APNIC

Apster36

The twice-yearly newsletter for the APNIC membership and community

RDAP/WHOIS

The WHOIS protocol is used to discover registration information about network resources.

Labs update

IPv6@APNIC

ISIF Asia update

In just a few years, the Information Society Innovation Fund (ISIF Asia) has evolved considerably.

1993 **20** 2013

APNIC over the last twenty years

Read about how APNIC was formed and how it became a hub for Internet community activity in the region.

APNIC over the last twenty years

For the past two decades, the Asia Pacific Networking Information Centre (APNIC) has served as the Asia Pacific's Regional Internet Registry (RIR). From its humble beginnings, first as an informally funded skeleton staff using borrowed equipment and offices in Tokyo, to a fresh start and almost entirely new staff in Brisbane, APNIC has steadily grown into a mature, well-established, highly professional service organization.

1993 **20** 2013

Here are some highlights of how APNIC was formed and how it became a hub for Internet community activity in the region and a respected voice on the global stage on Internet issues.

1993-1998

APNIC's formation was discussed at a forum called the Coordinating Committee for Intercontinental Research Networking or CCIRN in 1992, where leading Internet pioneers, including Dr Kilnam Chon of the Korea Advanced Institute of Science and Technology (KAIST) and Jun Murai, founder of the Widely Integrated Distributed Environment (WIDE) project, collaborated and shared information which eventually led to the birth of APNIC.

In January 1993, at the Asia Pacific Coordinating Committee for Intercontinental Research Networking (APCCIRN) meeting in Hawaii, attendees discussed and accepted a proposed plan for a NIC for the APCCIRN Region, to be called APNIC, that would carry out resource registration, information provision, NOC support, and NIC cooperation.

The APNIC pilot project was chartered to begin operation on 1 September 1993 and end on 30 June 1994. David Conrad was employed to manage APNIC's pilot phase and during this period, APNIC was staffed with one person who was supported by 44 others on a mailing list.

In APNIC's early operations, most of its work was based on and around a few mailing lists hosted on a computer at the University of Tokyo. It was the APNIC Working Group that played the major role of IP address allocation.

In April 1994, IANA publicly recognized APNIC's status by delegating the IPv4 address ranges 202/8 and 203/8. By the end of the experiment, APNIC was serving 27 Members from 12 economies and had processed 311 address requests.

During this period, APNIC understood the importance of community collaboration in addition to the provision of registration and informational services, and held APNIC 1 in Bangkok, Thailand.

One of the major issues discussed at this meeting was just how APNIC should continue, in particular, how it should be funded. It adopted a funding model similar to the RIPE NCC with a start-up fee and several payment tiers.

1995 saw the solid establishment of APNIC's operations, and in that same year, APNIC led the creation of the Asia Pacific Regional Internet Conference on Operational Technologies (APRICOT).

By the end of 1996, there was a proper fee structure in place, initial membership was established, and the first APRICOT took place.

In 1997, it was becoming clear that for APNIC to continue its growth, a different location was needed for a new headquarters. Consulting firm KPMG was contracted to assist with the search, and for reasons such as stable infrastructure, low cost of living and operation, and tax advantages for membership organizations, Brisbane, Australia was selected.

Relocation to a 216sqm office was completed between April and August 1998, all the while maintaining continuous operation. It was also during this period that the EC contacted a professional executive recruitment firm to find a new Director General after David Conrad announced his resignation. Paul Wilson was appointed as the new Director General in 1998, joining five other staff in Milton, Brisbane.

In addition to its core service deliverable of IP address delegation and registration, APNIC also began to build a broader suite of membership services, dedicating more resources to training, technical development, and communication. A new course was launched at APNIC 8 in 1999, and later that year, APNIC's first dedicated training manager, Champika Wijayatunga, joined the APNIC staff. In that same year, APNIC conducted its first Member and Stakeholder Survey. Since then it has completed six such surveys.

In 1999, all of APNIC's "primary allocation and assignment policies were brought together in a single document" and in 2000, the APNIC EC approved the document "Policies for Address Space Management in the Asia Pacific region". IPv6 services also became available in 1999 and work began on IPv6 policy with a high level of coordination among all the RIR communities.

2000-2013

The late 1990s and early 2000s presented tough challenges for the Asia Pacific region but despite these challenges APNIC embarked on a period of considerable organizational growth.

In 2000, APNIC membership grew by a record 52%. Significantly, APNIC introduced a biannual meeting model, with a second standalone meeting in addition to the first meeting held alongside APRICOT meetings. Rebranded "Open Policy Meetings", this term was designed to affirm the open nature of APNIC's processes. It reflected the "Internet Model" of development, which is inherently open, transparent, and inclusive, and widely considered to be the foundation of the Internet's success. APNIC also introduced the Special Interest Groups (SIGs) and Birds of a Feather (BoF) sessions at APNIC 9 and joined with the other RIRs on the Early Registration (ERX) project, which redistributed legacy address space records along regional lines.

Continual service improvement is a feature of APNIC's goals as an organization, and in 2002, APNIC launched a multilingual help desk service to reflect the diverse staff and membership that it served. By 2006, this included a live chat system and a VoIP telephony system for all Members, allowing free phone calls to the Helpdesk. APNIC also launched MyAPNIC, which significantly streamlined account administration, billing, and resource services; announced a new root server project to deploy new instances of the F-Root server across the region; and launched the Internet Routing Registry to assist with route filtering and router configuration.

Internet governance discussions were becoming more common during the early 2000s and governance issues were increasingly common drivers of APNIC's activities. In December 2003, the World Summit on the Information Society (WSIS) emerged and APNIC became an ITU Sector-D member. APNIC and the other RIRs

2013 marks APNIC's 20th year of service, and we will commemorate this at APNIC 36 in Xi'an with special events throughout the Conference week.

kept a close watch on WSIS and Paul Wilson attended an International Telecommunications Union (ITU) workshop to explain issues of IP addressing, address management, policy development, and the role and responsibilities of APNIC.

