

**American Registry for Internet Numbers** 

2006

Annual Report

Public Participation Leading to Positive Results

2006	

#### Contents

The American Registry for Internet Numbers (ARIN) publishes annual reports to document its operations and activities for its community. The audited financial statements for fiscal year 2006 will be published separately in mid-2007.

To view this report online or to review the annual reports and financial statements from previous years, please visit the ARIN website at:

www.arin.net/about us/corp docs/annual rprt.html

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#### Annual Report



# **Mission Statement**

Applying the principles of stewardship, ARIN, a nonprofit corporation, allocates Internet Protocol resources; develops consensus-based policies; and facilitates the advancement of the Internet through information and educational outreach.

RIN has been in operation for almost a decade. It is now a maturing organization that is continuing to innovate, with such recently established services as the ARIN Consultation and Suggestion Process (ACSP), outreach to new audiences, and an increasing diversity of communication and education materials.

As an organization, all our activities flow from the mission statement, and its guidance that we focus our efforts on stewardship of Internet number resources and providing registration, organizational, educational, and policy facilitation services.

ARIN continues to coordinate with the other Regional Internet Registries (RIRs), while working to serve the interests of the ARIN community. The RIRs have worked together within the Number Resource Organization (NRO) on topics of interest to the global Internet number resource community including participation with the ICANN framework, and joint projects like the RIR Comparative Policy Overview and the Internet Number Resource Report. ARIN staff was proud to serve as the NRO secretariat during 2006, while ARIN's President and CEO served as the NRO's Executive Council Secretary. ARIN's service in these roles not only contributed to the NRO's effectiveness, but directly assisted in the representation of the entire RIR community in many organizations and events.

In Internet governance discussions, the open and transparent processes of ARIN and the other RIRs continued to make the case that current systems for Internet number resource distribution are all they should be. The discussions that started with the World Summit on the Information Society (WSIS) continued in 2006 with the Internet Governance Forum (IGF). While the RIRs, through the NRO, can help represent our community, the direct participation of individuals and organizations within the ARIN region can play a major role for the good of all. If you haven't seen it already, I invite you to visit the NRO website at http://www.nro.net for information on how you can become involved.

Speaking of participation, 2006 was definitely a success story for ARIN. The ARIN XVII Public Policy and Members Meeting, held in Montreal in April, was the most well-attended second-quarter meeting in ARIN's history. ARIN XVIII, our fall meeting in St. Louis, also showed the success of ARIN's outreach efforts with the broadest ever diversity. Attendees at that meeting came from 29 U.S. states, 4 Canadian provinces, and 12 countries outside the ARIN region. We also saw a high level of participation with the Internet Resource Policy Evaluation Process (IRPEP), our mailing lists, and general feedback to ARIN staff.

I would also like to extend my thanks to all those who, by their direct participation in ARIN, contributed to the organization's successes in 2006. In addition to ARIN staff, the organization relies heavily on the contributions of those within the community. Everyone who attended one of our meetings, participated in the Internet number resource policy development process, or voted in the 2006 elections for the ARIN Board of Trustees, Advisory Council, or the Number Resource Organization's Number Council (NRO NC), can claim some measure of credit for contributing to the success of ARIN as an organization and a community. I would also like to highlight the contributions of my fellow members of the Board of Trustees and those who serve on the Advisory Council or on the NRO NC. These positions are filled with volunteers, elected by our membership or community, who derive no monetary compensation for their work with ARIN and are often called on to work long hours in addition to their regular workdays.

ARIN owes its entire existence to the services it is called upon to undertake by the community, and with greater participation comes greater opportunity to provide those services in a manner that benefits the entire community. In 2007, we look forward to both the participation we hope you will join in, and the opportunities it provides to serve you at the highest possible level.

John Curran Chairman ARIN Board of Trustees

#### "Who is ARIN? You Are!"

hether you are familiar with ARIN or not, you might have the same question about these two phrases. "What does that mean?" We've started using these phrases in the past year on a number of ARIN materials including documents like our annual reports, and simply put, they underline the fact that ARIN as an organization exists to serve its community. Through our open and transparent bottom-up processes, we receive direction from our community on what services to offer, how best to implement those services, and how to be good stewards of Internet number resources. These underlying principles of participation and representing the will of our community inform everything about ARIN, from our mission statement and outreach efforts to the way we interact with customers and the community.

Another question I am often asked is to describe the ARIN community. It's not an easy task, as the quick answer would be to reply "Everyone!" and that usually requires some explanation. It is obvious to many that companies within our service region that rely on the Internet as part of their business are natural members of the ARIN community. What is often missed is that our community also encompasses educational, financial, and civil society institutions, small businesses, nonprofits, national and local governments, and every single user of an IP address in Canada, many Caribbean and North Atlantic islands, and the United States. With the depth and breadth of Internet usage in today's society, you can see why everyone is included in our definition of our community.

With a community as diverse as ours, participation by as many individuals and organizations as possible is essential to the continued success of ARIN. Throughout my time at ARIN, I've generally highlighted the ARIN policy process as the most important avenue for public participation. With the start in 2006 of the ARIN Consultation and Suggestion Process (ACSP), I'm pleased to say that the opportunities for participation and feedback with ARIN have been greatly augmented. The ACSP offers the community a vehicle to make suggestions and reach consensus on ARIN services and practices. The ACSP itself evolved from feedback received from the community, and we look forward to your participation in enabling ARIN to be as responsive as possible to the needs of the community.

In addition to such new endeavors as the ACSP and the "Adventures of Team ARIN" comic book, ARIN continues to refine existing processes and services, such as new meeting-related efforts like the Cyber Café, Billing Help Desk, First-Timer events, and an Open Policy Hour that continues to evolve to meet the community's needs. In 2006, we also published a new suite of registration services templates, reformatted and redesigned based on customer feedback.

Participation, in all its forms, is the key to ARIN's success as an organization and community. For example in 2006, ARIN staff also offered a higher level of participation, as they served as the Secretariat of the Number Resource Organization. They accomplished this in addition to their regular duties and carried out both with an extremely high level of competence, and made a solid contribution to representation of the RIRs with the larger Internet community. In regards to participation in the usual sense, ARIN was once again fortunate to have the services and assistance of the dedicated members of the Board of Trustees and Advisory Council, but even more importantly the participation of our community and stakeholders.

In closing, let me address the question I am always most interested to hear: "What can I do?" Propitiously, the opportunities for participation are many and the effort required can be quite minimal. Whether simply following and contributing to our Public Policy Mailing List (PPML), suggesting new policies or services, participating in ARIN elections, or by taking advantage of ARIN educational and outreach materials to educate yourself and others, you will have assisted yourself and your community in creating an organization that best meets your needs. Much of the information on how to participate and what ARIN accomplishes as an organization is available in this Annual Report and also in much more detail on our website at http://www.arin.net.

In 2007, we are looking forward to a regional workshop to be held in St. Thomas, U.S. V.I, ARIN XIX which will be held in San Juan, Puerto Rico, and ARIN XX, which will be held in Albuquerque, New Mexico. I invite you to attend or participate remotely in our regular meetings, and look for us at many Internet community meetings and forums. Staff and representatives from our Board and Advisory Council would be happy to answer any questions you may have.

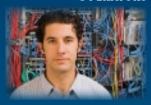
As stated before, participation by the community will only increase the positive outcomes possible for everyone. While every organization faces occasional challenges, I am confident that with your participation every challenge we face can be converted into an opportunity for ARIN to provide the best possible service to the entire community.

Thank you,

Raymond A. Plzak ARIN President and CEO

#### Who is ARIN? You Are!

NETWORK OPERATORS





Academic and Research Community

#### GOVERNMENTS





Users of Internet Resources

#### ARIN AT A GLANCE

#### **Overview**

Established in December 1997, the American Registry for Internet Numbers (ARIN) is a Regional Internet Registry (RIR) incorporated in the Commonwealth of Virginia, USA. ARIN is one of five (5) RIRs. Like the other RIRs, ARIN:

- Provides services related to the technical coordination and management of Internet number resources in its service region. ARIN's region includes Canada, many Caribbean and North Atlantic islands, and the United States.
- Participates in the international Internet community.
- Facilitates the development of policy decisions made by its members and stakeholders.
- Is a nonprofit, membership-based organization.
- Is governed by an executive board elected by its membership.

