



IPv6 – CÔNG NGHỆ VÀ ỨNG DỤNG VỚI VIỆT NAM
IPv6 – TECHNOLOGY & APPLICATIONS FOR VIETNAM

Melia Hotel, Hanoi 31 MAY – 1 JUNE 2012

IPV6 DEPLOYMENT IN VIETNAM

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- Policy for IPv6 Deployment in Viet Nam
- Vietnam National IPv6 Task Force
- Vietnam National IPv6 Action Plan
- IPv6 Deployment status in Viet Nam

- 6 May, 2008, the Minister of Information and Communications has issued directives No. 03/2008/CT-BTTTT on the promotion of IPv6 address.
- Assigned to the management units and ISPs three basic tasks: to propagate and disseminate awareness about the importance of using IPv6; quickly deploy, use and provide services based on IPv6 and strengthen research and training activities on IPv6.
 - A milestone in the process IPv6 deployment in Vietnam.



Policies for IPv6 Deployment



→ 6 January, 2009, the Minister of Information and Communications has issued Decision No. 05/QD-BTTTT establishment Vietnam National IPv6 Task Force with the task of research, plans and schedule for implementing the transition of IPv4 to IPv6 in Vietnam.

→ 29 March, 2011, Minister of Information and Communication has issued Vietnam National action plan on IPv6 which determine the objectives, specific roadmap for transition to IPv6 in Vietnam.

→ History and structure

- Was formed in January, 2009 to take the task of research, plans and schedule for implementing the transition of IPv4 to IPv6 in Vietnam.
- The leader: Mr Le Nam Thang - Vice Minister of MIC.
- Board of member: VNNIC, CEO of all ISP
- Working group: NOC Manager, Engineers from ISP

→ Promoting Activities and results

- Submit the National action plan on IPv6
- Setup National IPv6 network
- Deploy IPv6 in critical networks: national DNS system and VNIX
- Provide training on V6

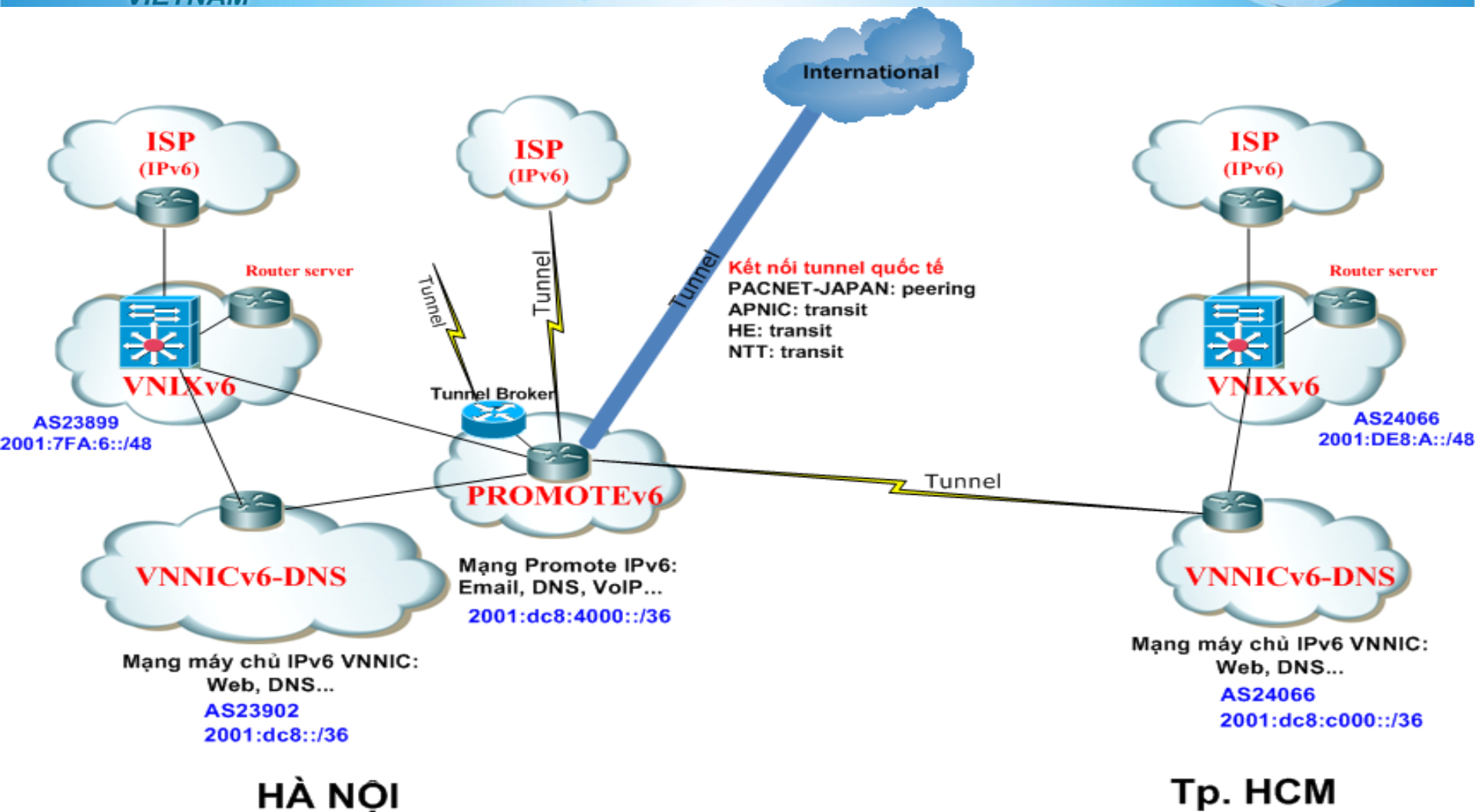
→ Stage 1: Preparation (2011 – 2012):