Training is well established as one of APNIC's key activities and to reach an even broader audience, APNIC stated providing APNIC eLearning in 2006 to accommodate geographical distance and time zone differences. More recently, as an extension to this service offering, APNIC now offers an Engineering Assistance service on a cost-recovery basis.

Despite IPv6 being available for over 15 years, it was in 2007 that the APNIC community resolved to actively promote the deployment of IPv6. Recognizing the accelerating demands for IPv4, APNIC introduced the IPv6 Program in 2008 as a new initiative to help community members transition smoothly to IPv6. Policy discussions continued to be dominated by IPv4 exhaustion and in 2009, the APNIC community adopted a proposal that allowed a sanctioned approach to IPv4 address transfers.

By 2010, IPv4 exhaustion was now looming as an imminent certainty, and to encourage the deployment of IPv6, APNIC launched the "Kickstart IPv6" policy, which allows existing IPv4 holders to automatically receive an IPv6 allocation through MyAPNIC and kickstart their IPv6 deployment.

It wasn't too long after that APNIC's request to IANA for two unreserved blocks in 2011 triggered the final global distribution policy where IANA made the final allocation of IPv4 to the RIRs. In April of that same year, APNIC made its last regular IPv4 allocation, activating the new policy that had been set in place for the final stage of IPv4 allocations. APNIC also launched APNIC Labs, in response to one of the five priorities revealed from the 2009 Member and Stakeholder Survey.

2011 saw an increase in IPv4 market transfers. APNIC has since established a sanctioned mechanism to allow transfers of IPv4 addresses both intra and inter-regionally and in October 2012, processed its first inter-regional transfer between an APNIC Member and an organization in the ARIN region. APNIC also launched a broker registration service, complemented by a pre-approval service that allows recipients to seek pre-approval of their IPv4 address needs.

Towards the end of 2012, APNIC participated in the World Conference on International Telecommunications (WCIT-12), on behalf of the NRO. APNIC contributed a series of articles distinguishing the Internet and telephony models, helping to inform discussion about updates to the International Telecommunications Regulations (ITRs).

APNIC

APNIC's vision for the future is for "a global, open, stable, and secure Internet that serves the entire Asia Pacific community". Navigating the next 20 years will no doubt have its challenges, but as one of the oldest and most established Internet organizations in the world, APNIC's resilience and strong open community will help ensure it can continue addressing the challenges that lie ahead.

RDAP collaboration and deployment

The WHOIS protocol is used to discover registration information about network resources. Originally created in the 1980s to discover network operators on ARPANET, the WHOIS protocol now has additional purposes, including checking for availability of names, law enforcement investigation, and trademark research. These broader purposes have given rise to four key problems for publishers and consumers of registry data:

- **Lack of internationalization support for names, addresses, IDNs, and other data**
- **No standardized query or output formats between different registries**
- **No referral mechanism when one registry indicates data is with another, and**
- **No common authentication mechanisms for differential service levels**

To address these shortcomings, in 2012 APNIC began contributing to work on the Registration Data Access Protocol (RDAP). RDAP is a suite of specifications currently under development in the IETF's Web Extensible Internet Registration Data Service (WEIRDS) working group, including specifications of query and response formats, a description of how HTTP is used to provide redirection, authentication, and access limits, and internationalization specifications.

In early 2013, APNIC and the RIPE NCC began a collaborative program to produce an RDAP server as part of the RIPE WHOIS database server. With developers from both RIRs working together, the communities of the two regions benefit from an advanced registration data access system integrated into the existing registry databases, without duplication of effort. The RIPE database server is also now an Open Source project, allowing other registries to also benefit from the work done by APNIC and the RIPE NCC.

More information about RDAP and APNIC's deployment roadmap can be found on the APNIC web site at www.apnic.net/rdap.

Upgrading the WHOIS service

APNIC provides community access to network resource registration data through the WHOIS service, allowing the APNIC community to look up the authorized operators of networks, autonomous systems, and reverse DNS domains.

The service is based on the RIPE NCC's database server, with changes applied to meet the needs of the APNIC region's policy framework. To take advantage of security, stability, and scalability improvements made by the RIPE NCC, APNIC tracks the RIPE NCC's development work and periodically upgrades the APNIC WHOIS service. In 2013, the RIPE NCC completed a major refresh of the server code, and APNIC has been working on adapting the new code to the APNIC region's needs.

The upgrade will deliver key new features to the APNIC region, taking advantage of work done by the RIPE NCC, and in work done collaboratively by APNIC and the RIPE NCC together. Internet number resource objects will gain geo-location and preferred language attributes, to allow APNIC Members and their customers more precision in indicating to content providers where their users are and what languages they speak. The organization object will be enabled, allowing APNIC Members to optionally link their network resource objects together via an object that describes their organization. Consumers of registration data will also be able to use a new, advanced query protocol as a result of collaborative work on a Registration Data Access Protocol (RDAP) module.

More information on the WHOIS service, including information about the new attributes and object, can be found at www.apnic.net/usingwhois.

What's new in Labs?

APNIC is measuring DNSSEC and DNS properties

Labs' data collections in IPv6 have been supplemented by a new activity measuring Domain Name Security (DNSSEC) behaviours. Labs has been able to take its investment in advertising technology for measurement, and redesign it to measure DNSSEC. This was presented at RIPE 86 in Dublin, and also at a network meeting in Barcelona and will be reprised at APNIC 36.