#### **Organizational Structure**

ARIN is a nonprofit service organization that is responsive to the needs of the public it serves. ARIN is comprised of its members, a 7-member Board of Trustees, a 15-member Advisory Council, and a professional staff of around 40. The Board of Trustees and Advisory Council are elected by ARIN members for three-year terms.

ARIN's organizational structure provides an effective framework for its operation as a service organization that is responsive to the needs of the public it serves. Users in the community organize and drive ARIN's activities. This allows ARIN to keep in step with the community's requirements. The organizational structure remained constant throughout 2006.



#### **Services**

The services ARIN provides are grouped in three areas: Registration, Organization, and Policy Development.

Registration Services include coordination and management of IP address space and ASN allocations and assignments, resource transfers, record maintenance, registration transaction information (WHOIS), routing information (Internet Routing Registry), and reverse DNS.

Organization Services include elections, members' meetings, information publication and dissemination, and education and training.

Policy Development Services include facilitating the development of policy related to the technical coordination and management of Internet number resources in the ARIN region. They include maintaining discussion e-mail lists, conducting public policy meetings, and publishing policy documents.

#### **International Community**

#### **Internet Community Organizations**

ARIN is active in the international Internet community, working in close coordination with such open Internet community organizations as ICANN, ISOC, IETF, and NANOG. ARIN enjoys a comprehensive relationship with each of these bodies and participates in many of their meetings throughout the year. See http://www.arin.net/community for more information about these organizations.

#### **Number Resource Organization**

The RIRs have worked together to coordinate their joint activities, including technical tasks and the management of Internet number resources. Recognizing this, the RIRs on 24 October 2003 formed the Number Resource Organization (NRO). The purpose of the NRO is clearly defined in its mission statement:

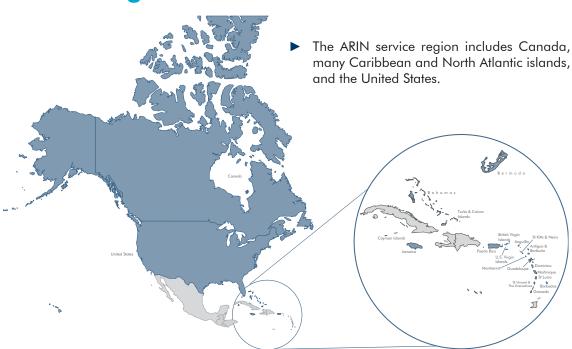
"Formed by the Regional Internet Registries to formalise their co-operative efforts, the NRO exists to protect the unallocated Number Resource pool, to promote and protect the bottom-up policy development process, and to act as a focal point for Internet community input into the RIR system."

More information on the NRO can be found on its website at http://www.nro.net.

#### Membership

Membership is not required to participate in ARIN's policy development process. ARIN General Membership is open to any interested individual or entity through completion of a membership application and payment of an annual membership fee. Entities that receive allocations of IP address space directly from ARIN are automatically accorded membership. It is not necessary to become an ARIN General Member prior to applying for any Internet number resource. All applications for Internet number resources are evaluated solely in accordance with policy requirements.

#### **Service Region**



Every ARIN General Member is entitled to:

Nominate and elect Board of Trustees and Advisory Council members.

Send two representatives to all ARIN Public Policy and Members Meetings at no cost.

Take advantage of benefits such as displaying the ARIN member logo on a company or personal website.

Public 2509:0000::/22

Participation

Positive Results



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#### **Highlights of 2006**

#### **Number Resource Policy**

In 2006, the ARIN community discussed ten distinct policy proposals. Covering a broad range of topics, the progression of these proposals was determined by the Internet Resource Policy Evaluation Process (IRPEP), with possible outcomes including ratification, abandonment, or a request for continuing work by the author and/or the Advisory Council. The proposals for 2006 were:

Policy Number	Title	Status
2005-1	Provider-Independent IPv6 Assignments for End Sites	Adopted
2005-8	Proposal to amend ARIN IPv6 assignment and utilisation requirement	Adopted
2005-9	4-Byte AS Number	Adopted
2006-1	Residential Customer Privacy	Abandoned
2006-2	Micro-allocations for Internal Infrastructure	Adopted
2006-3	Capturing Originations in Templates	Adopted
2006-4	IPv6 Direct PI Assignments for End Sites	Abandoned
2006-5	IPv4 Micro-allocations for anycast services (temporary)	Abandoned
2006-6	Bulk WHOIS agreement expiration clarification	Withdrawn by author
2006-7	Changes to IPv6 initial allocation criteria	Under discussion

A detailed accounting of actions taken on these proposals is provided in the Public Policy report on page 19. For an explanation of how ARIN's policy process works, please see the Internet Resource Policy Evaluation Process at http://www.arin.net/policy/irpep.html/.

#### **Elections**

#### **Board of Trustees and Advisory Council**

In October 2006, ARIN's General Members in good standing voted in ARIN's annual Board of Trustees and Advisory Council elections. The election guidelines describe the process followed, and can be found online at http://www.arin.net/elections/electionguidelines.html

John Curran and Scott Bradner were elected to serve on the Board of Trustees. Their three-year terms begin on 1 January 2007.

Elected to the Advisory Council were: Leo Bicknell, Lea Roberts, Robert Seastrom, Heather Skanks, and Stacy Taylor. Each begins serving a three-year term on 1 January 2007.

#### **Number Resource Organization Number Council**

Louis Lee will rejoin Sanford George and Martin Hannigan as a member of the Number Resource Organization Number Council (NRO NC) from the ARIN Region. In October 2006, Louis Lee was re-elected to the NRO NC from the ARIN region, and he will serve another three-year term beginning 1 January 2007.

#### **ARIN Service Fees**

Fees for IPv4 addresses and Autonomous System Numbers (ASNs) remained unchanged in 2006. Actions regarding other fees are noted below. The relevant Board of Trustees meeting minutes are available at http://www.arin.net/meetings/minutes/bot/. ARIN's service fees are noted on the ARIN Fee Schedule at http://www.arin.net/billing/fee\_schedule.html.

#### **IPv6** Fees

The ARIN Board of Trustees, at its meeting on 12 February 2006, extended the waiver of all IPv6 fees to all members in good standing through 31 December 2007. This waiver is not extended to any overdue IPv6 related fees. This is a continuation of the waiver that was first enacted at the Board of Trustees Meeting on 9 November 2004 meeting.

The ARIN Board of Trustees, at its meeting on 11 July 2006, waived all but \$500 of the IPv6 Initial Assignment fee through 31 December 2007.

#### **Transfer Fees**

At the direction of the ARIN Board of Trustees, on 31 December 2006, the waiver of the initial fee for the transfer of Internet number resources will expire. For approved transfer requests received on or after 1 January 2007, the initial transfer fee is \$250 USD.

#### **ARIN Consultation and Suggestion Process (ACSP)**

The ARIN Board of Trustees approved the ARIN Consultation and Suggestion Process (ACSP) for implementation in September 2006. This formal documented process provides a means for the ARIN Board and Executive to ask for comments on specific issues relating to ARIN services and practices, as well as a mechanism for the community to make suggestions regarding existing or potential services and practices at ARIN. The document is available at http://www.arin.net/about\_us/corp\_docs/acsp.html.

By the end of 2006, thirteen suggestions had been submitted via the web template. Ten suggestions were confirmed and thus considered valid. Several suggestions have been implemented; all were answered and closed. The consultation portion of the process was not invoked during the year.

#### Overview of Suggestions Received in 2006 and Actions Taken

Topic	Action	Response (via e-mail from Presi- dent & CEO)
One spam message	ARIN staff review, no action	None needed
One policy-related message	ARIN staff review, not applicable	Referred submitter to IRPEP
Three questions, not suggestions	ARIN staff review, not applicable	Referred submitters to info@arin.net
Suggestion to provide a cross-reference to policies and sections in NRPM	ARIN staff review, website work by ARIN staff	Cross references added in the policy archives
Suggestion to clarify instructions regarding mandatory confirmation of a suggestion; provide information on where to ask questions concerning the ACSP itself	ARIN staff review, website work by ARIN staff	Added text to suggestion submittal form and main ACSP page
Suggestion to announce things like ARIN legal activities on the arin-announce@arin.net mailing list	ARIN staff review and discussion	Decisions are made on a case by case basis in the best interest of ARIN
Suggestion to eliminate the "security box" on the suggestion submittal form or make it a lot easier to guess the letters	ARIN staff review, no action taken - will monitor	Needed to help prevent automated spam bot submissions
Suggestion to make public the suggestions and responses to provide accountability	ARIN staff review and discussions	Will publish periodic updates



# Keports

# Updates

#### **ARIN Departmental Reports**

#### Human Resources and Administration Department Director: Mary K. Lee

**Function:** Performs personnel acquisition, employee compensation management, benefits administration, payroll administration, employee training, office management, office security, and travel administration.

