

Collaboration among the NIRs and the APNIC IPv6 Program Vol.2

APNIC29, NIR-SIG Meeting
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Overview

- The APNIC IPv6 Program
 - Activities in 2009
- IANA's Final 10% Project
 - Report on outcome
- Working together with the NIRs
 - Future plans

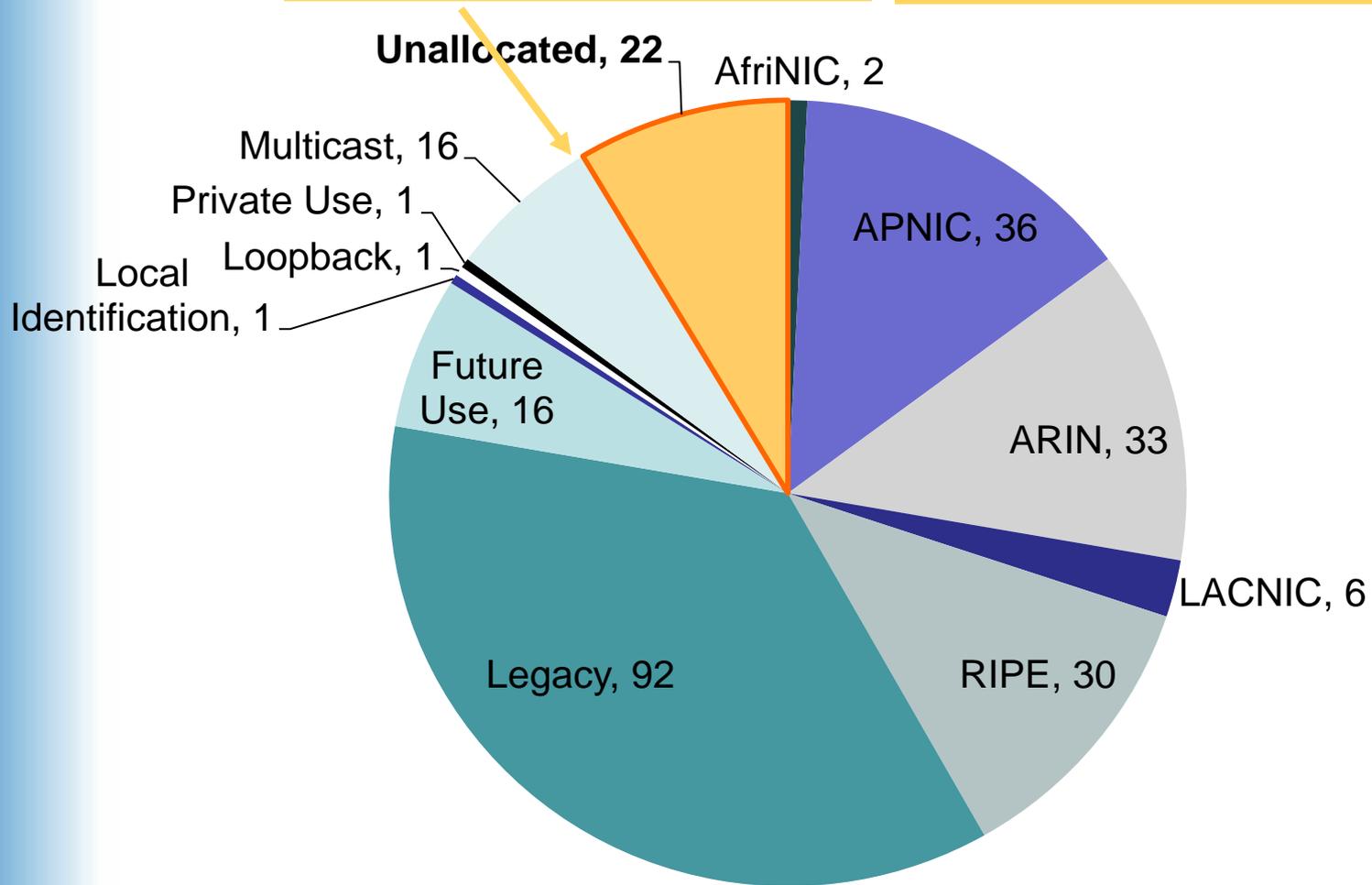
Activities in 2009

- Focused on multi-stakeholder approach
 - Developed new communication materials
 - Reinforced existing collaborative relationships with NIRs
 - Proactively networked to establish new communication channels with Internet organizations (60+) and individuals
 - Created effective foundation for the IANA 10% campaign
 - New collaborative relationships were established:
 - ISOC-AU
 - ISOC-TW
 - ICANN at Large
 - IP Mirror
 - .auDA
 - Obtained support in circulating the IANA 10% message

