - 23 modules (1-hour duration per module)
  - Enhanced schedule for 2013
- Face-to-Face
  - Extensive hand-on exercises
  - Physical and Virtual Training Labs to enable participants to build and configure networks
- New training website

#### training.apnic.net





### Training delivered in 2013 (Jan to Jun)

- Face-to-face training
  - 40 courses in 20 locations
  - 1101participants
- eLearning

APN

- 66 courses
- 498 participants



As at 30 June 2013



## Internet governance landscape





#### **Internet tradition**

- During the last thirty years, we have seen the Internet and its coordination structures develop in an open, bottom-up, and multistakeholder environment
- It is just in the last few years that the Internet has received increased attention from governments
  - Internet seen as a critical infrastructure
  - Growing concerns about the consequences of cybercrime
- Some recognize the current successes, others support an intergovernmental model
  - Ongoing discussions





#### **How APNIC participates**

- APNIC has been actively involved in the evolution of the multistakeholder model
  - Since WSIS, in all IGFs, at ICANN, NRO, ASO, and other organizations
- APNIC has active engagements with intergovernmental organizations, such as:
  - APT
  - APEC TEL
  - ITU
  - OECD
- Too many acronyms, but all of these have meaningful representation



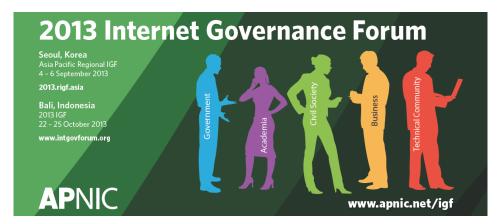


#### **Internet Governance Forum**

- Multistakeholder model in action
  - Open discussions that can help inform policy making on all aspects of Internet governance
  - Does not produce concrete outcomes
  - Participation to all on equal footing

www.apnic.net/igf

- Regional IGF Seoul, Korea from 4-6 September
- Global IGF Bali, Indonesia from 22-25 October





## **APNIC and the NIRs**





### **Engaging with NIRs**

- An important part of the APNIC community
- Long collaboration with VNNIC
- NIRs operate in a way that is consistent with regional and global resource management policies
  - Local policies cannot conflict with regional or global policies
- All NIRs and NIR members are encouraged to participate in the APNIC Policy Development Process (PDP)

www.apnic.net/nir





#### 20<sup>th</sup> anniversary

- We are celebrating our 20<sup>th</sup> year of service this year!
- Join us for APNIC 36 in Xi'an, where we will be commemorating this anniversary with special events throughout the conference



conference.apnic.net/36





### APNIC



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## Thank you