

Volume I. Issue 2

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September 2001

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# Registration Deadline for ARIN VIII Is Upon Us!

ARIN will be hosting its fall 2001 Public Policy and Members Meetings on October 28-31, 2001, at the Biscayne Bay Marriott hotel in Miami, Florida, US. These are important meetings wherein attendees have a direct impact on policy and operational decisions. You will want to be there! See <u>Meeting Registration</u> for details.

## Register by October 14 to become eligible for the Early Bird prize!

Tutorials held on October 28 will kick off the 4-day event, which will include 2 days of open public policy discussions and a half day for a members meeting. They will include

an ARIN policy and registration procedures overview for newcomers, a review of when to use the SWIP vs. NetMod template, a look at the architecture of an IPv6 address, and more. The meeting agenda will include database, IPv6, and community education working group discussions; other IP policy discussions; and a free evening social. The meetings will also include the election of an ARIN representative to the ASO AC. Suggestions for agenda items or interest in leading topic discussions may be expressed by contacting <u>memsvcs@arin.net</u> no later than October 5. The Members Meeting will provide Board of Trustees and Advisory Council reports as well as speeches by ARIN Board and Advisory Council nominees.

Miami is a fascinating city renowned for its art-deco buildings, cafes, shopping, and attractions such as trendy South Beach, Coconut Grove, Coral Gables, the Everglades National Park, and nearby Florida Keys. See you there!

# Upcoming Elections

Elections are underway to fill two open seats on ARIN's Board of Trustees, six open seats on the Advisory Council, and one seat on the ASO Address Council for terms beginning January 1, 2002.

At the upcoming Members Meeting in Miami the nominees for the Board and Advisory Council will present their qualifications, and on November 6 the elections will begin online via the ARIN website. The election period will close on November 13, 2001 and the results will be announced on November 16.



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**ARIN Board of Trustees.** Two seats will be filled: one to occupy the seat currently held by Michael Straty, whose term is expiring December 31, 2001, and a new Trustee position – for a total of seven Board members. The following candidates have been presented by the ARIN Nominating Committee. To read their biographies and voice support for the candidates see <a href="http://www.arin.net/election/botbios.html">http://www.arin.net/election/botbios.html</a>

Board Nominees:

- Ted Hardie
- Trent R. Hein
- Lee Howard
- David Huberman
- Bill Manning
- Mark McFadden
- Michael H. Straty
- Patrick Sweeney

**ARIN Advisory Council.** Six seats on the AC will become vacant at the end of this year: five for regular 3-year terms, and one for a 2-year term to be filled by the candidate receiving the sixth most number of votes. AC members whose terms are expiring are: Steve Corbato, Tony Li, Bill Manning, Guy Middleton, Justin Newton, and Cathy Wittbrodt. To read their biographies and voice support for the candidates see <u>http://www.arin.net/election/acbios.html</u>

AC Nominees:

- Abha Ahuja
- Lyric Apted
- John M. Brown
- Mohamed A Hirse
- Ron da Silva
- Cathy Wittbrodt
- Jim Pickrell
- Bob German
- Dawn Martin
- Sanford George
- Charles Smith
- Trevor Paquette

**ASO Address Council.** Election of an ARIN representative to the ASO AC will be held online for ARIN members during October 22 - 29

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and on-site for all attendees at the October 29 Public Policy Meeting. Candidates are invited to make a brief presentation at this meeting. This is an important position in that it is only one of three seats that represent the ARIN region on the ASO AC, a body that makes policy recommendations to ICANN. For more information visit http://www.arin.net/aso/asonom.htm.

The winner will be elected from the following slate of candidates to replace Raimundo Beca, whose term expires on December 31, 2001. Biographical information and statements of support for these candidates are posted at: <u>http://www.arin.net/aso/asonominees.htm</u>. The election winner will be announced on October 30.

ASO AC Nominees:

- Dewey Coffman
- Eric Decker
- Christopher Faulkner
- Greg Hiscott
- Rob Leon
- Peter Schroebel
- Timothy J. Biggs

# ARIN Board Ratifies Measures

**New Webhosting Policy.** At a July 27, 2001 meeting, the ARIN Board ratified a webhosting policy statement to replace an earlier one that had been suspended at the October 2000 Members Meeting. The new policy states: "When an ISP submits a request for IP address space to be used for IP-based web hosting, they will supply (for informational purposes only) their technical justification for this practice. ARIN will analyze this data continuously, evaluating the need for future policy change."

The ARIN Board of Trustees met on August 15, 2001 and ratified the following two measures relating to IPv6.

**IPv6 Reassignment Policy.** The Board ratified ARIN's IPv6 reassignment policy to adopt the recommendation made by the IAB/IESG on July 20, 2001.

