



2012 ARIN ELECTIONS CANDIDATE BIOS

Number Resource Organization Number Council (NRO NC)

Polls open 9am ET, Wednesday 17 Oct - 5 pm ET, Wednesday 24 Oct

ARIN Board of Trustees and ARIN Advisory Council Voting:

Polls open 5pm ET, Wednesday 24 Oct - 5pm ET, Saturday 3 Nov

Cast Your Ballot at:

<https://www.arin.net/app/election/>

NRO NC

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2012 NRO NC CANDIDATES

Name	Andrew Dul
E-mail Address	andrew.dul@quark.net
Optionally provide one URL to any one blog, social media, or external website of your choice.	http://www.ipaddressnews.com
Bearing in mind that you run and serve as an individual, rather than representing an organization, is there an organizational affiliation you'd like to state?	Cascadeo Corporation
Are you available to serve the entirety of a 3-year term?	Yes
Describe any concerns or limitations on your ability to travel to attend ARIN and ICANN meetings in person.	None anticipated
Why do you want to serve on the NRO NC, and what goals do you want to accomplish?	I wish to serve on the NRO NC to continue my involvement in the ARIN region and to assist in the ongoing development of number resource policy in the ARIN region and globally through the NRO. The current global policy development process is currently not as efficient or effective as it likely should be. The current process of adopting similar policy in 5 regions without substantial interaction between the policy makers and stakeholders in each region can lead to the lack of policy being adopted when policy is needed and ineffective policy when policy "diluted" to the least common denominator which allows the policy to be adopted in each region. As a member of the NRO NC I will take a look at how the global policy process can change to better meet the needs of both global & local stakeholders.
What if any, conflicts of interest might arise for you as an NRO NC member? Specifically, do you serve in what could be perceived as any Internet governance roles, provide any services directly or indirectly to ARIN, or represent any significant interest from the community?	I do not see any conflicts of interest at this time.
What is your record of serving the Internet community in the ARIN region?	I have been active in the ARIN region since 1999 and have attended ARIN meetings since 2000. I also served the region on the ARIN advisory council from 2002-2005.
What differentiates you as a candidate, or makes you uniquely suited to serve on the NRO NC?	I believe that I have the necessary experience and knowledge to serve the ARIN region on the NRO. In my career, I have served a number of different types and sizes of organizations, including small and large enterprises, Internet service providers, and local government and educational entities. This breadth of experience can provide valuable insight to help facilitate the continued development of Internet governance.
How do you propose to select an ICANN Board Member? Does there need to be any change in that selection process.	It appears to me, as an active ARIN region participant, that the current process for selection of ICANN Board Members is appropriate. As an NRO member, who is responsible for helping appoint two board members, I will take the time to insure that the selection process meets the needs of Internet stakeholders.

<p><i>Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the NRO NC, including names of organizations, positions held, specific duties, and dates of service.</i></p>	<p>Career Experience: Cascadeo Corporation: 2010 - present Perkins Coie: 2007 - 2009 Boeing Company (Connexion by Boeing): 2003 - 2007 Internap Network Services: 1998 - 2002 Sacramento County Office of Education: 1996 - 1998 Internet Community Activities: NANOG member: 2011 - present ARIN region participant: 1999 - present Education: Masters in Business Administration - Seattle University Bachelors of Science, Electrical Engineering - University of California, Davis</p>
<p><i>In light of the ongoing transition from IPv4 to IPv6, do you have experience you wish to share with the community that is noteworthy in terms of IPv6 adoption?</i></p>	<p>In 2011, I researched and presented a paper discussing the economic factors that are helping and hurting IPv6 adoption. Generally, IPv6 suffers from a lack of economic incentives to push deployment. IPv4 run-out, however, has the ability to change the economic equation and encourage IPv6 adoption. This paper was presented October 2011 at the joint ARIN - NANOG meeting in Philadelphia. Details of this work can be found here: http://www.ipaddressnews.com/2011/10/17/16</p>
<p><i>What is your view of the existing bottoms-up self governance model and structure of the Regional Internet Registry (RIR) system? Do you believe there are other models or structures that would work better?</i></p>	<p>I believe that the current multi-stakeholder bottom-up regional Internet registry model has served the Internet community well. The model, however, is not perfect and changes can and should be made as needed. Specifically, I believe additional active participation by some constituents and organizations would benefit the governance process. The RIRs must adapt to ensure that all stakeholders, including governments, have the ability to provide input to the process.</p>

