



IPv6 Deployment
Australia Update

Michael Biber

President

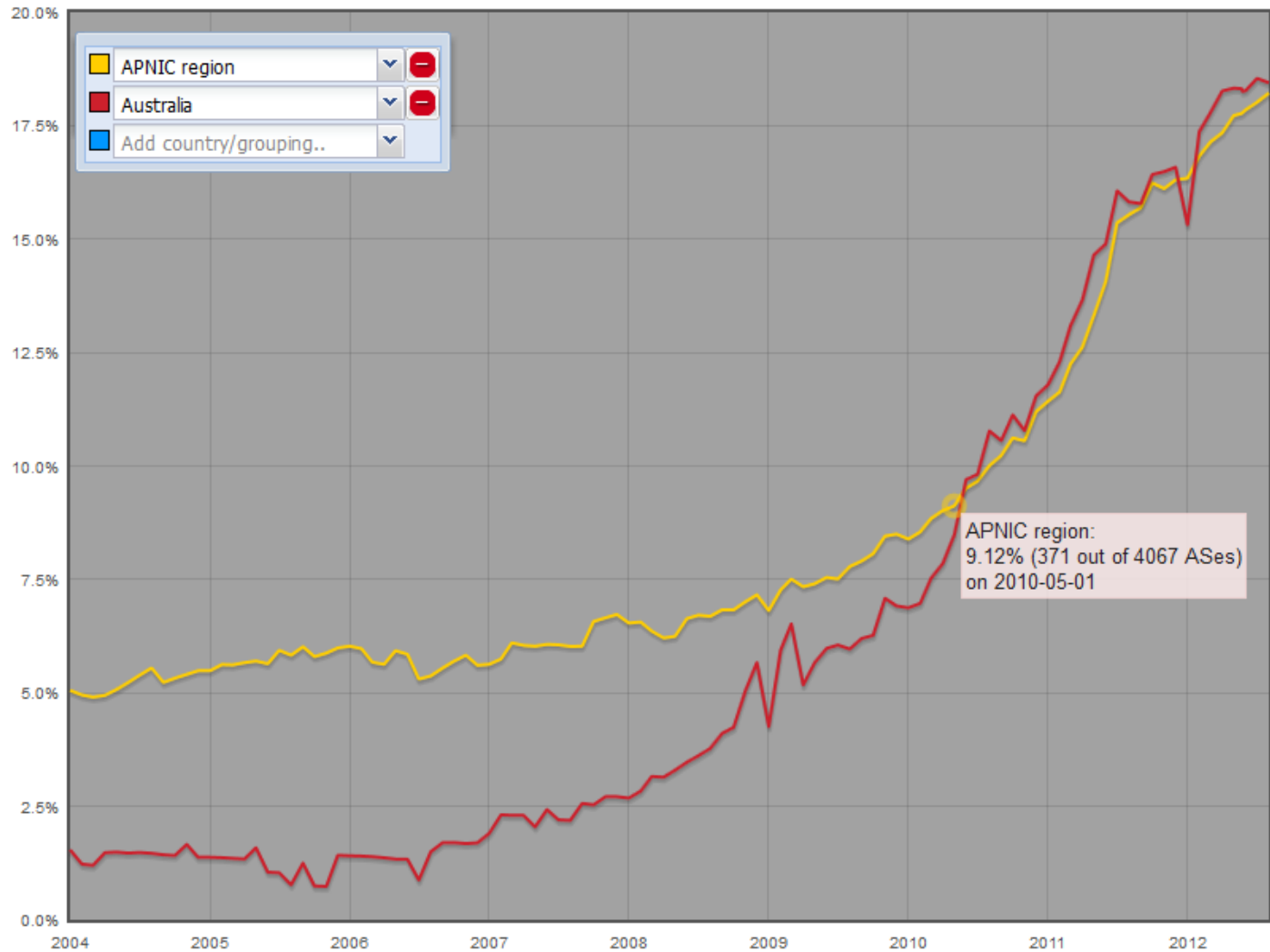
IPv6 Forum Australia

Acting Chair

Asia Pacific IPv6 Task Force

IPv6 in Australia - Growing Trend