The Human Resources and Administration Department provides services for the other four departments at ARIN.

In February 2006, the generator backup project was completed. Throughout the year, the department worked with Engineering and the Executive team on a reorganization of the Engineering department. The department presented, jointly with the Financial Services Department, a 401(k) update to all staff. All ARIN employees participated in the annual sexual harassment training, which was done online this year. Additional training completed by members of staff during 2006 covered areas such as Critical Thinking, Emotional Intelligence, an MBA five-day program, Oracle Database, and Communications and Project Management. The management team worked individually with several executive coaches, concentrating on further development of personal and business skills.

In 2006, the ARIN staff consisted of 42 full-time positions and a student intern, with one new position added to the Engineering Department. As of the end of the year, ARIN was comprised of twenty-two men and twenty women. ARIN continues to build a strong, knowledgeable, and tenured employee base. Twenty employees have been at ARIN for four years or more.

During 2007, the department will continue to work with the new performance evaluation system, adding enhancements and developing the six-month informal review templates. Other projects underway include a company-wide document retention and destruction policy and a business continuity plan.

#### Engineering Department Director: Ginny Listman

**Function:** Performs hardware, software, and database maintenance, system administration, internal network operations, software development, and hardware acquisition.

During 2006, the Engineering Department underwent a re-organization. System operational roles were more specifically defined, a systems architect role introduced, and database designing moved under the Software Engineering area. During the year, projects were undertaken to support both external and internal operations and services. Accomplishments included:

Improvements to Customer-Facing Processes: The department made improvements to the ARIN Routing Registry that included a data cleanup effort and server software that supports common WHOIS client flags and separates mirroring from WHOIS components. Engineering released a modified registration services ticketing system to reduce the automated response and processing time from up to one hour to less than five minutes, and added site/server redundancy so that auto-replies and ticketing could continue throughout site or back-end system interruptions. The department also developed the back-end systems necessary to implement the new ARIN Consultation and Suggestion Process (ACSP) and improved meeting registration, election, templates processing, and billing systems.

Operational Improvements: The focus in 2006 was on security and redundancy. The biggest project was establishing a multi-homing network to support ARIN services. Security improvements were made

through an analysis of our application security and a review of our monitoring systems. In addition, all source code was migrated to a central repository system, RWhois hardware was replaced, and the MySQL database was updated. The department also experimented with VoIP technology and will be moving forward with leveraging the expanding technology.

#### Goals for 2007

- Additional Improvements to the Routing Registry
- Integration of the Billing Database with the Registration Services Database
- Customer Web Portal
- Resource Certification Experimentation

#### Financial Services Department Director: Bob Stratton

**Function:** Provides ARIN financial services, which include accounts receivable, accounts payable, contracts, budgeting, general accounting activities, and financial reporting.

The Financial Services Department (FSD) instituted a successful e-mail reminder process in 2006. ARIN uses this process to inform contacts other than the Billing Point of Contact of the billing status of their organization. It has helped to lower the number of overdue accounts and in FSD's ongoing efforts to maintain the accuracy of billing contact data.

Collection of ARIN's overdue accounts receivable generated \$850,000 of revenue due from previous years. This process is almost complete and going forward organizations will be expected to keep their account paid up to date.

The department instituted an internal budget process that allows department directors to more closely track ARIN's financial operations during the year.

ARIN's investment program had another outstanding year. ARIN takes its fiduciary responsibility seriously and manages its funds conservatively, but with an expectation of growth to ensure the financial stability of the organization.

The Engineering Department is providing FSD support with a number of projects. A new inventory system is up and running and all capital equipment is tagged and tracked in the system, even down to the room where it is housed.

The Registration Services Agreement (RSA) now captures more data, allowing FSD to keep better contact records on customers.

Overall, FSD has continued to try to provide the best service possible to both ARIN's community and to the other departments within the organization.

#### Member Services Department Director: Susan Hamlin

**Function:** Provides ARIN member services, which include facilitating the policy development process, managing association services, providing information services, and supporting ARIN outreach activities.

Membership: ARIN membership grew 13%, to 2,681 members as of 31 December 2006. Steady growth continues as new organizations receive IP address space from ARIN and automatically become members and others voluntarily join ARIN. This year's membership numbers also reflect the work of the Financial Services Department, which continued its cleanup work that resulted in some membership closures.

Meetings: ARIN XVII was held in Montreal, Canada, from 9-12 April. ARIN replaced the Terminal Room with the "Cyber Café" – a space that combines Internet access, printing capability, registration and financial services help desks, and an ARIN 8' x 8' booth. This booth, and two similar table-top versions, provides visual displays to attract attendees to talk to staff, take literature, and watch multimedia presentations. This new educational package was developed for ARIN to take to other events throughout the year.

ARIN XVIII was held back to back with NANOG 38, 11-13 October in St. Louis, Missouri. Here, MSD premiered the "ARIN Meetings: Your Voice, Your Community" video. It features interviews of meeting attendees and footage from past ARIN meetings and social events. This ten-minute video helps the community understand what takes place at an ARIN meeting and conveys the importance of attending these meetings.

Services: MSD facilitated two cycles of ARIN's policy development process, following the community-defined Internet Resource

Policy Development Process (IRPEP). The Number Resource Policy Manual (NRPM) was updated several times during the year in conjunction with the ratification and implementation of new policies. MSD staff improved the online policy archives to cross-reference numbered policy proposals and their final locations inside the NRPM. MSD is currently working on a flash presentation to animate and narrate the IRPEP. This new production will be featured in 2007.

ARIN introduced new election software, which was successfully implemented in time for the October Board of Trustees, Advisory Council, and Number Resource Organization Number Council elections. The major enhancement for users is the one-stop action of registering, voting, and confirming on screen, thus eliminating the confirmation e-mail exchange. Back-end database improvements assisted Member Services in administering the process.

To provide the community with an easier address to remember, MSD changed its e-mail address to info@arin.net. Messages posted to the arin-announce@arin.net and ppml@arin.net mailing lists are now sent from this address. The community uses this e-mail address to contact ARIN staff about membership, designated member representative (DMR) updates, elections, meetings, and general questions.

Outreach and Education: Looking for an entertaining way to present the technical information at the core of ARIN's mission, MSD turned to a comic book format, unveiling *The Adventures of Team ARIN* at ARIN XVII. Four superheroes representing the broad ideals by which the Internet is operated and governed (access, responsibility, information, neutrality) use their powers to educate the public and facilitate the participation of Internet stakeholders in policy and technical discussions. Future adventures are planned for Team ARIN in 2007.

From 7-9 November, ARIN participated at ISPCON in Santa Clara, California. ISPCON, one of the largest conferences in the United States for Internet Service Providers, provided ARIN its first opportunity to exhibit outside an ARIN meeting. Staff members from Registration and Member Services were on hand to answer questions about ARIN and its operations, policies, and practices. Given the great success of this first experience, ARIN will participate at ISPCON in Orlando in May 2007.

NRO Activities: ARIN served as the Secretariat of the Number Resource Organization (NRO) in 2006, and with that responsibility MSD staff took on the extra duties of maintaining the NRO and Address Supporting Organization (ASO) websites. In addition, MSD staff coordinated the communication and outreach efforts of the NRO, in conjunction with their communications colleagues in the other Regional Internet Registries. ARIN staff also helped represent the NRO at the Internet Pavilion during ITU Telecom World in Hong Kong, China, from 4-8 December.