What emerges is twofold. Firstly, the world has been swept by adoption of Google public DNS, and Labs has been able to measure significant uptake in almost every economy. This has quite profound implications for long-term trust in the DNS. Secondly, Labs has seen encouraging signs of DNSSEC availability across the world, but as for IPv6, this is a "patchwork" and not a consistent outcome everywhere. Labs is continuing to measure this, and looking into how it can tabulate what's happening, so it can be presented to the community.

Labs is also exploring other dimensions of global DNS behaviour, including DNS over TCP, and aspects of bad DNSSEC signing and its impact on the system as a whole.

IPv6 measurement system redesign

The IPv6 measurement system has been refined, and Labs can now offer a much simpler Javascript-based web measurement linkage. This is available on demand, and is documented at http://labs.apnic.net/js-test. You can help Labs by putting this on your web page. Please get in touch with Labs if you need help!

Resource certification testbed open for service

APNIC Labs has been supporting Resource certification in the RPKI project, and a new user-interface in MyAPNIC was released at the Singapore APNIC 35/APRICOT 2013 Conference. Labs is very pleased to announce a further update, which introduces a new 'make my RPKI like BGP' feature. This follows the RIPE NCC user interface model, and increases the convergence of these two systems into one model of service. APNIC Members who manage their RPKI in MyAPNIC are now able to see a view of the BGP state of their routed prefixes, and have a simple way to make RPKI sign this state and keep it active.

Labs has also released a 'testbed' for RPKI, so that resource holders who want to explore self-hosted RPKI engines can connect to Labs safely, follow the resources that are delegated from APNIC, and then move into the live system once they are comfortable with the system's behaviour.

This has recently been tested with ARIN as part of the NRO-coordinated RPKI activity, and also with JPNIC. A workshop at APNIC 36 will explore use of the RPKI, and APNIC staff will be on hand to help with exchange of the business tokens to bootstrap self-hosted RPKI in either the testbed or the live system.

Catch up with Labs members at APNIC 36

Both members of the APNIC Labs team will be at the APNIC Conference in Xi'an and would love to catch up with anyone interested in measurements of IPv6 and DNSSEC, deployment of RPKI, or anything else you think is interesting in the global Internet. Contact research@apnic.net for more information.

labs.apnic.net

IPv6@APNIC update

6 August 2013

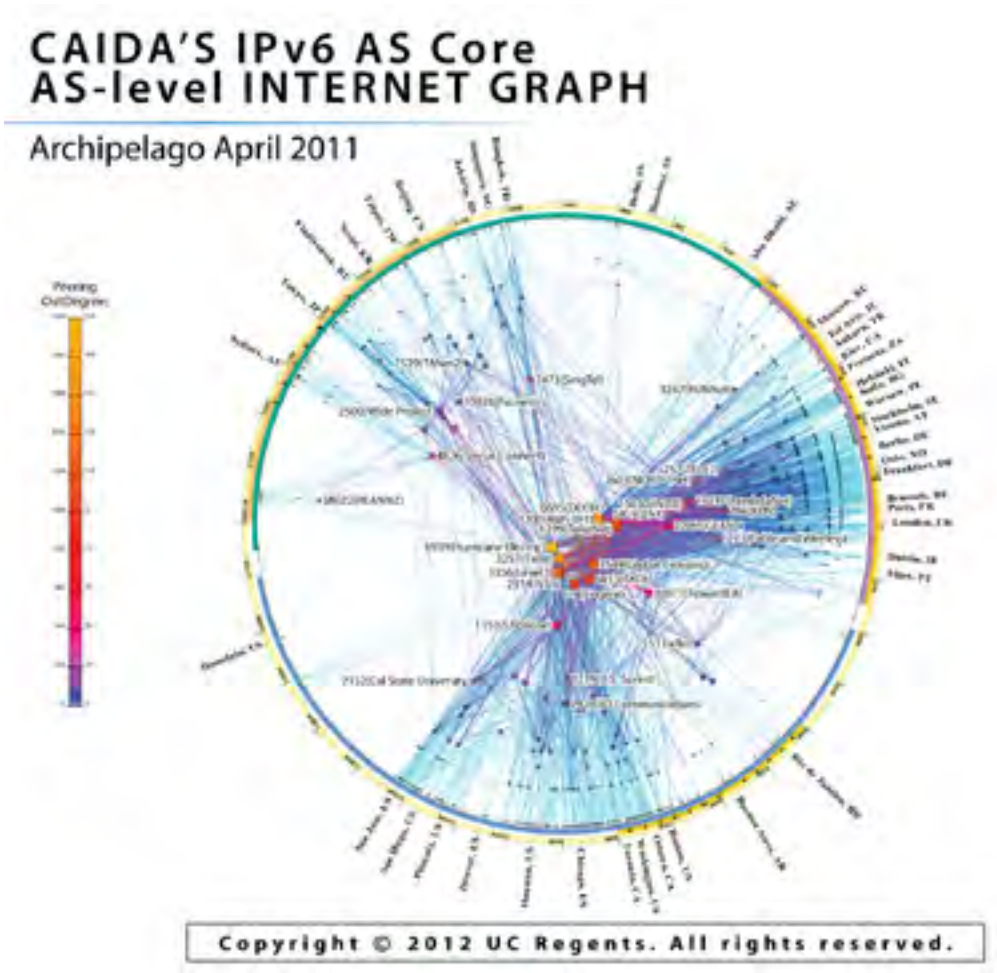
Business developed through the Internet infrastructure has had a significant impact on the world economy.

We observed huge growth in the Internet through "fixed" computing networks beginning in the mid-1990s through to the early 2000s, but the next wave of Internet growth will have a much larger impact on the fundamental nature of the Internet.

As millions and millions of new smart phones are sold annually, "Internet connectivity demand" will increase exponentially. Integrating billions of "mobile" devices on mobile networks that are constantly accessing the Internet via cellular phone networks or Wi-Fi networks is one of our greatest Internet challenges – and opportunities – today.