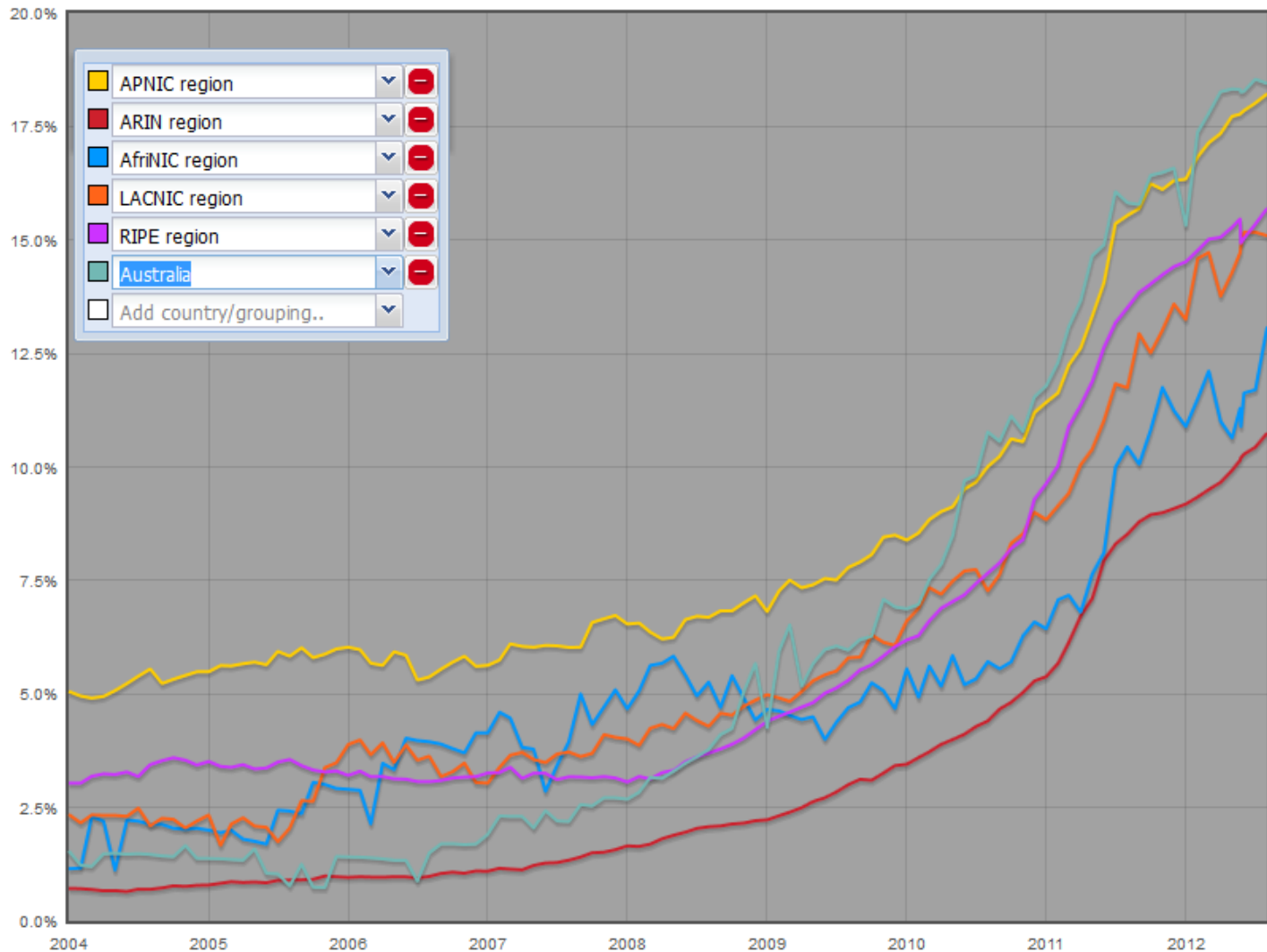
Source:



This graph shows the percentage of networks (ASes) that announce an IPv6 prefix for a specified list of countries or groups of countries