Name	Louie Lee
E-mail Address	louie@louie.net
Optionally provide one URL to any one blog, social media, or external website of your choice.	http://www.linkedin.com/in/louienet
Bearing in mind that you run and serve as an individual, rather than representing an organization, is there an organizational affiliation you'd like to state?	Equinix, Inc.
Are you available to serve the entirety of a 3-year term?	Yes
Describe any concerns or limitations on your ability to travel to attend ARIN and ICANN meetings in person.	None
Why do you want to serve on the NRO NC, and what goals do you want to accomplish?	As a member of the NRO NC fulfilling the role of the ASO AC, I would continue my work to reach out to other segments of the Internet community so that they may involve themselves in number resource policy activities. Without this involvement, these segments would feel compelled to create a new framework of governance of number resource that would not necessarily include a consensus-based, bottom-up policy development process. And depending on how a new framework is created, it may or may not co-exist with the existing framework. I remain committed to participate in these discussions. The duties and responsibilities of the ASO AC put its members in the intersection of the communities of the operators and number resource with the communities of Internet governance, DNS, and infrastructure. I intend to continue conversations that protect and improve the Internet for users of today and users yet-to-be. I have initiated work with the ICANN At-Large Advisory Council and the Regional At-Large Organizations to increase their participation in our number activities and policy development process. ALAC and the RALOs share our approach of consensus-based, bottom-up process for work. And I would like to continue work in this area because I believe that the RIRs and their organizations would become stronger as a result.
What if any, conflicts of interest might arise for you as an NRO NC member? Specifically, do you serve in what could be perceived as any Internet governance roles, provide any services directly or indirectly to ARIN, or represent any significant interest from the community?	Equinix receives number resources directly from ARIN. Equinix is also a vendor for ARIN. No conflict of interest issues have arisen over the past 9 years of my service on the NRO NC/ASO AC, nor do I foresee any at this point.
What is your record of serving the Internet community in the ARIN region?	I have served on the NRO Number Council / ASO Address Council for the past 9 years with the past 5 years serving as Chair for the ASO AC.
What differentiates you as a candidate, or makes you uniquely suited to serve on the NRO NC?	The members of the North American Network Operators Group and of the ARIN community saw fit to elect me for 3 terms to serve a total of 9 years so far. The members of the ASO Address Council allowed me the privilege of leading the group as Chair for the past 5 years. I have built and established a rapport with the leaders at ICANN and ICANN communities.

<p><i>How do you propose to select an ICANN Board Member? Does there need to be any change in that selection process.</i></p>	<p>An ICANN Board Member should be selected on the basis of his ability to listen to the community and effectively act to promote the growth of the Internet without compromising the security and safety of the infrastructure for the Internet of today and of the future. This Board Member will need to compliment the knowledge, experience, and skills of the rest of the Board in order to provide the whole Board with the means to carry out its duty. The current composition of the ICANN Board is heavily weighted towards the domain world. And thusly, much of the time and effort put in are related to DNS. The ASO Address Council should look for the following qualities in selecting an ICANN Board Member: • Familiar with the allocation policies, issues, and recent activities related to number resources, especially with regards to IP transfers and IPv6 adoption. • Understand how the infrastructure for number resources and that for DNS differ and are alike. • Recent operational experience in an organization relevant to Internet services • Has the respect of his/her peers based on work accomplishments and his/her effectiveness in reaching goals. The current selection process can be improved by loosening the language to provide flexibility without sacrificing on fairness. For instance, "in-person interview" can be altered to be "face-to-face interview" to accommodate for video conferencing as necessary.</p>
<p><i>Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the NRO NC, including names of organizations, positions held, specific duties, and dates of service.</i></p>	<p>2004-present: NRO Number Council / ASO Address Council • ASO AC Chair (2008-present), Co-Chair (2007) • ICANN Affirmation of Commitments Accountability & Transparency Review Team (2010) 2009-present: Internet Society SF Bay Area Charter Member 2007-present: IEEE Member 2000-present: Equinix Sr. Network Architect / Sr. Network Engineer 1995-present: active NANOG participant / member 1994-2000: Netcom Sr. Network Engineer</p>
<p><i>In light of the ongoing transition from IPv4 to IPv6, do you have experience you wish to share with the community that is noteworthy in terms of IPv6 adoption?</i></p>	<p>An interesting effect of the most recent Global Policy where it gives IANA a mechanism to evenly redistribute IPv4 resources to the 5 RIRs is that it would provide a way for the global Internet to run out of v4 addresses in a smaller window. The points between the 1st RIR running out and the last RIR running out would be brought closer together if IP resources flow from a region with abundance to a region with demonstrated need. By allowing IPv4 resources to flow out of a region with abundance, that region's members may see higher IPv6 adoption rate than it would otherwise.</p>
<p><i>What is your view of the existing bottoms-up self governance model and structure of the Regional Internet Registry (RIR) system? Do you believe there are other models or structures that would work better?</i></p>	<p>The current model works fairly well because it allows regional variations to address specific needs in the management of number resources. The variations I'm referring to include the formation and operation of National Internet Registries (APNIC), and Local Internet Registries (LIRs). This framework for self-governance allows for measured amount of representative governance that is necessary when it is impossible for all members of resource consumers are unable or unwilling to participate directly for whatever reason. And at the same time, those who do wish to be heard directly can do so effectively and be assured of a reasonable outcome. While other frameworks are always being considered by various individuals and organizations, I believe that it is useful to engage in discussion on this topic. When motives are clearly laid out in these discussions, then certain accommodations and adjustments can be made in the RIR system to improve it. When motives are not so well laid out, past discussions can also serve to prevent harmful changes disguised as improvements.</p>