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### **IPv6 Reassignment Guidelines**

#### Allocations should be:

- /48 in the general case, except for very large subscribers.
- /64 when it is known that one and only one subnet is needed by design.
- /128 when it is absolutely known that one and only one device is connecting.

#### Specifically:

- Home network subscribers, connecting through on-demand or always-on connections should receive a /48.
- Small and large enterprises should receive a /48.
- Very large subscribers could receive a /47 or slightly shorter prefix, or multiple /48s.
- Mobile networks, such as vehicles or mobile phones with an additional network interface (such as bluetooth or 802.11b), should receive a static /64 prefix to allow the connection of multiple devices through one subnet.
- A single PC, with no additional need to subnet, dialing-up from a hotel room may receive a /128 IPv6 address for a PPP style connection as part of a /64 prefix.

ARIN will regularly review this policy and may modify it subject to operational experience. See

http://www.arin.net/regserv/ipv6/reassign.html and 20 July 2001 IAB/IESG document for further details.

**Extension of IPv6 Bootstrap Phase**. The Board suspended the suspension of the IPv6 bootstrap phase described in the *Provisional IPv6 Assignment and Allocation Policy Document*, <u>http://www.arin.net/regserv/ipv6/IPv6.txt</u> pending further discussion by the Board in conjunction with the other RIRs. This document made the provision for the bootstrap criteria to be replaced by general criteria once the RIRs reached a combined 100 IPv6 allocations. While this figure had been attained, ARIN had made only 20 of those allocations. This being a number lower than expected, suspension of the bootstrap phase in the ARIN region should allow additional organizations to qualify for an IPv6 allocation.

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# Internet Community Calendar

RIPE 40, October 1 - 5, Prague, Czech Republic ISPCON Fall 2001, October 9 - 11, Las Vegas, Nevada, US NANOG23, October 21 - 23, Oakland, California, US 46th GSM Association Plenary, October 22 - 25, Cairo, Egypt ARIN VIII, October 28 - 31, Miami, Florida, US LACNIC, November 28, 2001, Sao Paulo, Brasil ICANN, November 12 - 15, Marina del Rey, California, US 52nd IETF, December 9 - 14, Salt Lake City, Utah, US

# Internet Community Meeting Reports

June 1-4 - ICANN, Stockholm, Sweden. The ICANN Board discussed and ratified <u>Criteria for Establishment of New Regional</u> <u>Internet Registries</u>, a document submitted by the Address Council (AC) of the Address Supporting Organization (ASO), an ICANN body associated with the RIRs designed to advise the ICANN Board on IPrelated policies. An ASO forum was also held to solicit feedback on global addressing issues.

July 10-12 - IPv6 Conference, Charleston, South Carolina. This conference brought the U.S. Department of Defense and Federal IT decision-makers together with industry and standards organization representatives to discuss the transition from IPv4 to IPv6, and how it will affect defense systems. ARIN presented its IPv6 policies to the group.

**August 5-10 – IETF, London, England.** At the 51st IETF, ARIN staff attended working group sessions and held policy and engineering coordination meetings with the other RIRs. Topics of particular interest that were discussed included DNS, Internet security, IPv6, mobile IP, new registration models, and Whois. ARIN gave several working group and Birds of a Feather (BOF) presentations. At a Root Server System Advisory Council (RSSAC) meeting, ARIN presented a briefing on its efforts to delegate subdomains for each /8 network out of in-addr.arpa and move these zones off the root name servers.

**August 28-31 – APNIC, Taipei, Taiwan.** APNIC held it's 12<sup>th</sup> Open Policy Meeting, during which ARIN presented an update on its plans for transitioning early registration in-addr information (i.e., before ARIN began operations) and an overview of recent activities. Dr. Kenny S.

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The initial day offered training on registration services, IPv6, and RPSL. The remaining 2 days consisted of group discussions on IPv6 policy and technical matters, routing, DNS, network abuse, certification authority, and joint routing/database operations. During the members meeting, consensus was reached on several issues of interest to the global community:

- A policy for provider independent Ipv6 address space assignments for Internet exchanges of a /64
- The Ipv6 bootstrap period should be extended until the next Ipv6 policy is implemented
- Agreement to continue discussion on a /29 as the new Ipv6 minimum allocation

**September 7-10 – ICANN, Montevideo, Uruguay.** The Address Support Organization (ASO) held an open input forum during the meeting to receive feedback on ASO related issues. There were also separate input forums held for the two emerging RIRs, LACNIC and AfriNIC.

ARIN and LACNIC submitted a status letter to the President of ICANN, Stuart Lynn, to update ICANN staff and the Board on the progress of LACNIC.

