

# Asia Pacific IPv6 Deployment and Trends

**8th Australian IPv6  
Summit**

18/10/2012

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APIPV6TF

# Introduction

- APIPv6TF
    - Established in 2003 by initiatives of IPv6 leaders in the region
      - To support IPv6 deployment in the region
- APNIC is providing secretariat support since 2010
- To increase stability in its operation
  - Regular meetings twice in a year in conjunction with APNIC and APRICOT conferences
  - Remote participation tools are available

# IPv6 deployment Global

- According to labs.apnic.net IPv6 monitoring data (<http://labs.apnic.net/ipv6-measurement/>):

Group	IPv6 Preferred (%)	IPv6 Capable (%)
OECD	0.3	4.6

- Still **BRICS** way to go from actual deployment point of view  
BRICS: 0.2, 7.9
- But IPv6 deployment is picking up its pace

# Allocation of the last five /8s (February 3rd, 2011)



<http://www.nro.net/media-center/video-archive-3-february-2011>

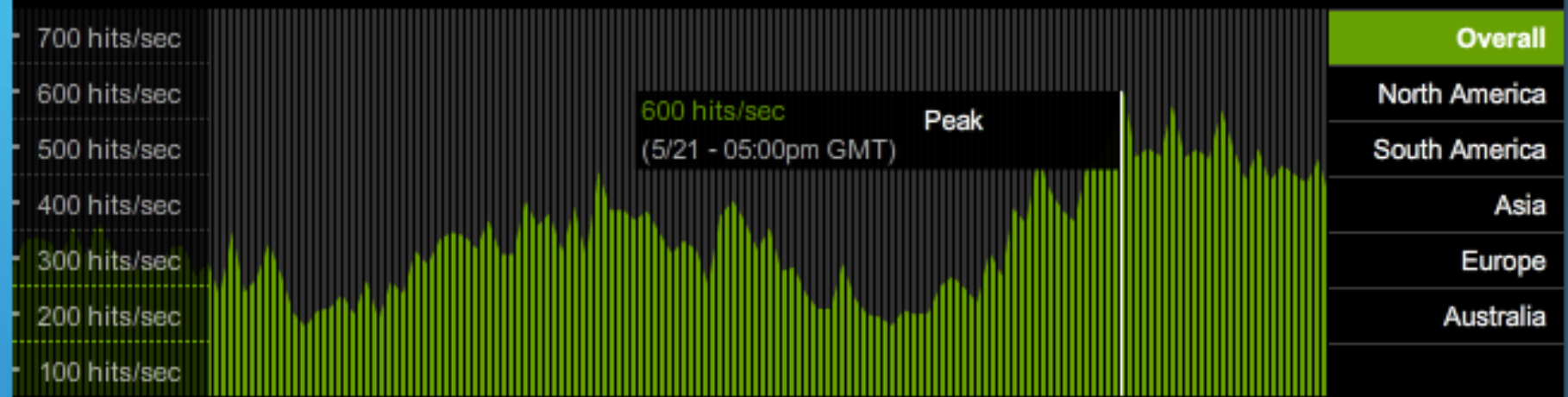
# IPv6 in the World?

## Akamai IPv6 Statistics

**371** IPV6 HITS  
PER SECOND

?