2012 BOARD OF TRUSTEES CANDIDATES

Name	Paul Andersen, P. Eng.
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Optionally provide one URL to any one blog, social media, or external website of your choice.	http://www.paul.ca
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Board of Trustees. Please be as specific as possible.	I am currently a member of the ARIN Board of Trustees and also serve as the organizations' Treasurer. I am the President of EGATE Networks Inc., an Internet hosting and connectivity provider offering a variety of services: consulting; web application development; shared, dedicated and collocated web hosting; high speed Internet access, domain name registration services, and other related services. I have been with the organization since its inception in 1996. I have worked in the service provider industry for over fifteen years and have been very active in Internet governance. The Canadian Internet Registration Authority (CIRA) is a not-for-profit organization primarily responsible for governance of the dot-ca domain name. I have been a member of the CIRA Board of Directors since 2001 (both elected and appointed) and have been actively involved in its various committees. I have served as Secretary and Vice-Chair, and currently serve as the Chair of the Board. I was previously an elected member of the Board of Directors of the Toronto Internet Exchange, the largest open peering Internet exchange in Canada, and served as its President and Chair. From 2003 to 2009, I served as a Member of the ARIN Advisory Council.
Describe the relevance of your technical and professional experience to serve on the Board of Trustees.	I have served for several years on the CIRA Board of Directors and currently serve as its chair. As of its last fiscal year, CIRA had revenues of 13 million dollars. I have served on the Board of Directors of the Toronto Internet Exchange (TorIX) as its Chair and have been responsible for managing its finances. During my time on the Board, the Exchange rebuilt its platform and became financially stable. I have successfully completed "Governance Essentials Program for Directors of Not-for-Profit Organizations" run by the Institute of Corporate Directors. The program provides education on key accountabilities and responsibilities of directors of not-for-profit organizations while maximizing board effectiveness. As a serial entrepreneur, I have managed several successful businesses and have a wide range of hands-on management experience running technology companies. I am confident I have the experience and skills necessary to continue serving on the ARIN Board of Trustees. I am also a Professional Engineer licensed by the provincial accreditation association (PEO). I have over twenty years of experience in the field of technology.
What Internet-related services do you or your current employer or organization provide?	EGATE provides a variety of connectivity and hosting services including consulting; web application development; shared, dedicated and collocated web hosting; high speed Internet access, domain name registration services, and other related services. The Canadian Internet Registration Authority (CIRA) is a not-for-profit organization primarily responsible for governance of .ca, the Canadian Country Code Top Level Domain (ccTLD).
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Board Member?	As is common with Board of Trustee applicants, organizations that I represent receive number resources from ARIN or use legacy space within the ARIN region. EGATE and CIRA both use number resources received directly from ARIN.
Describe any concerns or limitations on your ability to travel to attend Board Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	None.
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Board of Trustees?	I have the required technical experience to understand ARIN's mission and operations, while also having an entrepreneurial background to help support management in ARIN's operations. I also bring a small Canadian operator perspective to the table.
How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?	It is clear that ARIN will change in function and scale as we move to a post-IPv4 world; however, it is difficult to predict what those changes will be. The greatest impact will be on ARIN's registration service which will need to adjust to deal with transfers being the sole method of obtaining IPv4 address space. The biggest IPv6 change will be that resource holders will be making much less frequent contact with ARIN's Registration Services department, with many number resource holders never needing to come back. As a Board member, we need to adjust the organization to deal with this new reality.