During the report of the Government Advisory Committee (GAC) at the ICANN public forum, the RIRS were invited to provide an update on IPv6 policy issues during the next ICANN meeting.

# Outreach

**CAIP**. ARIN management traveled to Ottawa, Canada, where they met with the Canadian Association of Internet Providers (CAIP) and presented an overview of ARIN's operations and some of the policies under recent discussion (see <u>related article</u> on page 9). The trip was designed to promote closer ties between the two organizations and to encourage increased participation in ARIN activities by CAIP members. The CAIP is a trade association that represents a large and growing group of Canadian service providers. CAIP's mission is to foster the growth of a healthy and competitive Internet service industry in Canada through collective and cooperative action.



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**NANOG**. ARIN and Merit Network, Inc., the company responsible for promoting NANOG activities, met in Ann Arbor, Michigan, US, to explore areas where mutual activities might benefit the Internet community. Discussions focused on coordinating activities such as a joint ARIN and NANOG meeting.

# New Training Initiatives Launched

ARIN has begun a new training program that will include on-line tutorials and interactive web-based modules that explain the IPv4 and IPv6 registration processes. Some of these are available for viewing at <a href="http://www.arin.net/minutes/index.htm">http://www.arin.net/minutes/index.htm</a>, while others, including the ABC's to completing new templates, are under development and will be introduced later this year.

ARIN will continue offering tutorials at its biannual Public Policy and Members Meetings. At the fall meeting to be held in Miami, Florida, US, newcomers to ARIN will benefit from an overview of ARIN services, organization, and policies. A tutorial explaining the difference between the NetMod (network modification) and SWIP (Shared WHOIS Project) templates will be offered. Plus, attendees will have the opportunity to learn from industry experts about IPv6, including a technical look at the IPv6 numbering system.

Do you need training in your area? Do you have ideas on types of training ARIN should be providing? An Email account (training@arin.net) has been established to direct comments to ARIN's Training Program Developer. Use this account to make suggestions, to identify sites where there is a need for training, and to assist in formalizing a training program for 2002!

# RWhois Improvement Underway

In response to requests at ARIN VII meetings, ARIN has dedicated resources to provide further development of RWhois. The Referral WHOIS (RWhois) is a WHOIS enhancement protocol used for storing and retrieving network and organization information. Some ISPs opt to use a RWhois server in place of ARIN's SWIP template to provide reassignment information on IP address blocks received from ARIN.

RWhois uses a directory services protocol that focuses on the distribution of network data in a hierarchical manner, creating a useful

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and accurate way to retrieve information. It began as a pilot project that, after several revisions, has become preferred by some ISPs.

Testing has begun for the latest revision of RWhois, which can be retrieved from: <u>ftp://ftp.arin.net/pub/rwhois/rwhoisd-1.5.8.tgz</u>. This will also require the open source library at: <u>ftp://ftp.arin.net/pub/rwhois/str-0.9.5.tar.gz</u>. To learn more about RWhois, visit: <u>http://www.rwhois.net/</u>.

# Ecommerce - Did You Know

ARIN now accepts payments for all registration services and annual



maintenance fees as well as meeting reservations via credit cards. Customers have the choice of using the ecommerce system or the traditional invoicing method.

# Administration Department Update

**Staffing.** In direct response to discussions at ARIN's last two Public Policy and Members Meetings, ARIN has increased its staff. Each department has been carefully analyzed to determine the staffing needed to provide efficient and effective services to ARIN customers, to contribute to ARIN's overall operations, and to meet the needs of the community it serves. ARIN staff currently numbers 34.

**ARIN to Move by Year End.** A larger staff creating crowded conditions, a lease expiring this fall, and needed room for new computer equipment to replace outdated units, prompted the decision to undertake an extensive search to select a new location for the ARIN offices.



Still in Chantilly, Virginia, the new facility will allow for increased meeting space, additional work areas for ARIN staff, a larger and better equipped computer room, and space for future growth. The staff is looking forward to being in the new location. The anticipated move date is mid-December.

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# Canadian Association of Internet Providers

By Jay Thomson, CAIP President

ARIN recently visited Ottawa, Canada, and met with the President of the Canadian Association of Internet Providers (CAIP), Jay Thomson, to discuss strengthening ARIN's relationship with the Canadian Internet community.



CAIP is the only national Canadian association that arbitrates on behalf of all sectors of the ISP industry in Canada. It is able to speak effectively as a single voice because of the unique make-up of its board, which includes representatives from all sizes of ISPs. The association has been successful in addressing cable access, telco tariffs, and copyright issues and is involved in all of the regulatory developments and policy issues facing Canadian ISPs today. It is also an important source of information regarding proposed regulations or policies and new products of interest to its members. CAIP has also led the self-regulatory charge by establishing its own Code of Conduct, Privacy Code, Fair Practices initiative, and public awareness Internet "Protection Portal."