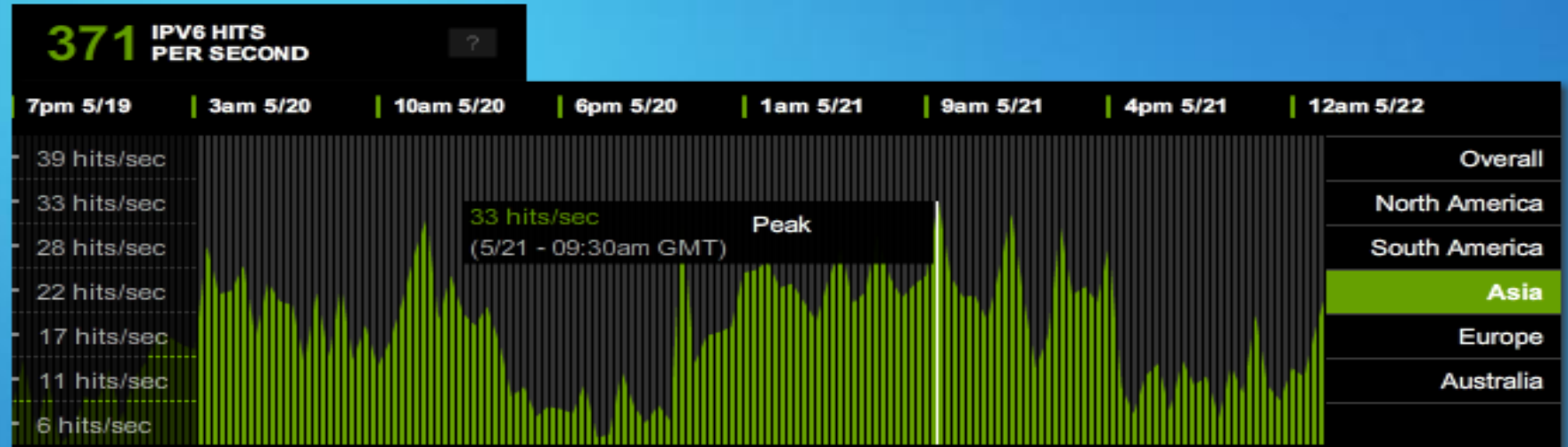
7pm 5/19 | 3am 5/20 | 10am 5/20 | 6pm 5/20 | 1am 5/21 | 9am 5/21 | 4pm 5/21 | 12am 5/22



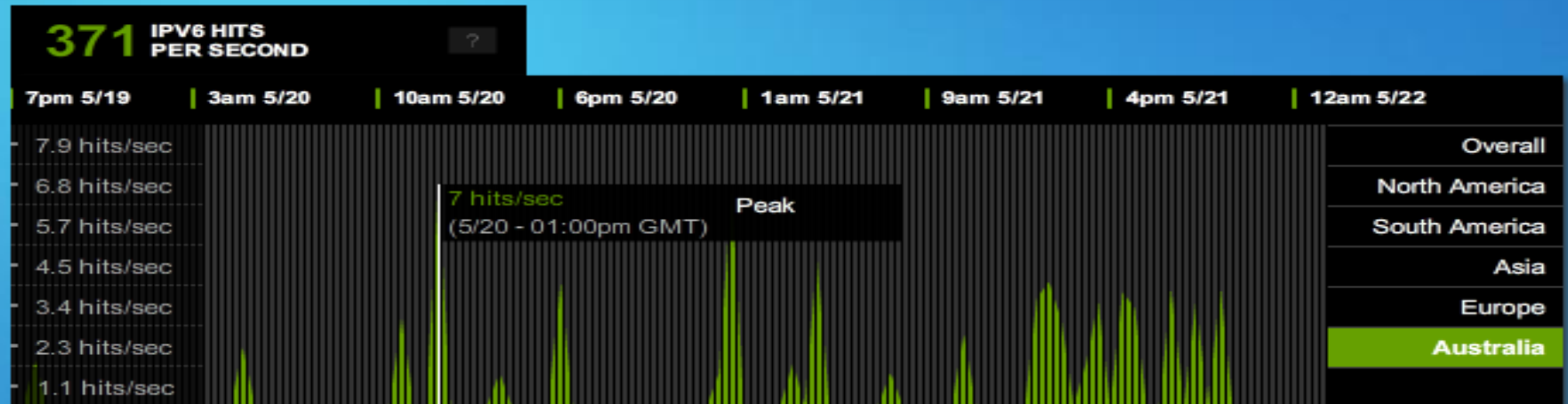
Source: <http://www.akamai.com/ipv6>

# IPv6 in Asia Pacific?

## Akamai IPv6 Statistics



## Akamai IPv6 Statistics



# IPv6 deployment cases

## Global

- US
  - Comcast
    - IPv6 production deployment in Nov 2011
    - IPv6 home networking pilot market launch begins in April 2012
  - T-Mobile USA
    - IPv6 is deployed across entire T-Mobile US network
    - Via Samsung Nexus S and Samsung Galaxy Nexus
- France
  - France Telecom Orange
    - IPv6 VPN services since 2009
    - Field trial started in 2011 + plan to enable commercial IPv6 services in 2012