<p><i>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</i></p>	<p>Yes. Like any organization, ARIN needs to put resources into continually improving the processes that external organizations interact with, including transfers. With transfers being relatively new to the organization it is imperative that ARIN continually analyze the efficiency of transfers to ensure ARIN is not creating any burden on parties utilizing them while ensuring ARIN policy is upheld.</p>
<p><i>What suggestions would you, as a Board Member, make to gain broader participation in the ARIN policy development process?</i></p>	<p>I would look at ways to simplify the process and most importantly work to ease the burden on those wishing to participate in the process. Submitting a new policy to the current process is very easy. Following the process has become increasingly difficult in understanding the process and trying to allocate resources to follow the mailing list and public policy meetings. I would work with management and the Advisory Council to identify ways to increase feedback from the community on issues facing us. My feeling is that we may need to move beyond a one size fits all approach for policies.</p>
<p><i>How can ARIN assist with IPv6 Adoption?</i></p>	<p>ARIN should be continually raising awareness of the pending depletion of IPv4 and the transition to IPv6. ARIN has taken good steps towards this such as its road show campaign. I had the privilege of attending some of these events where those normally outside our processes but equally affected by it were engaged and informed about what was happening in the community. The Board can continue to encourage adoption through avenues such as fee waivers and ensuring it is easy to understand the process by which an organization can get resources. Over the past three years ARIN has spent significant resources in outreach activities to ensure organizations such as ISPs, hosting and content providers, manufacturers, enterprises and governments – to name a few – are aware of the impending consequences of IPv4 exhaustion and the need to deploy IPv6.</p>
<p><i>What are ARIN's three greatest challenges and how do you see ARIN addressing them? Be concise (200 words maximum).</i></p>	<p>An IPv6-dominant World: In an IPv6-dominant world, ARIN will likely require fewer new policies and policy changes, and with less frequent requests for address space there will be fewer interactions between ARIN and its ISP subscribers. ARIN must adapt its processes, including the policy process, so that they continue to produce well developed policies with less reliance on standalone meetings. Internet Governance: There is growing pressure to evolve Internet governance, especially for critical resources such as IP addresses, in view of the increasing economic and social importance of the Internet. ARIN has to support its members and other regional constituents without sacrificing the longer term, global commitment to a resilient, sustainable Internet for everyone and holding onto its multi-stakeholder, bottom-up consensus driven values. ARIN Online: ARIN has been hard at work vastly improving our outward-facing processes through the development of ARIN Online. ARIN must continue to ensure it clearly understands its customers' needs and that such services are user-friendly, not overly burdensome, and implement community policy properly.</p>
<p><i>Should ARIN focus purely on Internet number registry services or should it also work with other organizations (such as NANOG and ISOC) to support Internet operational and training discussions? Please provide details on your view.</i></p>	<p>I support ARIN continuously looking for areas where it can work more closely on projects with organizations such as the NANOG or ISOC. Such projects should be carefully evaluated to ensure they will not distract from the core mission of registration services and be broadly supported by the membership. ARIN's motivation for such activities should not be solely to justify its existence.</p>

Name	Ron da Silva
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Optionally provide one URL to any one blog, social media, or external website of your choice.	http://www.linkedin.com/in/rondasilva
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Board of Trustees. Please be as specific as possible.	Vice President, Network Engineering, Architecture & Technology - Time Warner Cable, Inc. Sixteen years of direct internet experience in senior management, architecture & engineering. Current responsibilities include financial, strategic and network technology leadership for the 2nd largest cable operator in the US. Specifically, prior leadership as chair of ARIN's AC and current member of ASO-AC. Prior board experience includes serving on a couple non-profits.
Describe the relevance of your technical and professional experience to serve on the Board of Trustees.	I've been directly involved in internet technology and policy development throughout my career. I have relevant experience in address administration, the IETF, IANA function, ARIN and other associated RIR's. I have fiduciary responsibility as a part of my position at TWC; also, have direct experience leading a highly functioning technology organization. These will equip me with necessary perspective and maturity to serve on the ARIN Board.
What Internet-related services do you or your current employer or organization provide?	Time Warner sells direct internet access to consumers and businesses alike. Additionally, TWC offers internet technology based services including voice, video and IP based circuit technologies.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Board Member?	As an executive of a service provider who in turn receives services from ARIN, there could be occasions where I will need to recuse myself during certain Board considerations. However, prior and current members of the Board were successful even with similar consideration so this risk seems to be low, perceived or otherwise.
Describe any concerns or limitations on your ability to travel to attend Board Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	I've been regularly attending Public Policy Meetings for the last 10 years; addition need to attend Board meetings would only be in conflict if prior commitments from my employer should arise at the same time of the meetings.
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Board of Trustees?	I have significant experience in the service provider community, from standards development within the IETF, participation in ICANN and ISOC activities, ARIN and the other RIR's while leading network technology at a leading service provider.
How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?	The most significant factor that needs consideration in the near future for ARIN is the potential reduced scale in supporting IPv6 vs. IPv4. It isn't clear yet when or even if such a significant shift will take place, but clarity on that will like happen in the coming years as the industry at-large transitions from IPv4 to IPv6.
Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?	This should be in response to specific policies adopted by the community as a whole.
What suggestions would you, as a Board Member, make to gain broader participation in the ARIN policy development process?	Proactive outreach to ARIN members yielded mixed results back while I was serving as Chair of ARIN's advisory council; I think a similar approach albeit simple could prove effective, especially as members look for more support transitioning from IPv4 to IPv6.
How can ARIN assist with IPv6 Adoption?	Training, proactive outreach and continued financial incentives are all good measures.