New Activities for 2007: Next year's activities will include the distribution of a membership handbook to all members. Aimed at expanding communication with new members, the content describes important aspects of member interaction with ARIN staff such as requesting resources, billing, and updating points of contact and it will be sent to all members in an initial mailing, and subsequently it will be sent to new members on a quarterly basis.

#### Registration Services Department Director: Leslie Nobile

**Function:** Allocates and assigns Internet number resources, maintains IP registry and routing registry directories, administers reverse mapping DNS, and operates the ARIN Registration Services Help Desk.

The Registration Services Department (RSD) continued to provide high quality service to ARIN customers in 2006. Besides the critical tasks of allocating and assigning Internet number resources, operating a telephonic help desk, and maintaining the WHOIS Directory Service, reverse delegation registrations and a Routing Registry Service, RSD was actively involved in several external education and training activities to an ever expanding and diverse community over the course of the year.

In 2005, the United States government tasked the Office of Management and Budget to mandate the transition of all federal systems to IPv6 by 30 June 2008. In early 2006, the US Department of Commerce's NTIA contacted ARIN for assistance in training on how to request IPv6 addresses from ARIN, and would involve approximately 26 federal agencies involved in the transition. As a result, RSD actively participated in several Federal CIO Council's Architecture and Infrastructure Committee (AIC) IPv6 Addressing Working Group meetings as well as provided them with a formal training session at NASA HQ in Washington, DC.

In early 2005, the U.S. Federal Bureau of Investigation asked ARIN to give a presentation for FBI investigators on Internet number resources, the Regional Internet Registry (RIR) system, and how to use WHOIS. Due to the success of this initial training class, ARIN was officially added to the formal curriculum of the "Cyber Investigations Techniques & Resources" training classes held 5 - 6 times yearly at the FBI's National Training Academy in Quantico, VA.

Other outreach activities for RSD in 2006 included participation at ISPCON Fall 2006 in Santa Clara, CA, a presentation to the U.S. Federal Trade Commission in Washington, DC, and several presentations to the U.S. Department of Defense.

RSD reorganized the department this year to increase the efficiency of its operations. Two new positions were created; the "Principal Resource Analyst" who is responsible for supervising the day-to-day work of the department's four Resource Analysts, and the "Technical Specialist" whose responsibilities include acting as the technical advisor to RSD and the technical liaison with other departments at ARIN, particularly engineering. RSD experienced only minor staff turnover this past year and managed to operate steadily with nine staff members throughout the year.

In 2006, ARIN once again saw the number of IPv4 allocations increase and the number of IPv6 allocations decrease, possibly indicating that many Internet Service Providers are still relying heavily on IPv4 to sustain their operations. However, ARIN saw a large number of requests for IPv6 space from end user organizations. Out of a total of 47 requests from end users, ARIN issued 24 IPv6 end-user assignments between 30 September 2006, when the new policy was implemented, and the end of the year. On a monthly average, RSD received 1,200 Help Desk calls and over 70,000 ticketed e-mails in their various role accounts, and processed an average of 665,000 templates each month. At this point in time, the registration software has been honed enough to efficiently auto-process about 94% of all reassignment templates, which make up the majority of the templates that RSD receives.

The objectives of RSD continue to be the improvement and streamlining of processes and procedures, increased efficiency, reduction of errors and delays, and improvement of overall customer service. In 2006, some of these objectives were achieved through the release of enhanced versions of all registration templates, improvements to the registration software to allow the auto-processing of additional templates, and a streamlining of the vetting procedures for organization registrations. The new templates and reduced processing times, due to the automation and streamlining of procedures, have been very favorably received by the ARIN community.

#### **Overview**

The Advisory Council advises the Board of Trustees on matters involving Internet number resource policies and related matters. Adhering to the procedures in the Internet Resource Policy Evaluation Process, the Advisory Council forwards consensus-based policy proposals to the Board for ratification.

#### **Members**

The Advisory Council consists of 15 elected members. The members of the Advisory Council (AC) for 2006 were:

- Dan Alexander
- Paul Andersen
- Cathy Aronson
- Marla Azinger
- Leo Bicknell

- Ron da Silva, Chair
- Bill Darte
- Mark Kosters
- Alec Peterson, Vice Chair
- Matt Pounsett

- Lea Roberts
- Alex Rubenstein
- Rob Seastrom
- Stacy Taylor
- Suzanne Woolf

#### Meetings

The Advisory Council met in person at ARIN's biannual meetings in Montréal and St. Louis. In addition, they met twelve times via teleconference. The minutes from these meetings are available online at http://www.arin.net/meetings/minutes/ac/.

Supplementing their work related directly to their part in the ARIN Internet Resource Policy Process, an average of two AC Members attended each of the seven other RIR meetings in 2006.

#### **Advisory Council Policy Actions**

In 2006 the AC conducted initial reviews and accepted the following as formal proposals:

- 2006-1: Residential Customer Privacy
- 2006-2: Micro-allocations for Internal Infrastructure
- 2006-3: Capturing Originations in Templates
- 2006-4: IPv6 Direct PI Assignments for End Sites
- 2006-5: IPv4 Micro-allocations for anycast services (temporary)
- 2006-6: Bulk WHOIS agreement expiration clarification
- 2006-7: Changes to IPv6 initial allocation criteria

The AC found community consensus in favor and recommended that the ARIN Board of Trustees adopt the following policy proposals:

- 2005-1: Provider-Independent IPv6 Assignments for End Sites
- 2005-8: Proposal to amend ARIN IPv6 assignment and utilisation requirement
- 2005-9: 4-Byte AS Number
- 2006-2: Micro-allocations for Internal Infrastructure
- 2006-3: Capturing Originations in Templates

The AC abandoned the following proposals and they were subsequently closed:

- 2006-1: Residential Customer Privacy
- 2006-4: IPv6 Direct PI Assignments for End Sites
- 2006-5: IPv4 Micro-allocations for anycast services (temporary)

The following proposal was withdrawn by its author:

2006-6: Bulk WHOIS agreement expiration clarification

The AC did not accept the following proposal submissions as formal proposals and they were subsequently closed:

- Requirement for Reasonable Contract Terms
- Recommended v6 aggregation practices
- RSA Modification Procedure

#### **Overview**

The Board of Trustees has responsibility for the business affairs and financial health of ARIN, and manages ARIN's operations in a manner consistent with the guidance received from the Advisory Council and the goals set by the registry's members. The Board is responsible for determining the disposition of all revenues received to ensure that all services are provided in an equitable manner.

#### **Members**

The Board of Trustees consists of seven members. Six members are elected by ARIN's membership and the President of ARIN, appointed by the Board, serves as the seventh Trustee. The members of the Board of Trustees in 2006 were:

#### Officers

- Chairman: John Curran, Chief Technology Officer, ServerVault
- Secretary: Scott Bradner, University
  Technology Security Officer, Harvard
  University Office of the Provost, Harvard
  University
- Treasurer: Lee Howard, Director of Network Engineering, Stanley Associates
- President: Ray Plzak, Chief Executive Officer, American Registry for Internet Numbers

#### **Trustees**

- Bill Manning, Partner, EP.NET, LLC.
- Paul Vixie, President, Internet Systems Consortium
- Bill Woodcock, President and Research Director, Packet Clearing House

#### **Meetings**

The Board of Trustees met in person four times in 2006.

12 February – Dallas, Texas

10 April – Montréal, Québec (ARIN XVII)

11 July – Montréal, Québec

11 October - St. Louis, Missouri (ARIN XVIII)

The Board also met four times via teleconference. The minutes from all Board meetings are available online at

http://www.arin.net/meetings/minutes/bot/.