IPv4 Address Global Distribution

Remaining at IANA 22 x /8

Remaining at IANA 8.6%

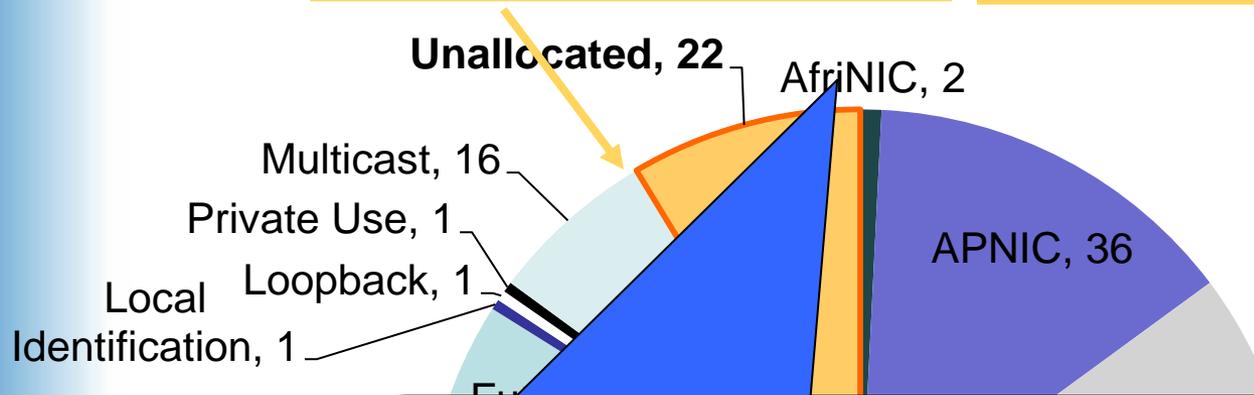


As of 11/02/2010

IPv4 Address Global Distribution

Remaining at IANA 22 x /8

Remaining at IANA 8.6%



22 x /8 remain:

APNIC was allocated 2 x /8 on 19/01/2010

ARIN was allocated 2 x /8 on 11/02/2010

IANA's remaining IPv4 address pool is now below 8.6%

NRO/IANA 10% Media Campaign



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Less than 10% of IPv4 Addresses Remain Unallocated, says Number Resource Organization

Deploying IPv6 - the next generation of the Internet Protocol - is vital to the continued development of the Internet

AMSTERDAM – The Number Resource Organization (NRO), the official representative of the five Regional Internet Registries (RIRs) that oversee the allocation of all Internet number resources, announced today that less than 10 percent of available IPv4 addresses remain unallocated. This small pool of existing IP addresses marks a critical moment in IPv4 address exhaustion, ultimately impacting the future network operations of all businesses and organizations around the globe.

“This is a key milestone in the growth and development of the global Internet,” noted Axel Pawlik, Chairman of the NRO. “With less than 10 percent of the entire IPv4 address range still available for allocation to RIRs, it is vital that the Internet community take considered and determined action to ensure the global adoption of IPv6. The limited IPv4 addresses will not allow us enough resources to achieve the ambitions we all hold for global Internet access. The deployment of IPv6 is a key infrastructure development that will enable the network to support the billions of people and devices that will connect in the coming years,” added Pawlik.

<http://www.nro.net/media>

NRO/IANA 10% Media Campaign



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Media Center

A major media release was
launched on
20/01/2010

organizations around the globe.