<p><i>What are ARIN's three greatest challenges and how do you see ARIN addressing them? Be concise (200 words maximum).</i></p>	<p>First, the depletion of IPv4 resources present ARIN with a unique challenge in the near future of being unable to meet the needs of its membership. This will certainly increase the amount of outreach, training and assistance that ARIN should be compelled to execute in order to continue to serve its membership. Secondly, new pressures associated with IPv4 depletion from other internet organizations, governmental agencies and desperate operators in the ARIN region will potentially stress the consensus based policy development process. It is imperative that ARIN maintains its clear mission and follows the interests of its membership when addressing any new actors that might come into this arena. Thirdly, ARIN will need to consider appropriate adjustments to its operating practices if any financial changes should come as a result of different services and fees associated with the administration of IPv6 vs. IPv4. The ARIN leadership and Board will have to be creative and open to change if appropriate. This isn't necessarily a forgone challenge however, as the details still need some time to work themselves out in the industry itself. ARIN should begin some contingency planning in this space.</p>
<p><i>Should ARIN focus purely on Internet number registry services or should it also work with other organizations (such as NANOG and ISOC) to support Internet operational and training discussions? Please provide details on your view.</i></p>	<p>I think ARIN should continue it's collaboration with NANOG, ISOC and other organizations to support internet operational and training discussion unless and until directed otherwise by the ARIN community. These activities are valuable to both the ARIN membership and the internet at-large.</p>

Name	Bill Herrin
E-mail Address	bill@herrin.us
Optionally provide one URL to any one blog, social media, or external website of your choice.	http://bill.herrin.us/arin
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Board of Trustees. Please be as specific as possible.	Active participant in ARIN's policy development process since 1997. Former director of engineering and network operations for CrossLink Internet, a regional ISP serving the U.S. mid-Atlantic states. Participate in the Internet Research Task Force Routing Research Group (IRTF RRG) seeking ways to reduce the costly impact of multihoming on core Internet routers and the ISPs who own them. Have held a direct address assignment since 1994. Currently operate three multihomed BGP-using networks, one mine and two for clients. Extensive work in and around Public Policy organizations including three years employment with the Democratic National Committee. Education: Bachelor of Science, Computer Science, George Mason University, 1997.
Describe the relevance of your technical and professional experience to serve on the Board of Trustees.	Because I have at various times managed legacy address assignments, modern end-user address assignments and ISP allocations on behalf of employers and clients so I'm well familiar with address management issues from each perspective. I initiated and helped drive the discussion which resulted in proposal 2010-2 lowering the multihomed minimum assignment to /24 even while balancing routing slot consumption concerns. As a participant in the Routing Research Group, I designed and wrote proof of concept software code for TRRP, an experimental protocol which could reduce routing table load on core routers via dynamic tunneling. I'm broadly aware of the technologies in the pipeline that may change how network numbering is done and intimately familiar with the probable and possible impacts. I am the author of http://bill.herrin.us/network/bgpcost.html , currently the best available attempt to quantify the economic impact of address disaggregation. I am a computer scientist who has been employed on Internet networking related jobs for nearly 20 years.
What Internet-related services do you or your current employer or organization provide?	Custom U.S. Government solutions, mostly associated with relaying Satellite communications to and from Internet connected systems.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Board Member?	I have an active policy proposal (#181) which, if it eventually comes before the board, I would expect to recuse myself from voting on. I know of no other conflicts.
Describe any concerns or limitations on your ability to travel to attend Board Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	None. As I live and work within a few miles of ARIN's Virginia headquarters, I'm also readily available to offer ad hoc assistance.
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Board of Trustees?	I have deep expertise in routing and addressing as a network operator, as a software developer engineering networking solutions, and as a basic researcher in to the underlying science. All three. What's more I have experience interacting with ARIN from the perspective of most of its various constituents including as the lead engineer of an ISP, a both for-profit and non-profit end-user organizations, on behalf of government entities, as a legacy holder or pre-ARIN address registrations and as a member of the general public participating in the policy development process. I directly appreciate the issues surrounding ARIN-interaction from many perspectives, not just one or two. This experience, both broad and deep, makes me a subject matter expert with few peers.