IPv6 in APNIC Growing

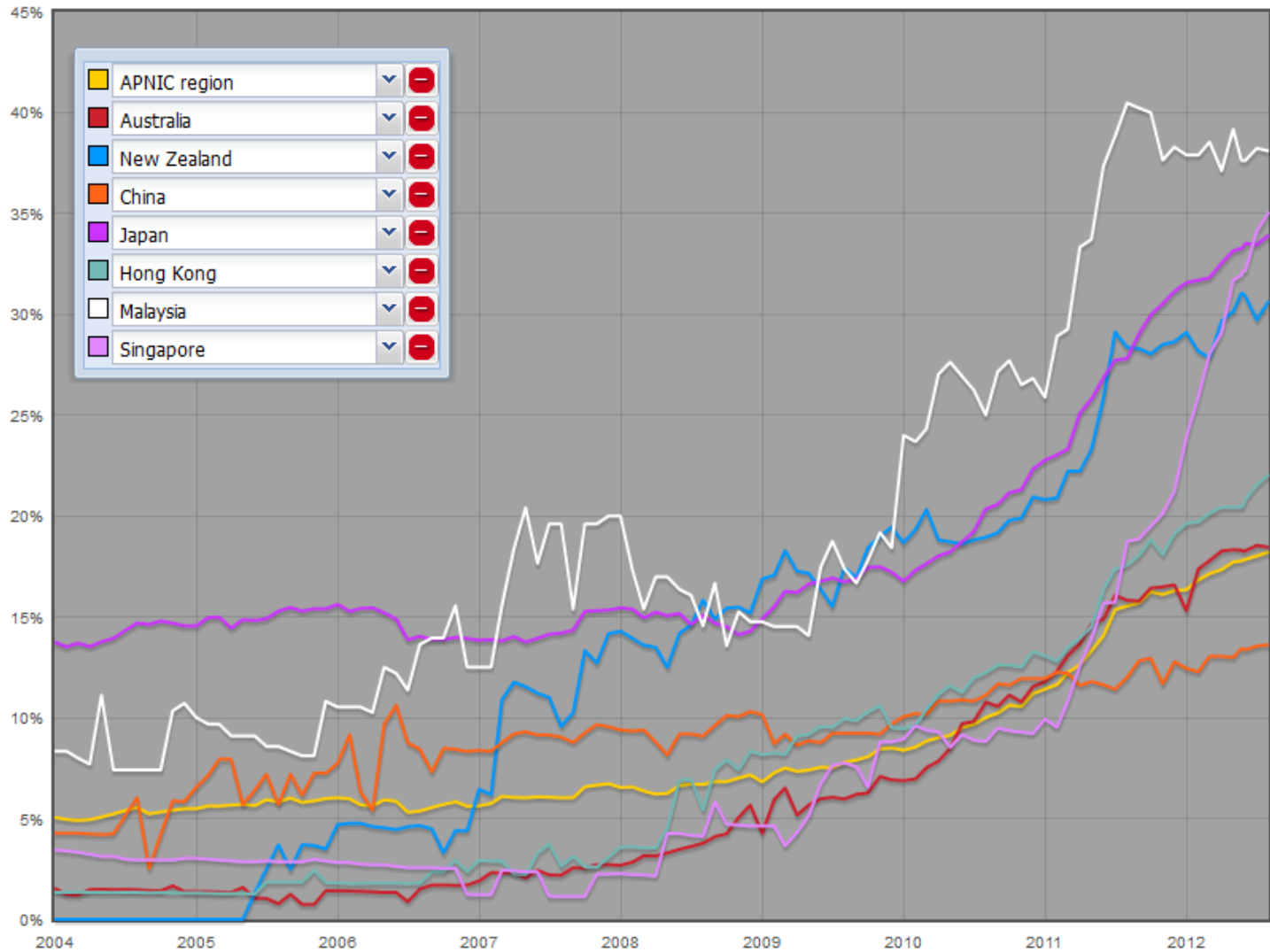
Source:



This graph shows the percentage of networks (ASes) that announce an IPv6 prefix for a specified list of countries or groups of countries

IPv6 in Australia Growing

Source:



This graph shows the percentage of networks (ASes) that announce an IPv6 prefix for a specified list of countries or groups of countries