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<http://www.nro.net/media>

APNIC/IANA 10% Media Campaign

The screenshot shows the APNIC website interface. At the top left is the APNIC logo. To its right, the user's IP address is displayed as 2001:dc0:a000:4:21f:f3ff:fed5:8a54. Further right are navigation links for 'Contact us', 'Jobs', and 'Site map', along with a search bar. Below this is a horizontal menu with 'Home', 'Services', 'Community', 'Events', 'Publications' (highlighted), 'About APNIC', and 'Log in to MyAPNIC'. The main content area features a 'Publications' header with a background image of a person at a computer. A sidebar on the left lists navigation options under 'News', including 'NRO News', 'Announcements', 'News archives', 'Press resources', 'Research & Insights', 'Media Library', 'Subscribe', and 'Contribute to APNIC news'. The main article is titled 'IPv6 indicator to business leaders' and includes a 'Print this page' button.

Your IP: 2001:dc0:a000:4:21f:f3ff:fed5:8a54

connect

Contact us | Jobs | Site map Search

APNIC

Home Services Community Events Publications About APNIC Log in to MyAPNIC

Publications

Print this page

News

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IPv6 indicator to business leaders

Published on: 2010-01-27

Organizations relying on the Internet to conduct business only have a limited time to act and adapt to changing technologies, or run the risk their online services may become unavailable to a rapidly growing population of users.

With the Number Resource Organization's (NRO) recent announcement that less than 10% of available IPv4 addresses remain unallocated, APNIC is calling on business leaders to act now to ensure that access to online content continues via IPv4 and IPv6 (dual stacking). Suppliers, partners, equipment vendors, and hosting companies are encouraged to support IPv6; and ensure their staff are adequately trained on IPv6.

APNIC's Chief Scientist, Geoff Huston warns: "We've reached a critical low water mark for IP addresses. Out of the original 4.5 billion addresses, less than 400 million remain. This is simply not enough to fuel further growth of the Internet."

"Consider how many new Internet compatible mobile phones were connected in the Asia Pacific in 2009 alone," he notes.

APNIC/IANA 10% Media Campaign



The screenshot shows the APNIC website interface. At the top, there is a navigation bar with the APNIC logo, a search bar, and links for 'Contact us', 'Jobs', and 'Site map'. Below the navigation bar, there is a main menu with tabs for 'Home', 'Services', 'Community', 'Events', 'Publications', 'About APNIC', and 'Log in to MyAPNIC'. The 'Publications' tab is selected. A large blue banner is overlaid on the page, containing the text: 'A major media release was launched on 27/01/2010'. Below the banner, there is a section titled 'Publications' with a list of news items. The first item is 'NRO Ne...', followed by 'Announ...', 'News ar...', 'Press reso...', 'Research...', 'Media Libr...', 'Subscribe', and 'Contribute to APNIC news'. The main content area contains a paragraph of text: 'ensure that access to online content continues via IPv4 and IPv6 (dual stacking). Suppliers, partners, equipment vendors, and hosting companies are encouraged to support IPv6; and ensure their staff are adequately trained on IPv6.' Below this paragraph, there is a quote from APNIC's Chief Scientist, Geoff Huston: 'We've reached a critical low water mark for IP addresses. Out of the original 4.5 billion addresses, less than 400 million remain. This is simply not enough to fuel further growth of the Internet.' At the bottom, there is another quote: 'Consider how many new Internet compatible mobile phones were connected in the Asia Pacific in 2009 alone,' he notes.

Your IP: 2001:dc0:a000:4:21f:f3ff:fed5:8a54 connect

Contact us | Jobs | Site map Search

APNIC

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Thank You!