Smooth, fast, and reliable Internet access has been a fundamental requirement for customers of Service Providers (SPs), and such demand will only increase in intensity. This is even more critical for enterprise customers of SPs that build their business model and/or deliver user-pay services via mobile devices. There may come a day when enterprise customers who are able to choose will shift to that SP that can guarantee smooth, fast, and reliable end-to-end Internet access.

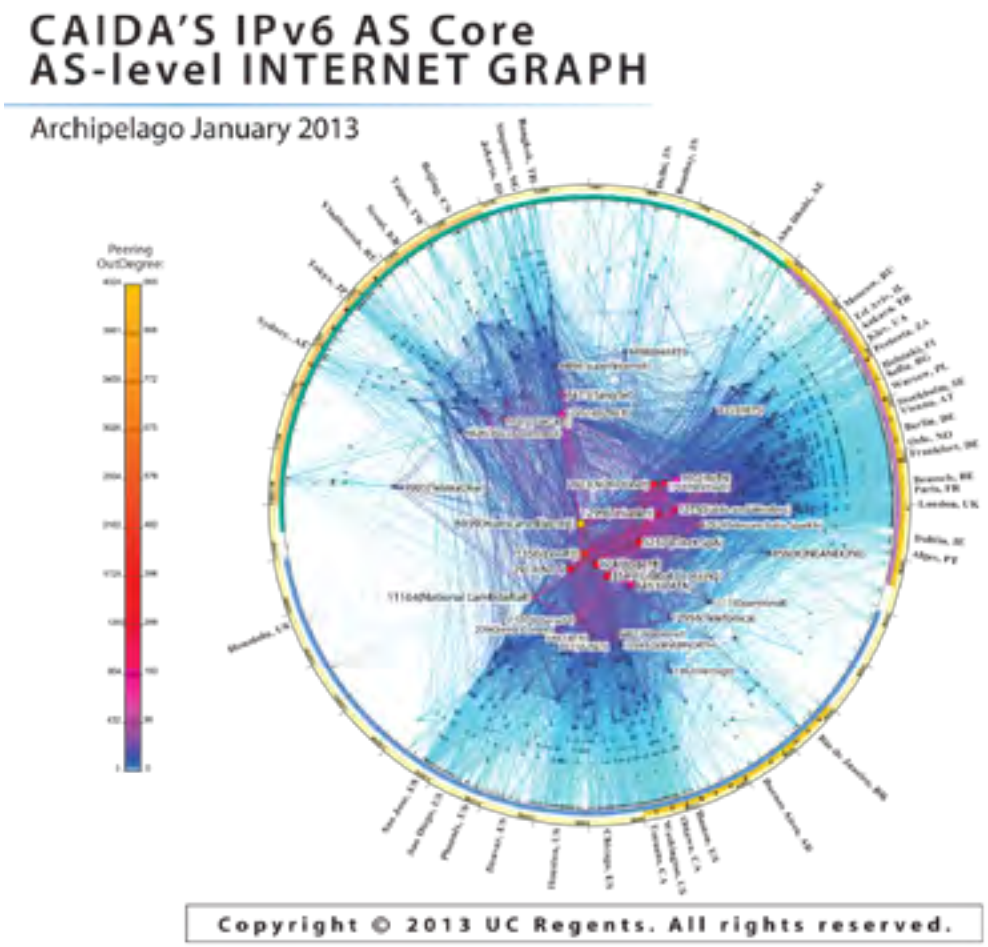
New businesses are constantly emerging and new business models are evolving to leverage smart mobile devices, social networks, cloud computing, and other new Internet developments. SPs play an essential role in this dynamic environment by providing Internet connectivity via Internet Protocol (IP) addresses.



1. This graph shows the density of the global IPv6 network in April 2011.

IPv6@APNIC update

6 August 2013



2. This graph shows the density of the global IPv6 network in January 2013.

IPv6, which can support the sustainable growth of the Internet with its vast pool of globally unique IP addresses, has been a top issue for the global and Asia Pacific Internet community. APNIC engages in activities throughout the region to help facilitate a smooth transition to IPv6. The greater goal is to support the Asia Pacific in deploying IPv6 to maintain a scalable Internet for everyone.

Deployment of IPv6 networks is not only an urgent issue for access providers but it also affects all Service Providers (SPs) whose business models rely on the Internet. Delaying IPv6 deployment in any SP network will negatively impact the level of coherence of the currently working Internet ecosystem. We need to achieve robust deployment of IPv6, as was achieved with IPv4, in a holistic manner.

It is important that decision makers of SPs including Internet transit providers, access network providers, hosting providers, datacentre operators, content distribution networks operators, mobile network operators, and content providers are able to establish their own understanding about the current Internet business environment so that they can make informed and sound decisions for their organizations. Such decisions should support their future business plan as well.

APNIC recently published a compilation of knowledge and information on this topic on www.apnic.net/ipv6, called "IPv6 for Decision Makers". Topics discussed include "Growth path of the Internet", "Meaning of user growth for the SP", "Fundamental ingredients to capture customers", and "SP business continuity and growth plan".

Please visit for more details:

IPv6 for Decision Makers
www.apnic.net/ipv6-decision-maker

IPv6 for CTOs
www.apnic.net/ipv6-cto

At the upcoming APNIC 36 Conference, APNIC once again provides a lot of attention to IPv6. There are various IPv6 conference sessions ranging from technical courses to seminars covering a wide scope of topics.

Please visit the APNIC 36 Conference website program for more details:
conference.apnic.net/36/program

Cooperating for growth and development

Despite concerns reported by the media, funding for the Eighth Internet Governance Forum (IGF) is now confirmed and preparations continue. The multistakeholder group responsible for staging the IGF is working hard ahead of the October event.