# IPv6 deployment cases AP region

- Australia
  - \_ Internode provides IPv6 commercial services
  - \_ Telstra rolling out to 'commercial/government'
  - \_ AGIMO Federal Government initiatives
- China
  - \_ CERNET implemented native IPv6 network
- Japan
  - \_ KDDI au Onenet over IPv6
  - \_ NTT DoCoMo provides IPv6 services over LTE



# Supporting IPv6 deployment in the AP Region

- 56 Regional Economies (APNIC LIST)

AFGHANISTAN	INDONESIA	NORTHERN MARIANA ISLANDS	PITCAIRN
AMERICAN SAMOA	INDIA	MALDIVES	SAMOA
AUSTRALIA	BRITISH INDIAN OCEAN TERRITORY	MALAYSIA	SOLOMON ISLANDS
BANGLADESH	JAPAN	NEW CALEDONIA	SINGAPORE
BRUNEI DARUSSALAM	CAMBODIA	NORFOLK ISLAND	FRENCH SOUTHERN TERRITORIES
BHUTAN	KIRIBATI	NEPAL	THAILAND
COCOS AND KEELING ISLANDS	DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA	NAURU	TOKELAU
COOK ISLANDS	REPUBLIC OF KOREA	NIUE	TIMOR-LESTE
CHINA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	NEW ZEALAND	TONGA
CHRISTMAS ISLAND	SRI LANKA	FRENCH POLYNESIA	TUVALU
FIJI	MARSHALL ISLANDS	PALAU	TAIWAN
MICRONESIA (FEDERATED STATES OF)	MYANMAR	PAPUA NEW GUINEA	VIETNAM
GUAM	MONGOLIA	PHILIPPINES	VANUATU
HONG KONG SPECIAL ADMINISTRATIVE REGION OF CHINA	MACAO SPECIAL ADMINISTRATIVE REGION OF CHINA	PAKISTAN	WALLIS AND FUTUNA ISLANDS

# Supporting IPv6 deployment in the AP region

APIPV6TF 6 monthly Economy Update:

- efforts to increase IPv6 deployment  
in the Asia Pacific region, e.g.

February 2012 New Delhi, August  
2012 Phnom Penh;

- \_ Pakistan
- \_ Australia
- \_ China
- \_ India
- \_ Singapore
- \_ Taiwan
- \_ Malaysia
- \_ Japan
- \_ New Zealand

# Supporting IPv6 deployment in the AP region

- APIIPv6TF provides forums to member economies to exchange IPv6 deployment stories
  - Updates from 8 economies
  - Lots of support from the government sector

# Meeting Space and Information Dissemination for the AP Region – e.g.

**Executive Summary:** The purpose of this planning guide is to provide United States (U.S.) Federal Government agency leaders with practical and actionable guidance on how to successfully integrate Internet Protocol version 6 (IPv6) throughout their enterprise. This guide has been updated from the original guide published in 2009 to aid in understanding the Federal Government's Internet Protocol version 6 (IPv6) history, vision, current goals, and deadlines. Based on the information found in this document, the Agency Chief Information Officer (CIO), IPv6 Transition Managers, Chief Enterprise Architects, and Chief Acquisition Officers (CAO) can assess their own agency's current IPv6 implementation progress and develop an agency-specific plan with detailed milestones to achieve the defined IPv6 goals for FY2012 and FY2014.

Download the USGv6Roadmap: USGv6Roadmap.pdf on IPv6forum web site:  
[www.ipv6forum.org](http://www.ipv6forum.org)

Dr. Peter Tseronis  
Chairperson of the Federal IPv6 Task Force  
Chief Technology Officer, U.S. Department of Energy

# Way forward

- Next APIPv6TF meeting
  - February 2013 in Singapore
  - Join us and share your stories
- Life after World IPv6 Launch
  - 6th June 2013?
  - Further initiatives for network users to deploy IPv6 and not to turn it off
    - <http://www.worldipv6launch.org/>
- 9th Australian IPv6 Summit

# APIPv6TF Mailing List

- Open to all, subscribe at:

**<http://www.ap-ipv6tf.org/join-us>**

More information at

**<http://www.ap-ipv6tf.org/>**

# Thank you!

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