<p><i>How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?</i></p>	<p>If IPv6 takes off as planned, ARIN's role in address management will become much more front-loaded. By design, registrants will hold few discrete address blocks and will rarely if ever return for more. Rightsizing that first or second assignment then becomes of paramount importance. If IPv6 deployment continues to drag, ARIN's role will become one of facilitating transfers between low-value use of IPv4 addresses and high-value use. What exactly that means or should mean is an open question with widely divergent answers. ARIN's future success will depend on navigating that debate to something resembling consensus within a useful time frame. Interference from the ITU and its sponsoring governments poses a major threat to the operation and stability of the global addressing process and the Internet routing processes which depend on it. Parallel addressing processes by the ITU or incautious change to ARIN processes under pressure from the ITU could increase routing costs borne by Internet Service Providers to the tune of hundreds of millions or even one or two billion dollars per year.</p>
<p><i>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</i></p>	<p>Emphatically yes. IPv4 addresses underlie the economic engine that is today's Internet. Even as we drive for IPv6 deployment, if ARIN can't keep IPv4 addresses flowing to where they're needed ARIN will give governments little choice but to redirect or replace it.</p>
<p><i>What suggestions would you, as a Board Member, make to gain broader participation in the ARIN policy development process?</i></p>	<p>ARIN's current Policy Development Process (PDP) assigns the AC an impossible mission: develop policy as a body while also bolstering public participation. An author's policy *is* the words he chose to express it. When the AC changes those words, when it "develops" that policy, it ceases to be the author's policy, invariably diverges from the author's intent and discourages his future participation. Pardon the hyperbole but a committee of 15 people shouldn't be voting on sentence fragments. The members of the AC are subject matter experts, well qualified to advise both the board and those individuals who would step up and try to write ARIN policy. An AC which as a body focuses on advice would well serve the community.</p>
<p><i>How can ARIN assist with IPv6 Adoption?</i></p>	<p>ARIN IPv6 addresses should be free. Period. In a down economy its hard enough to start deploying IPv6 without first justifying a purchase order for a couple thousand bucks. IPv6 addresses should stay free until there's more IPv6 on the public Internet than IPv4.</p>
<p><i>What are ARIN's three greatest challenges and how do you see ARIN addressing them? Be concise (200 words maximum).</i></p>	<p>ARIN's greatest challenge is retaining legitimacy in the face of declining public participation and rising interest by national and world regulatory entities. This has no trite answer. It will require nuance and clever, adaptive thinking by people with the time, the skill and the desire to succeed.</p>
<p><i>Should ARIN focus purely on Internet number registry services or should it also work with other organizations (such as NANOG and ISOC) to support Internet operational and training discussions? Please provide details on your view.</i></p>	<p>ARIN should avoid engaging in activities for which a competitive market is adequate to the task and focus its efforts on activities for which an authoritative source is critical the task's success. I intentionally offer no specifics; any idea for an ARIN service merits consideration and scrutiny.</p>