Having this year's IGF in the Asia Pacific presents a great opportunity for Asia Pacific Internet stakeholders. Most of the world's Internet users live in the region, and here is where we continue to see the fastest Internet growth, so the Asia Pacific is an appropriate place for such an important global event.

Our Indonesian hosts of this year's IGF are a multistakeholder group, led by the government, but strongly supported by industry and civil society. The organizers are putting enormous energy and passion into receiving the 2,000 or so participants that are expected to converge on beautiful Bali for the week-long event.

There are a number of preparatory meetings in the form of national and regional IGFs on the calendar before the global forum. These smaller, local events are important opportunities for preparation for the main event, providing space for those who can't travel to Bali to participate in the process.

NetHui in New Zealand was a good example. NetHui nearly rivaled the global IGF in terms of size with more than 800 participants attending. National IGFs are being staged in Australia and India in the coming months and registrations are now open for the Asia Pacific regional IGF (http://2013.rigf.asia/) which will take place in Seoul, Republic of Korea, from 4 to 6 September 2013.

Focus on Sustainable Development

This year the global IGF is in its eighth version, under a renewed mandate by the UN since the Tunis phase of the WSIS summit. The proposed overarching theme for the 2013 IGF was decided by a consensus of the Multistakeholder Advisory Group (MAG) together with all IGF stakeholders. The theme will be "Building Bridges - Enhancing Multistakeholder Cooperation for Growth and Sustainable Development". APNIC's Director General Paul Wilson is a MAG member.

In line with the IGF principles and tradition, all discussions will be open and will include a range of stakeholders who will focus their discussions within six sub-themes as follows:

- Access and Diversity-Internet as an engine for growth and sustainable development
- Openness - Human rights, freedom of expression and free flow of information on the Internet
- Security - Legal and other Frameworks: Spam, Hacking and Cyber-crime
- Enhanced Cooperation
- Principles of Multi-Stakeholder Cooperation
- Internet Governance Principles

The agenda of Internet governance, as originally defined by WSIS is deliberately broad and workshop proposals for this IGF exemplifies this by bringing a number of new topics to the discussion.

APNIC and the Number Resource Organization (NRO) have always been active supporters of the IGF process. Our community sees the event as the only global, open space where these discussions can take place with all stakeholders on equal footing. The IGF is not only informative, it has the great potential to help policy processes at all levels by bringing a diverse range of perspectives together in an interactive, energetic dialogue.

This is why it is so important for governments to participate at the IGF. It is a safe place, detached from negotiated decisions, where they can listen, contribute, and interact with stakeholders at the local and global levels.

Our community focus

The obvious focus for APNIC, along with the other RIRs, is to be involved as a workshop organizer in the area of IP addressing. IPv4 address space management continues to be of interest to stakeholders who want to understand legacy space, remaining free pools, market transfers, and the evolution of that market. More importantly, the RIRs will also promote IPv6 adoption as the only viable solution to the growth and future of the Internet.

However, as regional stakeholders in the global Internet ecosystem, the APNIC community is interested in many other topics, from regional collaboration, case studies, best practices, and Enhanced Cooperation.

Enhanced Cooperation has been a subject of much discussion since Tunis. The IGF is an opportunity to further advance the implementation of Enhanced Cooperation. It can illuminate the way forward in a lot of issues affecting today's Internet. Discovering new ways for collaboration between stakeholders can help define and improve ways for all stakeholders to achieve their objectives. There is some great material on this topic in the IGF program, including many examples of successful Enhanced Cooperation occurring in the RIR space.

More governments took an interest in address policy discussions regarding IPv4 depletion and there is an ongoing willingness to work together to develop ways to support IPv6 adoption. These are examples of the necessary public-private partnerships that can bring about better results for such high impact changes.

WSIS+10 review process

A review of the WSIS outcomes is planned to conclude in 2015 and discussions have already begun on the subject. Earlier this year APNIC facilitated a session at the WSIS+10 meeting in Paris, which collaborated via videoconference with the APNIC 35 Conference in Singapore. Outcomes of that discussion included a recommendation for the Working Group of the Chair of the CSTD on Enhanced Cooperation to document the concrete practices that have been developed within and among existing organizations.

Further, it was suggested all stakeholders and processes foster efforts to ensure participation and inclusion of governments and other stakeholders from developing countries and to encourage all stakeholders to follow and contribute to the work of the upcoming Working Group of the Chair of the CSTD on Enhanced Cooperation.

Other topics of note

Questions on security and surveillance are also very important in this IGF. There are several workshops proposed to discuss a range of associated issues including online anonymity and freedom of expression, as well as emergent cybersecurity threats and the role of multilateral organizations in cybersecurity.

Following the contentious discussions of the World Conference on International Telecommunications (WCIT-12) in Dubai the preceding year, this IGF is a good opportunity for all stakeholders to increase their understanding and forge their opinions on these sensitive matters.

Finally, an issue of considerable importance in our region is development with workshops planned that will focus locally on ways to promote the development of local content, to the bigger picture, investigating how Internet enabled businesses can reach out to the global market.

Again, issues of importance to governments will feature prominently with discussions about broadband deployment and sustainable development on the agenda.

We look forward to these discussions ad encourage you to participate in them at the local regional and global events that will take place before the end of this year.

The Internet Governance Forum will run from 22 – 25 October 2013 in Bali, Indonesia.

IGF

www.apnic.net/igf

What's new with APNIC Training!

TRAINING

New eLearning offerings

During the past few months, APNIC eLearning has become a popular mode of learning for our community and to meet the increased demand identified, the APNIC Training team has increased eLearning offerings by including an extra time slot on the eLearning days and two new courses.