#### **Board of Trustees Policy Actions**

- Adopted 2005-4: AfriNIC Recognition Policy
- Adopted 2005-5: IPv6 HD Ratio
- Adopted 2005-7: Rationalize Multi-homing Definition and Requirement
- Adopted 2005-1: Provider-independent IPv6 Assignments for End Sites
- Adopted 2005-8: Proposal to amend ARIN IPv6 assignment and utilisation requirement
- Adopted 2005-9: 4-Byte AS Number

#### **Other Actions**

- Elected officers: John Curran, Chairman; Scott Bradner, Secretary; Lee Howard, Treasurer
- Extended the waiver of IPv6 fees until 31
  December 2007; approved modifications
  to the fee schedule for IPv6; approved fee
  schedule for IPv6 initial assignments
- Approved the updates to IRPEP to change the period for the initial review of policy proposals by the ARIN AC
- Approved modifications to the ARIN Bylaws
- Discussed ARIN's potential role as certification authority for Internet number resources and approved coordinated work in this area with other RIRs
- Reviewed and accepted the 2005 audited financial statements

- Directed President, staff, and Counsel to develop practice in the area of notification of modifications to the Registration Service Agreement
- Discussed and approved process for ARIN to use in making public certain contract opportunities and soliciting feedback
- Adopted the ARIN Consultation and Suggestion Process (ACSP)
- Confirmed the results of the 2006 Board of Trustees and Advisory Council elections
- Approved 2007 budget
- Agreed that ARIN would participate in Postel Network Operator's Sponsorship in conjunction with NANOG

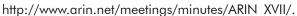
#### **ARIN XVII**

Public Policy Meeting: 9-11 April 2006 Members Meeting: 12 April 2006

Montréal, Québec, Canada

#### Montréal Meeting is Largest Second-Quarter Meeting Ever for ARIN

From 9-12 April, the ARIN community gathered in Montréal, Québec for the ARIN XVII Public Policy and Members Meetings. In addition to the regular meetings, there were workshops, tutorials, and several new meeting features. Discussions focused on a number of technical and policy issues, including Provider Independent IPv6 Address Space, 4-Byte AS numbers, and X.509 resource and routing certificates. Meeting notes, transcripts, presentations, and archives of the webcast are available at:





This was ARIN's largest second-quarter meeting, with 155 attendees, including approximately 58 first-time attendees. Meeting attendees included 94 attendees from 21 U.S. states, 40 from 3 Canadian provinces, and 21 from outside the ARIN region. An exciting new development at ARIN meetings was the Cyber Café, which combines the services formerly provided by the Terminal Room with the Registration Services and Billing Help Desks.

On Sunday, 9 April, ARIN was excited to once again offer "Getting Started with IPv6," a workshop providing hands-on experience in setting up IPv6 on attendees' laptops. Also on Sunday, ARIN held a First Timers Lunch where those new to the ARIN community got a chance to meet members of the ARIN Board, Advisory Council, and ARIN's executive team and department directors. Activities on Sunday concluded with the Open Policy Hour and the 7th Annual ARIN Foosball tournament.

At the Public Policy Meeting, in addition to the seven policy proposals in front of the community, discussion and presentation highlights included: a discussion panel on 'X.509 Resource and Routing Certificate,' featuring John Curran, Steve Bellovin, Randy Bush, Geoff Huston, and Steve Kent; a presentation titled 'Bogon filtering for fun and profit' by Dave Dietrich; and a report on the Internet Governance Forum by Lynn St. Amour focusing on the history in the area of Internet governance and what lies ahead. Open microphone discussions occurred on the minimum prefix size for end-users; ARIN focusing on address allocations for anycast; and continued discussion of residential customer privacy.

The Members Meeting included reports from ARIN's departments, the Board of Trustees, and the Advisory Council, as well as a presentation by Scott Bradner on a Member Suggestion Process, followed by discussion of the topic. Topics from the Open Microphone session included a request that ARIN publish a road map of services to be provided to members and discussion on technical issues related to DNSSEC and certification, and ARIN's role in this effort.

#### **Sponsors**

ARIN thanks Teleglobe, a VSNL International Company, who with assistance from Bell Canada, Cisco, Dell, and Force10 Networks sponsored the network connectivity, social event, and Cyber Café (formerly the "Terminal Room") for this meeting.

ARIN also thanks the Canadian Internet Registration Authority (CIRA) for its sponsorship of lunch on Monday, 10 April.







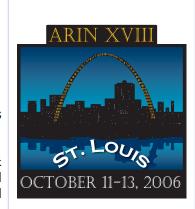
#### **ARIN XVIII**

Public Policy Meeting: 11-12 October 2006 Members Meeting: 13 October 2006

St. Louis, Missouri, USA

#### ARIN XVIII and NANOG 38 demonstrate continued success of back-to-back meetings

ARIN XVIII was held in St. Louis, Missouri, from 11-13 October. Held back to back with NANOG 38, the meeting proved to be quite successful and included in-depth policy discussions, technical presentations, and a great deal of participation by a broad cross-section of the ARIN community.



The meeting drew 169 attendees, including approximately 45 first-time attendees and 103 attendees who also attended NANOG 38.

The ARIN XVIII meeting reports contain the presentations given at the meetings, an archive of the video webcast, summaries of agenda items and subsequent discussion from those in attendance and participating remotely, and a transcript of discussions at the meetings. It is available at http://www.arin.net/meetings/minutes/ARIN XVIII/.

On Sunday, 8 October, ARIN offered a new all-day workshop "Networking with IPv6," aimed at providing hands-on experience in setting up IPv6 on routers and working with the protocol in a network environment. After the completion of NANOG 38 on Tuesday, ARIN held a tutorial titled "PKI: An Operational Perspective," and an extremely well-attended Open Policy Hour.

The community focused on the three policy proposals up for discussion at the Public Policy Meeting, and engaged in discussion on a number of other technical and policy-related topics. Highlights included: a roundtable discussion on blacklisting which featured John Curran, Don Blumenthal, Adam Brower, Katie Flowers, and Rob Seastrom; a presentation on a proposal regarding IP renumbering by Steve Crocker; a presentation on best common practices for IPv6 multihoming by Marla Azinger, and Leslie Nobile presented on the issue of whether the Regional Internet Registries (RIRs) should harmonize their allocation periods. Another presentation that generated much interest was by Leo Bicknell which included analysis he had undertaken on the data provided in WHOIS, specifically his attempt to find the actual scope of records involved with several WHOIS issues including residential customer privacy. Open microphone discussions covered such topics as when and how staff should present assessments on policy proposals, comments on the new ARIN Consultation and Suggestion Process (ACSP), and Leo Bicknell's WHOIS presentation and its possible ramifications. During the lunch break on Wednesday, 11 October, ARIN also held a lunch for first-time ARIN meeting attendees where they got a chance to meet with representatives from the ARIN Board of Directors, ARIN Advisory Council, and the ARIN executive team and department directors.

The Members Meeting began with a presentation on ARIN Board and Advisory Council election procedures, and speeches by candidates for the ARIN Board of Trustees and Advisory Council. The remainder of the meeting included reports from ARIN's departments, the Board of Trustees, and the Advisory Council, as well as a presentation by Lee Howard as ARIN's Treasurer on the organization's finances. Topics from the Open Microphone session included further discussion of the new ACSP, discussion of ARIN's fees for non-subscriber members, and a request for updates at future meetings on ARIN's Service Level Agreements (SLAs).

#### **Sponsors**

ARIN would like to thank Savvis for its sponsorship of the network connectivity for ARIN XVIII. ARIN also extends its thanks to the Center for the Application of Information Technology (CAIT) at Washington University in St. Louis' School of Engineering and Applied Science for its assistance with the Cyber Café. In addition, ARIN thanks Cisco Systems for its sponsorship of the "Networking with IPv6" Workshop.







#### **Internet Community Organizations**

ARIN is active in the international Internet community, working in close coordination with such open Internet community organizations as ICANN, ISOC, IETF, and NANOG. ARIN enjoys a comprehensive relationship with each of these bodies and participates in many of their meetings throughout the year.

#### **Number Resource Organization (NRO)**

The NRO is the cooperative body of the five Regional Internet Registries. It exists to protect the unallocated Number Resource pool, to promote and protect the bottom-up policy development process, and to act as a focal point for Internet community input to the RIR system.

ARIN's President served as the Secretary for the NRO in 2006. This task included providing ARIN staff support to run the secretariat function of the NRO. Susan Hamlin served as the Chair of the NRO Communications Coordination Group and Ginny Listman served as the Chair of the NRO Engineering Coordination Group. In 2007, ARIN's President will serve as the Chair of the NRO.

Much of the activity for the NRO in 2006 centered on events related to Internet governance. This included active participation in all events related to the Internet Governance Forum (IGF). The IGF is a new forum for multi-stakeholder policy dialogue, resulting from a suggestion to the U.N. Secretary-General from the World Summit on the Information Society (WSIS) that took place over the past many years. In December of 2006 the NRO participated in ITU Telecom World 2006 and operated an information booth. Members of the NRO Executive Council also coordinated with the ICANN Government Advisory Committee throughout the year to provide pertinent information about the functioning of the RIRs and the facilitation of the respective regional policy processes.