IPv6 transition plan and deployment status update

- State and Federal Government initiatives
 - AGIMO Guidelines for Federal Government – IPv6 Ready end 2012
- World IPv6 Day June 2011
- World IPv6 Launch June 2012
 - National subsidiaries of key international organisations **Now turned on and staying on!**
- Carrier/ISP Offerings becoming available , e.g.,
 - Internode **native** IPv6,
 - Telstra **native** IPv6 for Fibre connected customers
 - Telstra OPT-IN for other business customers
 - Niche providers such as IPv6Now Tunnels growing
 - National Broadband Network - IPv6 at OSI 3 [Multicast]

Partnership between governments and the industry

- Government's efforts to adopt IPv6 lead the industry - e.g., government's networks, government services, websites, procurement practice, outsourced services
- Effective collaboration in adopting IPv6 among governmental agencies – JCIO Council
- Victorian Government initiatives e.g., VIC6

Current Australian Status

Mark Prior (MRPnet) has extended the work of Ron Broersma of the US Defense Research and Engineering Network (DREN) to identify the current status of IPv6 Deployment that is relevant to Australia.

Weekly script that runs every Sunday evening and tests the status of the sites. It makes sobering reading...but it is evolving.

IPv6 degrees of readiness Web / Email / DNS access:

MP IPv6 Readiness Survey

- http://www.mrp.net/IPv6_Survey.html
- **Summary Statistics**

	Accessible via IPv6	Total	Percentage
Web Servers	140	1301	10.8%
Mail Servers	82	130	16.3%
DNS Servers	607	4246	14.3%

Last Updated: Sun Jun 6 04:42:48 2010 UTC

MP IPv6 Readiness Survey

- http://www.mrp.net/IPv6_Survey.html
- **Statistics**

	Accessible via IPv6	Total	Percentage
Web Servers	437	1807	24.2%
Mail Servers	189	1807	10.5%
DNS Servers	1456	5787	25.2%

Last Updated: **Tue Feb 28 03:58:19 2012 UTC**

MP IPv6 Readiness Survey

- http://www.mrp.net/IPv6_Survey.html
- **Statistics**

	Accessible via IPv6	Total	Percentage
Web Servers	691	2110	32.7%
Mail Servers	415	2110	19.7%
DNS Servers*	449	2379	18.9%

* Change of metric: No. reachable, not numbers of servers

Last Updated: **Thu Aug 23 23:18:37 2012 UTC**

IPv6 Readiness – Select Sites

IP Address Registries

Organisation (domain)	Web	Mail	DNS	NTP	XMPP	SIP	Access	Submit
AfriNIC (afrinic.net)	SUCCESS	SUCCESS	2/2 7/7		SUCCESS	FAIL		
APNIC (apnic.net)	SUCCESS	SUCCESS	4/5 7/8	Stratum 1	SUCCESS	FAIL		
ARIN (arin.net)	SUCCESS	SUCCESS	4/4 4/4		SUCCESS			
China NIR (cnnic.net)	SUCCESS	FAIL	0/0 0/5					
Indonesia NIR (idnic.net)	FAIL	FAIL	0/0 0/2					
Japan NIR (jpnict.net)	SUCCESS	SUCCESS	0/0 2/2					
Korea NIR (krnic.net)	FAIL	FAIL	0/0 0/4					
LACNIC (lacnic.net)	SUCCESS	SUCCESS	2/2 4/5		C-SUCCESS			
Number Resource Organization (nro.net)	FAIL	SUCCESS	0/0 6/6					
RIPE (ripe.net)	SUCCESS	SUCCESS	1/1 6/6	Stratum 1	FAIL			
Taiwan NIR (twnic.net)	SUCCESS	FAIL	1/1 1/2					
Vietnam NIR (vnnic.net)	www.ipv6	FAIL	0/0 1/3					