- Make the assessment of the network; forming the national IPv6 test network; implementation of IPv6 test and performed extensive training of human resources
- Vietnamese ISPs shall issue their own IPv6 action plan, follow on National plan on IPv6.

- Stage 2: Implementation (2013 – 2015):
 - Transition from IPv4 networks to simultaneously support IPv4 and IPv6; forming national IPv6 network infrastructure; and provide testing IPv6 services to end users.
- Stage 3: Accomplishment (2016 - to 2019):
 - Ensure the stable operation of Internet in Vietnam with IPv6-based technology.

IPv6 Deployment in some Critical Networks

- **“.vn” cctld: Support IPv6**
 - A.DNS-SERVERS.vn AAAA IPv6 address = 2001:678:4::12
 - ipv6.vnnic.net AAAA IPv6 address = 2001:dc8:5::115
 - ipv6.vnnic.net.vn AAAA IPv6 address = 2001:dc8:5::115
 - mail.ipv6tf.vn internet address = 203.119.8.118
 - mail.ipv6tf.vn AAAA IPv6 address = 2001:dc8:4005::118
 - my.ipv6tf.vn internet address = 203.119.8.119
 - my.ipv6tf.vn AAAA IPv6 address = 2001:dc8:4005::119
- **Vietnam National Internet eXchange (VNIX): Support IPv6 (VNIXv6)**



- **VNIXv6:** with two points in Hanoi and Hochiminh city.
- **VNNICv6 (DNS) Network:** VNNIC's IPv6 Network with DNS, web, mail....services.
- **Promote network:** For community and members to connect to promote IPv6 deployment in Vietnam: DNS, web, email, VoIP, Tunnel broker...
- **International connection: IPv6 (tunnel)**
 - Peering: PACNET-JPAN.
 - Transit: APNIC, HE, NTT.

DNS IPv6 dual-stack

- VNNIC's DNSv6:
 - dns4.vnnic.net.vn/2001:dc8:5::70
 - dns5.vnnic.net.vn/2001:dc8:C005::70
- National DNS servers.
 - A.dns-servers.vn/2001:678:4::12

IPv6 Website

- <http://www.ipv6.vn>
- <http://my.ipv6tf.vn>
- <http://ipv6.vnnic.vn>, <http://ipv6.vnnic.net>...

Emailv6

- Offer IPv6 mail service for members who connect to National IPv6 network.
- <http://mail.ipv6.vnnic.net>

VoIPv6

- Offer VoIP with IPv6 for members who connect to National IPv6 network.
- Both soft phone and hard phone are available.

Tunnel Broker

- VNNIC offer client and tunnel broker services for community. End user and end site can have international IPv6 connection through IPv6 National IPv6 network.

- Vietnamese ISPs play crucial role in the national transition to IPv6
- Most of large ISPs has registered IPv6 address blocks .
- Almost all large ISP in Vietnam has issued their own IPv6 Action plan that conform with the National plan.

- Still lack of fully awareness about V6.
- No any ISP to provide commercial service on V6.
- Just some report on ADSL and 3G testing services by some largest ISP's.

- Vietnam got some first result in deploying IPv6 but it just still be in the initial step.
- There is a big gap for Vietnam to catch up with the current international trend.
- Vietnamese communities (ISPs, government, vendor, end user...) need improve awareness about deploying IPv6 to narrow the gap.
- Vietnam IPv6 Task force will play a key role on the way to V6 in Vietnam.

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THANK YOU