#### **Internet Governance Activities**

During the inaugural Internet Governance Forum (IGF) in Athens, 30 October - 2 November 2006, participants gathered to discuss the overall theme of Internet Governance for Development, with capacity building as a cross-cutting priority. IGF explored four main themes of openness, security, diversity, and access in main sessions and various workshops.

Two members of the NRO Executive Committee, Adiel Akplogan (AfriNIC) and Raul Echeberria (LACNIC), were part of the Advisory Group that helped to coordinate the IGF, including setting the agenda and participating in discussions leading up to the IGF. In addition, Adiel Akplogan spoke at the closing ceremony, where he defended the spirit of multistakeholder participation and the relevance of capacity building.

Throughout the event, NRO representatives met IGF participants and exchanged knowledge, experience, and views on Internet activities.

#### **ICANN**

ICANN held three meetings in 2006: 25-31 March in Wellington, New Zealand, 26-30 June in Marrakesh, Morocco, 2-8 December in São Paolo, Brazil. Discussions focused on ICANN's Strategic Plan, Internationalized Domain Names (IDNs), and Internet governance with respect to the International Telecommunication Union (ITU) and the Internet Governance Forum (IGF).

The NRO participated in ICANN meetings by providing input on the ICANN Strategic Plan and other discussions, interacting with ICANN's Government Advisory Committee, and working to pass the "IANA to RIR IPv6 Allocation" global policy proposal.

#### **ARIN's Meeting Participation**

In addition to facilitating ARIN's Public Policy and Members Meetings, ARIN staff actively participates in the global Internet community. Below is a listing of meetings where ARIN staff participated. For additional details on these meetings and how ARIN staff participated, please see the archives of ARIN's quarterly newsletter "ARIN Review." Reports on the meetings ARIN staff attend were included on the second page of each quarterly edition of the ARIN newsletter.



ARIN staff engaging in outreach effort at ISP-CON in San Diego

Meeting	Dates	Location
NDSS Symposium	2-3 February	San Diego, California
ESCC/Internet2 Joint Techs Workshop	5-8 February	Albuquerque, New Mexico
NANOG 36	12-15 February	Dallas, Texas
APNIC 21	27 February - 3 March	Perth, Australia
IETF 65	19-24 March	Dallas, Texas
ICANN	25-31 March	Wellington, New Zealand
RIPE 52	24-28 April	Istanbul, Turkey
AfriNIC 4	16-17 May	Nairobi, Kenya
Federal (US) IPv6 Summit	17-19 May	Reston, Virginia
LACNIC IX	22-26 May	Guatemala City, Guatemala
NANOG 37	4-7 June	San Jose, California
ICANN	26-30 June	Marrakesh, Morocco
IETF 66	9-14 July	Montréal, Canada
ESCC/Internet2 Joint Techs Workshop	16-19 July	Madison, Wisconsin
HostingCon 2006	17-19 July	Las Vegas, Nevada
APNIC 22	4-9 September	Kaohsiung, Taiwan
VI Computer Law World Conference	6-8 September	Edinburgh, Scotland
RIPE 53	2-6 October	Amsterdam, the Netherlands
NANOG 38	8-10 October	St. Louis, Missouri
Internet Governance Forum	30 October - 2 November	Athens, Greece
IETF 67	5-10 November	San Diego, California
ISPCON Fall 2006	7-9 November	Santa Clara, California
AfriNIC 5	27 November - 1 December	Port Louis, Mauritius
ICANN	2-8 December	São Paulo, Brazil
ITU - World Telecom 2006	4-8 December	Hong Kong, China



Through its participation in the NRO, ARIN staff joined their colleagues from the other Regional Internet Registries in staffing the "Internet Pavilion" at ITU Telecom World in Hong Kong. The Pavilion was co-sponsored by the NRO, ICANN, and ISOC.

#### The NRO display included:

- Multimedia presentations on Regional Internet Registry (RIR) history, the NRO, and IP addressing and routing
- An NRO fact sheet available in six official United Nations languages (Arabic, Chinese, English, French, Russian, and Spanish)
- Brochures and fact sheets on technical and RIR-specific issues
- Newsletters, articles, and other documentation

## INTERNET NUMBER RESOURCE POLICY

#### Introduction

The community in the ARIN region decides how ARIN will manage and administer Internet number resources. These community decisions are recorded as polices. The ARIN Number Resource Policy Manual (NRPM) is the repository for all policies.

Policy development is an open and transparent process. Anyone may participate in the process - a prior relationship as an ARIN member or customer is not a requirement. The Internet Resource Policy Evaluation Process (IRPEP) describes the process structure and details how a proposal becomes a policy. The ARIN Board of Trustees ratifies policies only after:

- a discussion is conducted on mailing lists and at biannual Public Policy meetings;
- the ARIN Advisory Council makes a recommendation that, based on these discussions, community
  consensus has been reached that the proposal should be a policy.

The Policy Proposal Archive (http://www.arin.net/policy/proposals/proposal\_archive.html) contains the status of current proposals as well as complete information concerning previous policy proposals.

#### **How to Participate in the Process**

- Subscribe to the Public Policy Mailing List (PPML) and join in the discussions. The community uses this public
  forum to raise and discuss policy-related ideas and issues surrounding existing and proposed ARIN policies.
  All new policy proposals are introduced and discussed on this mailing list. Find subscription information at
  http://www.arin.net/mailing\_lists/.
- Attend biannual ARIN Public Policy Meetings or participate remotely through the meeting webcasts.
   Current policy proposals are presented and discussed at each meeting. Meeting information is available at http://www.arin.net/meetings/.
- Submit a policy proposal to create a new policy or revise current policy. After reading IRPEP to understand the proposal process, follow the template instructions to submit your proposal.

#### **Internet Resource Policy Evaluation Process**

The ARIN Board of Trustees ratifies Internet resource policies only after a full public discussion, a recommendation from the ARIN Advisory Council, and expressed consensus in support of the policy among the community.

The IRPEP governs the steps necessary to adopt a policy proposal, and is available on ARIN's website at http://www.arin.net/policy/irpep.html.

On 14 January 2006, the Board of Trustees solicited feedback via the Public Policy Mailing List on a proposed change to the time frame of the initial Advisory Council review. There was minimal community feedback, with the one concern raised being addressed in the final language approved by the Board during its 12 February 2006 meeting.

A new version of the Internet Resource Policy Evaluation Process (IRPEP) was then ratified by the ARIN Board of Trustees and took effect 28 March 2006.

... the NRO website offers a comparative matrix of the Internet resource policies of all the Regional Internet Registries?

It's available at:

www.nro.net/policy/

... subscription information and archives of all ARIN mailing lists, including the Public Policy Mailing List are available on the ARIN website?

See:

www.arin.net/mailing\_ lists/

... if you would like to see information about a previous ARIN Public Policy Meeting, ARIN's website has a "Meeting Report" page where minutes, presentations, and webcasts and transcripts (of more recent meetings) are all available?

Visit: www.arin.net/ meetings/minutes/

#### **Policy Proposal Discussions and Actions in 2006**

Policy text, mailing list archives, and meeting minutes are available at the following URLs:

#### **Policy Proposal Text and Status Reports**

http://www.arin.net/policy/proposals/proposal archive.html

#### **Mailing List Archives**

http://www.arin.net/mailing\_lists/

#### **ARIN Public Policy and Members Meeting Minutes**

http://www.arin.net/meetings/minutes/

#### **Board of Trustees Meeting Minutes**

http://www.arin.net/meetings/minutes/bot/

#### **Advisory Council Meeting Minutes**

http://www.arin.net/meetings/minutes/ac/

#### **Policy Proposal Discussion Summaries and Status**

The following are the policy proposals that were either discussed or acted on in 2006. For additional details, please see the URL for each specific proposal.

#### 2005-1

Title: Provider-independent IPv6 Assignments for End Sites

http://www.arin.net/policy/proposals/2005 1.html

ARIN XVII Discussion: The AC determined that this proposal had community support.