In addition to the existing time slots on Wednesdays, held at 10:30, 12:30; and 14:30 (all UTC +10), a new time slot is will be offered in August from 16:30-17:30 (UTC+10), to accommodate differing time zones within the region. Two new courses have also being introduced to complement the current courses: BGP Attributes (eROU04); and Intro to RPKI (eSEC04). BGP Attributes focuses on routing protocols that run the Internet and Intro to RPKI details the protocol behind Resource Public Key Infrastructure (RPKI), its management hierarchy, components, and implementation. So far this year, we have provided eLearning training to 498 participants.

eLearning is a convenient learning experience for our trainees, as it enables them to participate when and where they want.

training.apnic.net

TRAINING

Face-to-Face training

Since the beginning of 2013, APNIC Training has conducted 40 training face-to-face courses in 16 economies and in 21 locations throughout the Asia Pacific region.

Sponsorship

APNIC is actively involved in Internet infrastructure development and is proud to partner with organizations across the region wishing to host or sponsor Training events.
To view our recent sponsors and to sponsor an APNIC training session, fill out the online form at training.apnic.net/sponsor.

Since January 2013, we have trained 1,101 participants on a variety of topics, and this was enhanced by upgrades to our virtual lab. All trainers now have access to a portable MacMini to use for IPv6, Routing and Network Security Workshops.

In March, APNIC Learning and Development Director, Philip Smith, ran a two-day Internet Exchange Point (IXP) Workshop for the Vanuatu Internet Exchange. Topics covered included OSPF and BGP, sufficient for the network operators to participate in the peering mesh of the IXP.

In May, Philip also participated in a two-day IXP Workshop in Thailand along with Randy Bush from IIJ at the invitation of THNIC, to explore ways of establishing the first neutral IXP for Thailand. Topics covered included the benefits of peering, IXP experiences from other parts of the world, exchange point design, and round table discussions on the Internet landscape in Thailand.

In June, APNIC Trainers attended a number of events to conduct training. From 25-27 June, Philip presented a two-day Advanced BGP Workshop where topics covered included RPKI, BGP Multihoming, BGP Best Practices, and Advanced BGP configuration techniques.

From 25 to 29 June, APNIC Training Manager, Champika Wijayatunga and APNIC Internet Resource Analyst, Wita Laksono travelled to Yogyakarta, Indonesia to conduct the successful Network Security Workshop & Educational Seminar on Past, Present, and Future of the Internet in Indonesia. The Network Security Workshop was fully booked and attended by 40 participants, who represented various industry groups such as network operators, regulators, government bodies, enterprises, and academics. Participants were taught best current practices in securing networks, and responsibly managing their Internet resources with a focus on routing and DNS security. The educational seminar, presented to a group of over 100 participants, focused, in particular, on the current state of IPv4 and the critical need for organizations to deploy IPv6. Presenters from the Indonesia Network Information Centre (IDNIC) also provided statistics to further emphasize the growth of Indonesia's Internet.

From 24-26 June, APNIC Senior Training Specialist, Nurul Roman Islam, and Training Officer, Shane Hermoso, were in Melbourne, Australia to conduct an IPv6 Workshop. Sponsored by Asian Pacific Telecommunications, the workshop was attended by 21 networking professionals. Here participants configured an IPv6 network based on a service provider network topology.

From 1-5 July, Champika travelled to Tonga to conduct the Introduction to Routing course during PacNOG 13. This event was well attended by networking professional and operators from the Pacific.

training.apnic.net

ISIF Asia explores enhanced support for ICT projects

In just a few years, the Information Society Innovation Fund (ISIF Asia) has evolved considerably. Since teaming up with the Seed Alliance, a generous injection of funds from the Swedish government has enabled ISIF Asia to allocate more funds to ICT innovation in the Asia Pacific region's developing communities.

Internet growth poses many challenges in developing economies, such as building and maintaining reliable infrastructure, navigating the business and policy environment, and unique economic and social challenges. ISIF Asia provides small grants and awards to help advance local and regional projects aimed at introducing, improving, and applying Internet technology for the benefit of users and communities in the Asia Pacific. The ISIF Asia program conducted an internal review and evaluation in 2010 and the lessons learned from that process were incorporated into the current framework for 2012 - 2015.

isif.asia/about

2013 ISIF Asia Award winners

ISIF Asia Awards recognize projects that have already been implemented and have had a significant impact on their local communities with improved communications infrastructure, applications, or organizational arrangements.

APNIC congratulates the 2013 ISIF Asia Award winners, which were each awarded AUD 3,000 toward the continuation of their projects, and each team will receive a travel grant to attend the global Internet Governance Forum (IGF) to showcase their project, make new professional contacts, and participate in discussions about the future of the Internet.

www.isif.asia/Awards2013

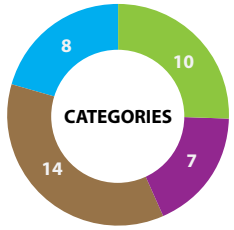
Community Choice Award

In addition to the four ISIF Asia Award winners chosen by the selection committee, one project received the Community Choice Award for receiving the most votes during a social media campaign. This year's winner received 2,237 votes!

isif asia

2013 COMMUNITY CHOICE AWARD

ONLINE VOTING RESULTS



Rights
Code for the common good
Innovation on access provision
innovation on learning and localization