Name	Aaron Hughes
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Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Board of Trustees. Please be as specific as possible.	President, CTO and acting CEO of 6connect, an IPv6/IPv4 Address Management, DNS/DNSSEC Management software company focused on the Service Provider and Enterprise space. Heavy participation in community supporting organizations, ARIN, NANOG, RIPE, Rocky Mountain IPv6 Summit, go6.si, GPF. Contributor at EPF, Interop, Cable Labs, EuroIX and other BCP/BCOP and IPv6 outreach programs. I also run the Best Current Operational Practices Track at NANOG.
Describe the relevance of your technical and professional experience to serve on the Board of Trustees.	More than 20 years of Internet Engineering and management experience in advanced systems and network designs in C level and VP level roles in the Service Provider, Content Provider, Government, Data Center, Access Provider, Software Development space. I have a unique ability to problem solve across departmental borders and drive solutions with fiduciary responsibility, long term vision for the organization, operational prudence and scalability in appropriate balance.
What Internet-related services do you or your current employer or organization provide?	RIR/LIR management & reporting tools. IP Address Management software for both IPv6 and IPv4. DNS, DNSSEC management and automation software. DHCP Management software. Asset management software. Network Automation and provisioning software. Peering communication and configuration management software. Outsourced network management.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Board Member?	No
Describe any concerns or limitations on your ability to travel to attend Board Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	None. I currently travel heavily and already attend all ARIN meetings where Board Meetings are held and can easily add the additional annual meeting in NoVA.
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Board of Trustees?	I am a business owner and operator who works with the community every day in the RIR->LIR->Resource Requestor management process. I work with every aspect of Policy, Provisioning / Implementation, and Operations. I can solve problems at both high level business operation as well as micro-level engineering needs. I currently serve on multiple boards and know how to make sound well thought out decisions.
How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?	In all likelihood, ARIN as an organization will have to scale down it's operational spend and automate many business processes over time to accommodate the shift from v4 policy and regular reporting for dipping back in the pool to v6 policy and far less regular, high spend, interaction with it's members. The PDP and all supporting functions will need to move in a direction that allows for more automation in the resource management process.
Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?	Yes. Transfers are going to happen regularly for the foreseeable future globally. We must embrace this fact and facilitate both ease of transfer while maintaining accurate contact information as well as keeping reverse DNS delegation functioning properly.
What suggestions would you, as a Board Member, make to gain broader participation in the ARIN policy development process?	I would not suggest broader participation, but rather target high quality participation. Focusing on promoting an understanding of what it means to be a DMR, how to work within our respective organizations to accurately describe short and long term impacts of policy proposals, and collect appropriate feedback from within the organization facilitates approved travel and cycles spent on ppml as well as increases quality of response and show of support. I believe this is one of many steps that can be taken in better the quality of the PDP.

<p><i>How can ARIN assist with IPv6 Adoption?</i></p>	<p>Obviously exhausting IPv4 would assist with IPv6 adoption. Prior to runout incentives are challenging. We could explore more traditional marketing tactics such as surprise in a box outreach to CIO/CTO/CEO or look into case studies highlighting severe cases of pain and expense by ignoring IPv6 adoption.</p>
<p><i>What are ARIN's three greatest challenges and how do you see ARIN addressing them? Be concise (200 words maximum).</i></p>	<p>The short answer to both identifying problems and their respective solutions are, in a word, balance. - Keeping accurate resource holder contact data while maintaining a balance between government/abuse desires. This, in combination with a move to IPv6 resources which do not motivate resource holders to keep this data accurate, is a serious challenge. e.g. no carrot for 80% utilization of IPv4 to dip back in the pool. - Maintaining a balance between community stated desires and best for the community based policy. This includes an 80/20 model of trying to serve the majority and ignore one off cases, unless they <u>really</u> do need a policy to serve their needs. Defining that line is a challenge. - Building a solid AC while maintaining the number of great participators in the community who can speak up as non-AC members and show true community support (not AC support) for or against a policy proposal. - Managing a depleting resource that has been converted into a commodity while defending ARIN's position as an organization to not be taken over or heavily influenced by an organization such as the ITU. The answer to all of these is difficult but appropriate balance.</p>
<p><i>Should ARIN focus purely on Internet number registry services or should it also work with other organizations (such as NANOG and ISOC) to support Internet operational and training discussions? Please provide details on your view.</i></p>	<p>I would support all steps in favor of policy being closer to operational practice and needs. Currently, there is a significant disconnect between ARIN and Operator communities, therefore, I am in favor of anything getting us closer to bridging that gap. Support of discussions would be a good first step.</p>