Status as of 31 Dec. 2006: Adopted by the Board of Trustees on 27 July 2006 and implemented by staff on 30 August 2006.

#### 2005-9

Title: 4-Byte AS Number

http://www.arin.net/policy/proposals/2005\_9.html

ARIN XVII Discussion: The AC determined that this proposal had community support.

Status as of 31 Dec. 2006: Adopted by the Board of Trustees on 27 July 2006 and scheduled to be implemented by staff on 1 January 2007.

#### 2005-8

Title: Proposal to amend ARIN IPv6 assignment and utilisation requirement

http://www.arin.net/policy/proposals/2005 8.html

ARIN XVII Discussion: The AC determined that this proposal had community support.

Status as of 31 Dec. 2006: Adopted by the Board of Trustees on 27 July 2006 and implemented by staff on 30 August 2006.

#### 2006-1

Title: Residential Customer Privacy

http://www.arin.net/policy/proposals/2006 1.html

ARIN XVII Discussion: The AC found community support to revise the text and would work with the author to do so.

ARIN XVIII Discussion: The AC abandoned this proposal due to lack of community support.

Status as of 31 Dec. 2006: Abandoned.

#### 2006-2

Title: Micro-allocations for Internal Infrastructure

http://www.arin.net/policy/proposals/2006 2.html

ARIN XVII Discussion: The AC found community support to revise the text and would work with the author to do so.

ARIN XVIII Discussion: The AC determined that this proposal had community support.

Status as of 31 Dec. 2006: Adopted by the Board of Trustees on 16 November 2006 and implemented by staff on 20 December 2006.

#### 2006-3

Title: Capturing Originations in Templates

http://www.arin.net/policy/proposals/2006\_3.html

ARIN XVII Discussion: The AC found community support to revise the text and would work with the author to do so.

ARIN XVIII Discussion: The AC determined that this proposal had community support.

Status as of 31 Dec. 2006: Adopted by the Board of Trustees on 16 November 2006 and scheduled to be implemented not later than 30 March 2007.

#### 2006-4

Title: Direct PI Assignments for End Sites

http://www.arin.net/policy/proposals/2006 4.html

ARIN XVII Discussion: The AC abandoned this proposal due to lack of community support.

Status as of 31 Dec. 2006: Abandoned.

#### 2006-5

Title: Micro-allocations for anycast services (temporary)

http://www.arin.net/policy/proposals/2006\_5.html

ARIN XVII Discussion: The AC abandoned this proposal due to lack of community support.

Status as of 31 Dec. 2006: Abandoned.

#### 2006-6

Title: Bulk WHOIS agreement expiration clarification

http://www.arin.net/policy/proposals/2006 6.html

Withdrawn: Prior to any discussion at a Public Policy Meeting, this proposal was withdrawn by the author.

Status as of 31 Dec. 2006: Withdrawn.

#### 2006-7

Title: Changes to IPv6 initial allocation criteria

http://www.arin.net/policy/proposals/2006\_7.html

Introduction on PPML: The ARIN Advisory Council concluded its review of this proposed policy and agreed to forward it as a formal proposal for discussion by the community. It will be presented at ARIN XIX.

Status as of 31 Dec. 2006: Under discussion.

#### Proposal Template Submissions

The following proposal template submissions were received before 31 December 2006, but were not yet acted on by the Advisory Council before the end of the year.

- Documentation of the X.509 Authentication Method - received 25 October 2006
- Documentation of the Mail-From Authentication Method - received 25 October 2006
- Reinstatement of PGP Authentication Method
   received 25 October 2006

# Number Resource

### 9Policy Manual

#### 2006 NRPM Updates

Exact details of the changes to the Number Resource Policy Manual (NRPM), including references to specific sections, is included in the Change Log, located in Appendix A of the NRPM and available at http://www.arin.net/policy/nrpm\_changelog.html.

#### 2006.1

Version 2006.1 of the NRPM was released on 17 February 2006. Ratification of the policy proposals that necessitated this update came from the ARIN Board of Trustees at its meeting on 12 February 2006.

The 2006.1 release incorporated policy text from the adoption and implementation of the following:

- Policy Proposal 2005-4: AfriNIC Recognition Policy
- Policy Proposal 2005-5: IPv6 HD ratio
- Policy Proposal 2005-7: Rationalize Multi-Homing Definition and Requirement

#### 2006.2

Version 2006.2 of the NRPM was released on 30 August 2006. Ratification of the policy proposals that necessitated this update came from the ARIN Board of Trustees at its meeting on 9 May 2006.

The 2006.2 release incorporated policy text from the adoption and implementation of the following:

- Policy Proposal 2005-1: Provider-independent IPv6 Assignments for End Sites
- Policy Proposal 2005-8: Proposal to amend ARIN IPv6 assignment and utilisation requirement
- Policy Proposal 2005-9: 4-Byte AS Number

In addition, at its meeting on 27 July 2006, the Board of Trustees approved some minor editorial updates of the NRPM, affecting Sections 6.6 and 10.2. These updates were included in this version.

#### 2006.3

Version 2006.3 of the NRPM was released on 20 December 2006. Ratification of the policy proposal that necessitated this update came from the ARIN Board of Trustees at its meeting on 16 November 06.

The 2006.3 release incorporated policy text from the adoption and implementation of Policy Proposal 2006-2: Micro-allocations for Internal Infrastructure.

#### References

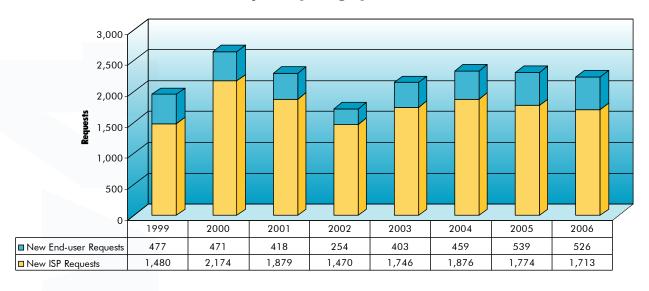
The Number Resource Policy Manual (NRPM) can be found at: http://www.arin.net/policy/nrpm.html

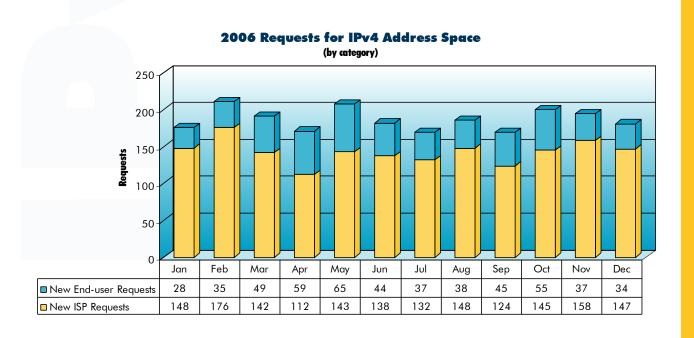
Board of Trustees minutes can be found at: http://www.arin.net/meetings/minutes/bot/index.html

## REGISTRATION SERVICES STATISTICS

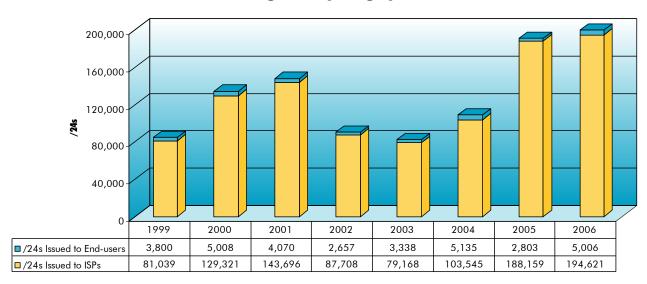
Below are charts with information about highlighted ARIN statistics. Data is shown both in the context yearly for the period of 1999 - 2006 and also aggregated by month for the current year. These statistics, both historical and for the current year are available at <a href="http://www.arin.net/statistics/">http://www.arin.net/statistics/</a>.