Nepal

1700 Broadcasting agricultural radio for agricultural development

1700 Votes

Bangladesh

2237 Design and Development of Precision Agriculture Information System for Bangladesh

906 Amar Desh Amar Gram (My Country My Village)

106 Shikkhok.com

23 UnnayanTV - A Open Video Channel from Bangladesh

3272 Votes

Malaysia

8 eToro: Indigenous Botanical Knowledge Management System of Penans

2 Where is my baby?

2 Sinar Project*

12 Votes

Pakistan

504 VDrive - Providing Storage via Volunteer Computing*

73 Clicksafe: Browser Security Threat Detection and Mitigation via Addon*

2 eLibrary in Jahangirabad community Multan, Pakistan

579 Votes

Philippines

564 Technology Package for Student Learning Empowerment: Mathematics Courseware for Tablet PC

254 Rights, Science, and Secularism: Advocacy Online and On the Streets

60 #Digibak: Digital Activism Program

878 Votes

Vanuatu

13 LiteGateway Network Access System

13 Votes

India

812 MTNL Broadband ISP Billing System (In-House)

794 An Integrated Intranet system: A combination of CRM, HRIS, O&M and Information Management

21 Young Masters Programme (YMP) on Sustainable Development. An Innovative Online course introduced in Indian Schools

3 eVidyaloka Remote education services

1630 Votes

Sri Lanka

1454 Shilpa Sayura

184 Global Availability Through Connectivity

1638 Votes

Indonesia

201 Love Indonesia

21 RuaiSMS to empower grass root communities*

13 Sungai - A Web-based Dashboard for River Management

235 Votes

* Nominated in previous years

2014 ISIF Asia Grants

ISIF Asia now has the funding capability to allocate up to AUD 30,000 per project team selected! ISIF Asia Grants provide financial support in the form of "small grants". To date, ISIF Asia has allocated AUD 1.2 million to 38 projects in 17 economies across the Asia Pacific region. ISIF Asia Grants are aligned with the funding categories.

Innovation on access provision

This category focuses on innovative solutions providing low cost deployment with low power consumption and low maintenance to expand fixed and mobile access to the Internet, information services and/or applications in local communities. Innovation should not necessarily be technical, it could refer to organizational or business arrangements that support access provision, or improve the quality of access through accessibility or linguistic diversity.

Innovation on learning and localization

This category covers capacity building and localization efforts, which are key to improve the skills needed to design, maintain, and manage ICT infrastructure and services in local languages. Localized projects support local talent and create job opportunities in rural or urban marginalized areas. Innovative, open, inclusive, and sustainable approaches to learning and language diversity are key elements to guarantee access to information that is needed to offer reliable services and applications to local communities.

Code for the common good

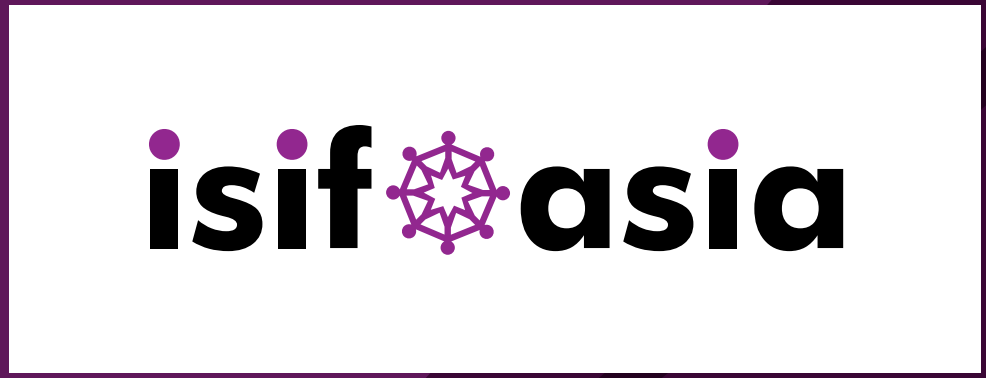
This category includes applications and other software solutions that enable communities in a variety of ways. High mobile penetration in the Asia Pacific region has been a catalyst in the development of mobile-based services, applications and software solutions. These solutions have been used to support timely and relevant information dissemination on a large scale using a range of network infrastructures through a variety of devices, even where literacy rates are lower. Mobile technologies have enabled communities to increase participation in political processes, coordinate efforts during emergency situations, receive extreme weather alerts, communicate with remote health services, and receive specialized patient referrals, among many other applications.

Rights

This category supports the strategic use of Internet tools and services to promote freedom of expression, freedom of association, protects privacy, security, consumers' rights, gender equality, new forms of intellectual property in the digital environment, and a wider range of issues related to the Internet and human rights.

Developing evaluation capacity

This year, in addition to the grant, three of the ISIF Asia 2014 grant recipients will be selected to receive additional mentoring on evaluation and research communication through a partnership between ISIF Asia and the project "Developing Evaluation & Communication Capacity in Information Society Research (DECI-2)". Teams will acquire valuable knowledge and skills that their organizations will be able to use not only for the ISIF Asia supported project but to their organizations as a whole. For more information about the DECI-2 project, visit **http://evaluationandcommunicationinpractice.ca**



Building human capacity in the Pacific Islands

In June, ISIF Asia led a workshop on grant proposal writing in Vanuatu in partnership with the Vanuatu Internet Exchange and Inveneo. The workshop provided participants with the skills required to seek funding from potential donors with effective proposals, covering a range of topics relevant to grant proposal writing and a session on how to apply for ISIF Asia Grants and Awards. The two-day workshop was filmed for reuse as a free webinar to be broadcast from the APNIC office in Brisbane, for the benefit of anyone looking to enhance their grant proposal writing skills.

The Pacific Island communities were selected to receive additional support for capacity development to improve the quality of project proposals presented to potential donors, sponsors, or investors. The attendees for this workshop were nominated by Pacific organizations that are aligned with the goals of ISIF Asia and APNIC, to enhance skills for individuals and teams in core areas where initiatives for infrastructure development are generated.

Policy Update

To be presented at APNIC 36

Under discussion on the Policy SIG mailing list

prop-108: Suggested changes to the APNIC Policy Development Process

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

prop-107: AS number transfer policy proposal

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

IPv4 address blocks received by APNIC are added to the final /8 pool and redistributed according to the final /8 policy (prop-088). 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.