This Protection Portal is a bilingual public awareness site designed to educate parents and consumers on Internet content issues. Developed in partnership with Canada's federal departments of Industry and Justice and several leading Internet providers, the Portal promotes Canadian organizations that address Internet media literacy, online hate propaganda, and online sexual predation, and links to the Government of Canada's Strategy to Promote Safe, Wise and Responsible Internet Use.

CAIP has recently introduced a new Affinity Program for its members offering discounted products and services from some of its members. Other member benefits include access to or participation in:

- The CAIP members' directory
- The CAIP members' listserv
- All CAIP communications, Members Bulletins, and monthly Products and Services Bulletins
- Discounts on CAIP-sponsored events and conferences
- Various association committees

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- "Summer Madness," a program where suppliers provide promotional offers exclusively to CAIP members
- A National Group Insurance Program.

CAIP currently has a special introductory offer for first-time members. For additional information visit http://www.caip.ca/ or contact diane@caip.ca.

# **ARIN Member Pete Bowden Dies**

By Sarah Garfinkel, XO Communications, Inc.

Pete J. Bowden was a long-time member and friend of ARIN. His relationship with ARIN developed during his tenure with XO Communications, Inc. (San Jose, CA), which began in the mid-1990s.

Pete started his career at Internex's California NOC where he became a supervisor. He moved into the engineering division and worked with all aspects of DNS and IP management. His "unofficial" title was IP Czar. He was one of the few people who successfully ran RWHOIS.

Pete was a cordial person with a keen sense of humor, and was always willing to provide sound advice on many topics, some work-related, some not. He was someone ARIN could always count on to provide whatever support was needed. Pete was one of the good guys, a model member. He will be missed.

# Emerging Technologies -Mission to Mars

We may all be talking Martian sooner than you think. Building on current Internet technologies, efforts are moving forward for establishing deep-space Internet nodes on Mars and aboard spacecraft to link future outposts on other planets. And everyone is getting in on the action. European, Japanese, French, Italian, and United States space agencies are working together to explore Earth's nearest neighbor.



View of Mars

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Currently, the Jet Propulsion Laboratory is working with the Internet community to design a Mars Internet using a protocol similar to IP, which would serve as a pipeline for other Mars projects for transmitting data to Earth. By providing increased bandwidth and connectivity, this gateway should spur industry and academic participation to enhance its effectiveness. And yes, IPv6 is the preferred protocol.

Could we soon be looking at a .mars domain? Not such a far-fetched idea anymore. As this newsletter goes to press, NASA's Mars Odyssey orbiter is speeding towards Mars carrying telecom relay links for future missions. In 2007, NASA will collaborate with the Italian space agency to send another orbiter dedicated to supporting telecom tasks.

Satellites are already using IP addresses to send and receive data, while NASA plans to make all their future space assets Internet nodes. A Mars-resident land rover, Mars Pathfinder, is communicating with an Earth-bound robot using IP-related protocols. Other efforts include ongoing development of a TCP/IP variation for Earth-Moon communications, and the Interplanetary Internet (InterPlaNet, see <a href="http://www.ipnsig.org/">http://www.ipnsig.org/</a> ), a NASA project designed to link the Earth's Internet with internets on other planets and spacecraft. An early stage of an InterPlaNet is expected to be in place by 2040.

And after Mars? Technical issues such as power limitations, speed-oflight constraints, and transmission noise must still be overcome, but the next stops would likely be Jupiter and its moon Europa. And in the meantime, well, let's just say that IP numbers are out of this world.

For more information on NASA Mars projects, visit: <u>http://marsnet.jpl.nasa.gov/</u>.

Compiled from CNN, Network World Fusion, PC World, and NASA news reports.



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# MYSTERY WORD PUZZLE

A word game that uses Internet-related terms and familiar acronyms

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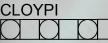
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What the "classless" member coordinator enjoys drinking.



Unscramble the four words on the left, then unscramble the letters in the circled boxes to solve the mystery. See answers in the next issue.

> Answers from last issue: SWIP, NANOG, FILTER, SUBNET

What the ISP representative forgot to bring on a business trip.

His "PORTABLE" Addresses.

**ARIN Today** is a newsletter produced quarterly by ARIN staff for ARIN members. Articles and contributions from the community are not only welcome, they are solicited. For questions, comments, and article submissions contact the editor-in-chief at arintoday@arin.net.

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