#### IPv4 Requests by Category 1999 - 2006

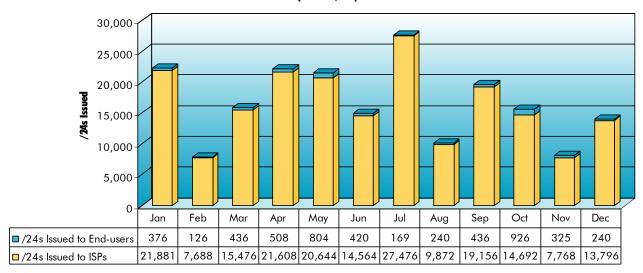




ARIN IPv4 Delegations by Category 1999 - 2006

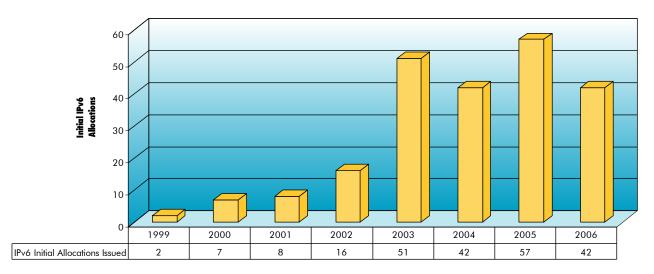


#### 2006 IPv4 Delegations Issued By ARIN (listed in /24s)

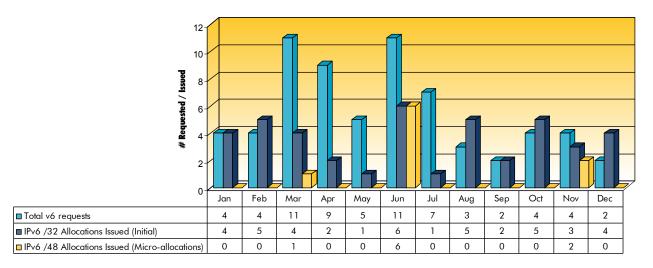


ARIN uses /24 equivalents as the "common denominator" for measuring the larger (/19, /16, etc.) IPv4 address blocks that ARIN actually delegates. In IPv4, one /19 equals thirty-two /24s, and one /16 equals two hundred and fifty-six /24s.

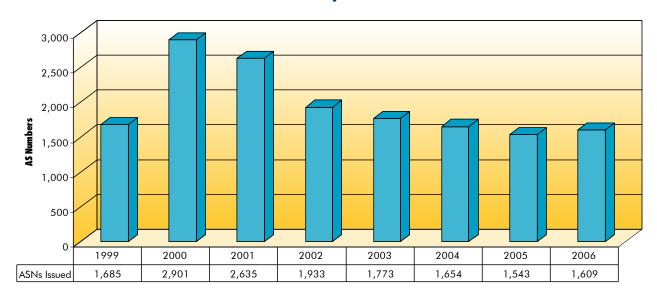
**ARIN IPv6 Initial Allocations 1999 - 2006** 



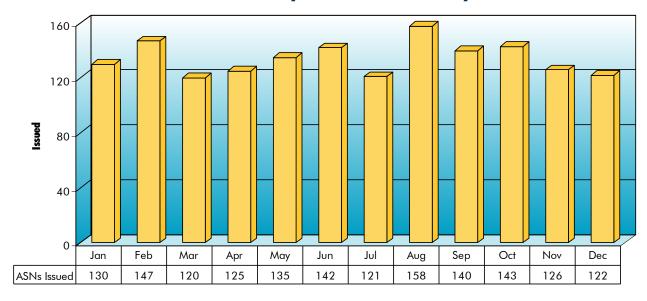
#### 2006 IPv6 Address Requests and Allocations Issued By ARIN



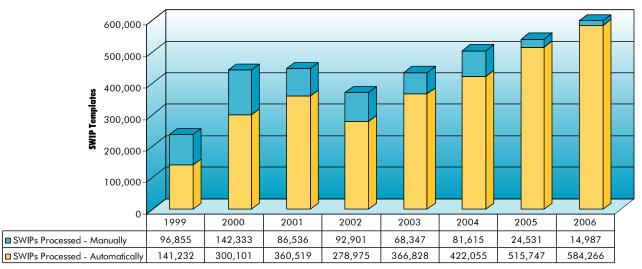
AS Numbers Issued by ARIN 1999 - 2006



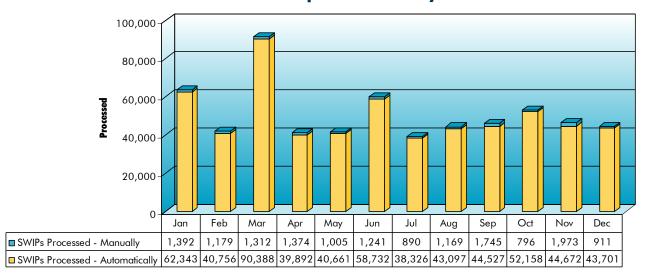
2006 Autonomous System Numbers Issued By ARIN



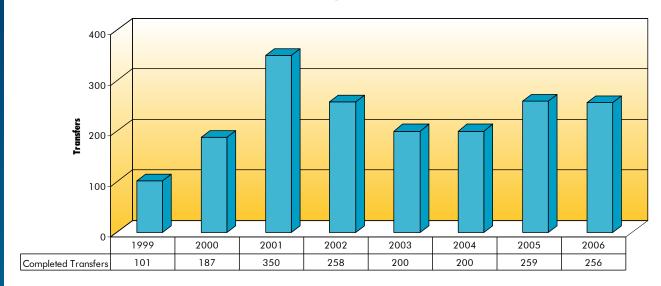




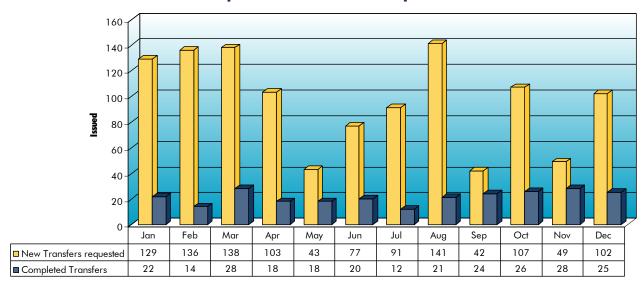
#### **2006 SWIP Templates Processed By ARIN**



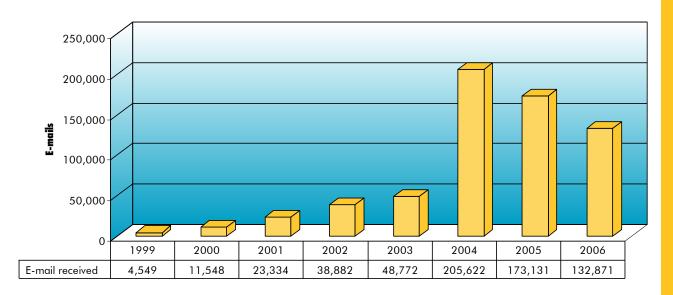
**Total Transfers Completed 1999 - 2006** 



**2006 New Requests for Transfers and Completed Transfers** 

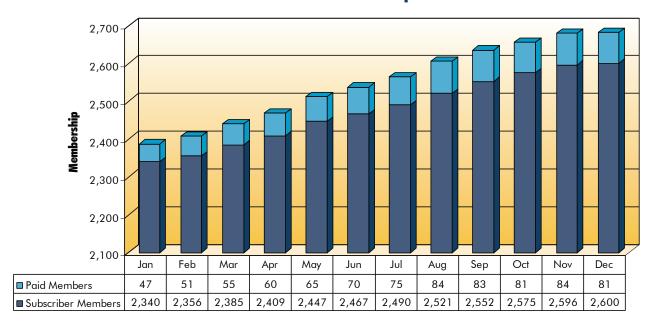


E-mail Received at hostmaster@arin.net 1999 - 2006



Numbers above do not include e-mails containing template submissions.

#### **2006 ARIN Membership**



Any individual or entity may become a General Member of ARIN by receiving and paying for a direct allocation of IP address space from ARIN or by completing a Membership Application Form and paying an annual membership fee. Membership remains active as long as the organization remains General Member in good standing.

As of 31 December 2006, ARIN membership was comprised of 2,398 organizations from the United States, 256 from Canada, 21 organizations based in the Caribbean, and 6 from outside the ARIN region.

#### American Registry for Internet Numbers



3635 Concorde Parkway, Suite 200, Chantilly, Virginia, 20151, USA; www.arin.net