- Thank you for your great assistance during the IANA 10% campaign
- Media coverage (examples):

Economy	Media name	URL
Korea	News Wire Korea Press Release Network	http://www.newswire.co.kr/newsRead.php?no=452571&lmv=A03
China	c114 (online news)	http://www.c114.net/news/16/a479463.html
Japan	JPNIC PR	http://www.nic.ad.jp/ja/topics/2010/20100120-01.html
Taiwan	Yahoo news	http://tw.news.yahoo.com:80/article/url/d/a/100131/5/1zr9z.html

Global Media Coverage (examples)

Media / Subject line of the article	URL
ZDNet "IPv4 address shortage reaching critical stage"	http://news.zdnet.com/2100-9595_22-385195.html
CNET "IPv4 address in short supply"	http://news.cnet.com/business-tech/?keyword=IPv6
NetworkWorld "Available IPv4 address dwindle below 10%"	http://www.networkworld.com/news/2010/011910-ipv4-addresses-dwindle.html
InfoWorld "Internet addresses expected to run out next year"	http://www.infoworld.com/d/networking/internet-addresses-expected-run-out-next-year-582

Working Together with the NIRs

- As IPv4 milestones occur, NRO and APNIC will continue to launch major media campaigns:
 - When 5% of IANA's IPv4 pool remains unallocated (about 13 x /8)
 - When 5 x /8 of IPv4 are left unallocated
- Please identify relevant media to assist with this effort

Working Together with the NIRs

- APNIC IPv6 Program 2010 Q1 objectives:
 - Identify systematic methods to reach out to enterprises and content providers
 - Your suggestions are appreciated!
- Maintain close communication with the NIRs, especially prior to a major media campaign
 - Provide coordinated messages to the AP community
- Future round table meetings:
 - Share IPv6 strategies and activities with NIR Board Members and staff
 - e.g., A round table meeting between the JPNIC Board and Paul Wilson (APNIC DG) in Jan 2010 explored many Internet community topics including IPv6 strategies

Working Together with the NIRs

- Transition together
 - Establish P2P links between the APNIC IPv6 Program and the NIRs
 - Establish a mechanism of mutual support and exchange
- Share the APNIC IPv6 Program's stance
 - Provide facts on IPv4 exhaustion and IPv6 deployment
 - APNIC does not make operational decisions for our Members and other stakeholders
 - Provide required support to make the right decisions
 - Support the view of the technical community on IPv6 address management
 - Spread community views to key stakeholders
 - Do we need to have an “Additional Parallel Structure” run by ITU to manage IPv6 address space?

last but not least

Let's get ready for IPv6!

IP Address Registries

Organisation (domain)	Web	Mail	DNS	NTP	XMPP
AfriNIC (afrinic.net)	FAIL	SUCCESS	1/6/6	FAIL	
APNIC (apnic.net)	SUCCESS	SUCCESS	5/9/9	Stratum 1	SUCCESS
ARIN (arin.net)	SUCCESS	SUCCESS	2/2/7		SUCCESS
China NIR (cnnic.net)	FAIL	FAIL	0/0/5		FAIL
Indonesia NIR (idnic.net)	FAIL	FAIL	0/0/3		
Japan NIR (jpnict.net)	SUCCESS	SUCCESS	0/2/2		
Korea NIR (krnic.net)	FAIL	FAIL	0/0/3		
LACNIC (lacnic.net)	SUCCESS	SUCCESS	2/4/5		FAIL
Number Resource Organization (nro.net)	SUCCESS	SUCCESS	0/4/4		
RIPE (ripe.net)	SUCCESS	SUCCESS	1/4/4		FAIL
Taiwan NIR (twnic.net)	SUCCESS	FAIL	1/2/2		
Vietnam NIR (vnnic.net)	FAIL	FAIL	0/0/2		

last but not least

Let's get ready for IPv6!

IP Address Registries

Organisation (domain)	Web	Mail	DNS	NTP	XMPP
AfriNIC (afrinic.net)					
APNIC (apnic.net)					SUCCESS
ARIN (arin.net)					SUCCESS
China NIR (cnnic.net)					FAIL
Indonesia NIR (idnic.net)					
Japan NIR (jpnict.net)					
Korea NIR (krnic.net)					
LACNIC (lacnic.net)					FAIL
Number Resource Center (nrc.net)					
RIPE (ripe.net)	SUCCESS	SUCCESS	1/4/4		FAIL
Taiwan NIR (twnic.net)	SUCCESS	FAIL	1/2/2		
Vietnam NIR (vnnic.net)	FAIL	FAIL	0/0/2		

Let's present a good example to the community!

Let's help each other by sharing know-how. We are a team 😊



Thank You!

<miwa@apnic.net>



Discussion Time

Questions?