Australian Federal Government IPv6 Status

Organisation (domain)	Web	Mail	DNS	NTP	XMPP
Agriculture, Fisheries and Forestry (daff.gov.au)	FAIL	FAIL (MQ)	0/0 0/3		
Attorney-General's (ag.gov.au)	FAIL	FAIL	0/0 4/7		
Australian Government (australia.gov.au)	FAIL	FAIL	0/0 0/3		
Broadband, Communication and the Digital Economy (dbcde.gov.au)	FAIL (A)	FAIL (MQ)	0/1 0/2		
Climate Change and Energy Efficiency (climatechange.gov.au)	FAIL	FAIL (MQ)	0/0 0/3		
Defence (defence.gov.au)	FAIL	FAIL	0/2 0/2		
Education, Employment and Workplace Relations (deewr.gov.au)	FAIL	FAIL	0/4 0/5		
Environment, Water, Heritage and the Arts (environment.gov.au)	FAIL	FAIL	0/0 0/3		
Families, Housing, Community Services and Indigenous Affairs (fahcsia.gov.au)	FAIL	FAIL	0/2 0/2		
Finance and Deregulation (finance.gov.au)	FAIL	FAIL	0/0 4/4		
Foreign Affairs and Trade (dfat.gov.au)	FAIL	FAIL	0/2 0/2		
Health and Ageing (health.gov.au)	FAIL	FAIL	0/0 4/4		
Human Services (humanservices.gov.au)	FAIL	FAIL	0/2 0/2		
Immigration and Citizenship (immi.gov.au)	FAIL	FAIL	0/3 0/4		
Infrastructure, Transport, Regional Development and Local Government (infrastructure.gov.au)	FAIL	FAIL	0/0 4/4		
Innovation, Industry, Science and Research (innovation.gov.au)	FAIL	FAIL (MQ)	0/0 0/3		
Parliament of Australia (aph.gov.au)	FAIL	FAIL	0/2 0/6		
Prime Minister and Cabinet (dpmc.gov.au)	FAIL	FAIL (MQ)	0/0 0/3		
Resources, Energy and Tourism (ret.gov.au)	FAIL	FAIL (MQ)	0/0 0/3		
The Treasury (treasury.gov.au)	FAIL	FAIL	0/1 0/2		
Veterans' Affairs (dva.gov.au)	FAIL	FAIL	0/0 0/2		

Organisation (domain)	Web	Mail	DNS
Agriculture, Fisheries and Forestry (daff.gov.au)	FAIL	FAIL (MQ)	0/0 0/3
Attorney-General's (ag.gov.au)	FAIL	FAIL	0/0 4/7
Australian Government (australia.gov.au)	FAIL	FAIL	0/0 0/3
Broadband, Communication and the Digital Economy (dbcde.gov.au)	FAIL (A)	FAIL (MQ)	0/1 0/2
Climate Change and Energy Efficiency (climatechange.gov.au)	FAIL	FAIL (MQ)	0/0 0/3
Defence (defence.gov.au)	FAIL	FAIL	0/2 0/2
Education, Employment and Workplace Relations (deewr.gov.au)	PROBLEM	FAIL	0/4 0/5
Environment, Water, Heritage and the Arts (environment.gov.au)	FAIL	FAIL	0/0 0/3
Families, Housing, Community Services and Indigenous Affairs (fahcsia.gov.au)	FAIL	FAIL	0/2 0/2
Finance and Deregulation (finance.gov.au)	FAIL	FAIL	0/0 4/4
Foreign Affairs and Trade (dfat.gov.au)	FAIL	FAIL	0/2 0/2
Health and Ageing (health.gov.au)	FAIL	FAIL	0/0 4/4
Human Services (humanservices.gov.au)	FAIL	FAIL	0/2 0/2
Immigration and Citizenship (immi.gov.au)	IPv6	FAIL	3/3 3/4
Infrastructure, Transport, Regional Development and Local Government (infrastructure.gov.au)	FAIL	FAIL	0/0 4/4
Innovation, Industry, Science and Research (innovation.gov.au)	FAIL	FAIL (MQ)	0/0 0/3
Parliament of Australia (aph.gov.au)	FAIL	FAIL	0/2 0/6
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The Treasury (treasury.gov.au)	FAIL	FAIL	0/1 0/2
Veterans' Affairs (dva.gov.au)	FAIL	FAIL	0/0 0/2

For further information contact;-



Narelle Clarke President Internet Society Australia (ISOC-AU)

<http://www.isoc-au.org.au>

president@isoc-au.org.au



Michael Biber, Australia Country Representative IPv6 Forum Australia

<http://www.ipv6forum.org.au>

mbiber@ipv6forum.com.au