Pending remaining steps of the global policy process

prop-097: Global policy for post exhaustion IPv4 allocation mechanisms by the IANA

This proposal describes the process that IANA will follow to allocate IPv4 resources to Regional Internet Registries (RIRs) after the central pool of addresses is exhausted.

The processes for how IPv4 space may be placed in the IANA Recovered IPv4 Pool is out of the scope of this proposal.

TRAINING

Calendar

September 2013

Start	Duration	Delivery	Title	Location
03-Sep-2013	2 days	Workshop	WIP601 - Workshop: IPv6	Hong Kong
04-Sep-2013	1 hour	eLearning	eIP604 - eLearning: IPv6 Address Planning	Pacific & Oceania
04-Sep-2013	1 hour	eLearning	eIP601 - eLearning: IPv6 Overview	South-Eastern Asia
04-Sep-2013	1 hour	eLearning	eIP603 - eLearning: IPv4 to IPv6 Transition	South Asia
04-Sep-2013	1 hour	eLearning	eIP602 - eLearning: IPv6 Addressing and Subnetting	South Asia
11-Sep-2013	1 hour	eLearning	eDNS01 - eLearning: DNS Concepts	Pacific & Oceania
11-Sep-2013	1 hour	eLearning	eROU04 - eLearning: BGP Attributes	South-Eastern Asia
11-Sep-2013	1 hour	eLearning	eROU01 - eLearning: Routing Basics	South Asia
11-Sep-2013	1 hour	eLearning	eIP601 - eLearning: IPv6 Overview	South Asia
18-Sep-2013	3 days	Workshop	WROU01 - Workshop: Routing I **Supported by:** Y4iT; UPSITF	Philippines
18-Sep-2013	3 days	Workshop	WROU02 - Workshop: Routing II **Supported by:** ISOC India Kolkata Chapter	India
18-Sep-2013	1 hour	eLearning	eIP601 - eLearning: IPv6 Overview	Pacific & Oceania
18-Sep-2013	1 hour	eLearning	eDNS02 - eLearning: Reverse DNS Procedures	South-Eastern Asia
18-Sep-2013	1 hour	eLearning	eSEC04 - eLearning: Intro to RPKI	South Asia
18-Sep-2013	1 hour	eLearning	eIRM01 - eLearning: Internet Registry Policies	South Asia
23-Sep-2013	3 days	Workshop	WROU04 - Workshop: Introduction to MPLS	India
24-Sep-2013	3 days	Workshop	WSEC01 - Workshop: Network Security **Supported by:** MobiNet	Mongolia
25-Sep-2013	1 hour	eLearning	eIRM03 - eLearning: Best Practices in Managing Internet Resources	Pacific & Oceania
25-Sep-2013	1 hour	eLearning	eIRM05 - eLearning: Introduction to Autonomous System Numbers	South-Eastern Asia
25-Sep-2013	1 hour	eLearning	eIRM08 - eLearning: 4-Byte ASN	South Asia
25-Sep-2013	1 hour	eLearning	eIRM07 - eLearning: Whois Database and MyAPNIC	South Asia

TRAINING

Calendar

Oct - Nov 2013

Start	Duration	Delivery	Title	Location
02-Oct-2013	1 hour	eLearning	eIP601 - eLearning: IPv6 Overview	Pacific & Oceania
02-Oct-2013	1 hour	eLearning	eIP603 - eLearning: IPv4 to IPv6 Transition	South-Eastern Asia
02-Oct-2013	1 hour	eLearning	eIP604 - eLearning: IPv6 Address Planning	South Asia
02-Oct-2013	1 hour	eLearning	eIP602 - eLearning: IPv6 Addressing and Subnetting	South Asia
09-Oct-2013	1 hour	eLearning	eROU03 - eLearning: BGP Basics	Pacific & Oceania
09-Oct-2013	1 hour	eLearning	eSEC01 - eLearning: Network Security Fundamentals	South-Eastern Asia
09-Oct-2013	1 hour	eLearning	eDNS03 - eLearning: DNS Security	South Asia
09-Oct-2013	1 hour	eLearning	eSEC02 - eLearning: Cryptography Basics	South Asia
16-Oct-2013	1 hour	eLearning	eROU02 - eLearning: OSPF Basics	Pacific & Oceania
16-Oct-2013	1 hour	eLearning	eDNS01 - eLearning: DNS Concepts	South-Eastern Asia
16-Oct-2013	1 hour	eLearning	eSEC03 - eLearning: IPSec	South Asia
16-Oct-2013	1 hour	eLearning	eDNS02 - eLearning: Reverse DNS Procedures	South Asia
23-Oct-2013	1 hour	eLearning	eIRM01 - eLearning: Internet Registry Policies	Pacific & Oceania
23-Oct-2013	1 hour	eLearning	eIRM02 - eLearning: Requesting IP Addresses	South-Eastern Asia
23-Oct-2013	1 hour	eLearning	eIRM03 - eLearning: Best Practices in Managing Internet Resources	South Asia
23-Oct-2013	1 hour	eLearning	eIRM05 - eLearning: Introduction to Autonomous System Numbers	South Asia
06-Nov-2013	1 hour	eLearning	eIP603 - eLearning: IPv4 to IPv6 Transition	Pacific & Oceania
06-Nov-2013	1 hour	eLearning	eIP604 - eLearning: IPv6 Address Planning	South-Eastern Asia
06-Nov-2013	1 hour	eLearning	eIP603 - eLearning: IPv4 to IPv6 Transition	South Asia
06-Nov-2013	1 hour	eLearning	eIP601 - eLearning: IPv6 Overview	South Asia
13-Nov-2013	1 hour	eLearning	eSEC04 - eLearning: Intro to RPKI	South Asia

training.apnic.net/events

Apster36

The twice-yearly newsletter for the APNIC membership and community

APNIC 1993 20 2013

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XI'AN, CHINA
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