Name	Martin J. Levy
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Optionally provide one URL to any one blog, social media, or external website of your choice.	http://twitter.com/mahtin
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Board of Trustees. Please be as specific as possible.	<p>Martin Levy has been involved in the TCP/IP world since the publication of the first TCP/IP RFCs in the early 80's. Born and educated in England, Martin moved to the United States to work as a software developer at the prestigious Bell Labs. It was at Bell Labs where thirty years ago he ran their first TCP/IP network-enabled UNIX computers. After seven years in New Jersey, Martin moved to California and joined the Silicon Valley entrepreneurial-life to continue his focus on networking software and systems. Since then Martin has been building networks in California, the US, Europe, Latin America and now in Asia. Martin Levy joined Hurricane Electric over four plus years ago. Since then, Martin has taken on the role of significantly expanding Hurricane Electric's IPv6 global connectivity services. Martin Levy's major contribution to the IPv6 world while at Hurricane Electric has been his tireless pursuit in making IPv6's global routing on-par or better than the existing Internet routing.</p>
Describe the relevance of your technical and professional experience to serve on the Board of Trustees.	<p>Martin's experience within the global IP community is well known to many. Starting out 30 years ago within AT&T Bell Labs and those initial days of TCP/IP networking the experience has grown to include both the technical and the business side of many aspects of the global IP world. Martin has focused his efforts at the IP layer (both in his past and current ISP related roles). Simply put; this is the layer with direct relevance to the ARIN community and to the Board of Trustees. Martin has spent the last four-plus years with Hurricane Electric (based in California) with the express tasking of promoting IPv6 deployment on the Internet. You can't get more relevant than that subject when it comes to reviewing ARINs present mission!</p>
What Internet-related services do you or your current employer or organization provide?	<p>Hurricane Electric provides global IP transit services along with Internet datacenter services within California. As expected; since the mid-2000's, all IP services are provided by default as IPv4/IPv6 dualstack. The company also provides IPv4/IPv6 transition services including its globally-accessible tunnelbroker.net service along with a massive 6to4/Teredo relay service. IPv4/IPv6 enabled DNS services are also provided under the dns.he.net URL. The company also provides the global Internet community various monitoring services including the bgp.he.net routing reporting service along with a long-standing IPv6 progress report.</p>
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Board Member?	<p>There would be no real or perceived conflicts should Martin be elected to the ARIN Board of Trustees.</p>
Describe any concerns or limitations on your ability to travel to attend Board Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	<p>Martin presently travels to various RIR, *NOG, ICANN and other Internet related meetings globally. No concerns or limitations are seen at this time.</p>
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Board of Trustees?	<p>Martin brings a fresh commercial-mindset to the ARIN Board of Trustees. His experience within the business world should be of value to the whole ARIN community, let alone the Board of Trustees. As the ARIN community progresses through 2012 and we reach IPv4 exhaustion within the rest of the RIRs (including at some point ARIN), then the commercial experience will provide the board the required guidance it will need. Martin's dedication to the promoting the deployment of IPv6 would continue from a position on the board and that provides consistency to the message ARIN as-a-whole has.</p>

<p><i>How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?</i></p>	<p>IPv4 run-out will become the number-one driver of change within ARIN. Two diverse challenges will be on the ARIN Board of Trustees agenda soon. Either ARIN will scale down as IPv4 run-out kicks in; or ARIN membership (as new smaller members join) will increase and change the makeup of the membership base. Those new members, joining because they want IP space directly from ARIN vs. their ISPs will require the board to carefully guide ARIN to make sure it still provides its community all the support it can. The Board of Trustees will also have to deal with the very real fact that IP address transfers exist in the real world and that it's ARIN's goal to continue to provide the global community with the correct contact information for any transferred block.</p>
<p><i>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</i></p>	<p>Yes. Sticking ones head in the sand and ignoring transfers (or making transfers hard) would be foolish!</p>
<p><i>What suggestions would you, as a Board Member, make to gain broader participation in the ARIN policy development process?</i></p>	<p>ARIN has already (like other RIRs) commenced on expanding its marketing and PR in this area. It's very hard to get more people involved in policy development. It's just not exciting. More outreach could be possible; but sometimes you have to accept that some thing just don't interest everyone. That said; it's important that the existing OPEN policy methodology continue and be promoted as best as possible.</p>
<p><i>How can ARIN assist with IPv6 Adoption?</i></p>	<p>It already does. Use a Google search and you will see this. Between ARIN (and the other RIRs), ISOC, ICANN, Various *NOGs and many-many companies; there's a lot of people pushing for IPv6 adoption.</p>
<p><i>What are ARIN's three greatest challenges and how do you see ARIN addressing them? Be concise (200 words maximum).</i></p>	<p>1) Managing the IPv4 transfer process. 2) Budgeting and stability in a post-IPv4 world. 3) Continuing the messaging about Legacy-IPv4 space. Number one and two are already work-in-progress. Number three is simply the very nature of the Internet. The initial allocations were huge and were mainly USA-based. ARIN has the unfortunate position for being a punching-bag for the rest-of-the-world as its allocated IPv4 size if massive. This is going to continue to be an issue for ARIN to deal with forever.</p>
<p><i>Should ARIN focus purely on Internet number registry services or should it also work with other organizations (such as NANOG and ISOC) to support Internet operational and training discussions? Please provide details on your view.</i></p>	<p>It's always healthy to have more than one organization focus on operational issues and providing ongoing training. ARIN does that today and should continue with that. If ARIN were to simply focusing on number registry services it would find that it doesn't have enough to engage its members and hence would lose relevance or worse still lose a communications channel with its membership. ARIN has to continue doing more than just number registry services.</p>

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Optionally provide one URL to any one blog, social media, or external website of your choice.	http://www.linkedin.com/in/dsiegel
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Board of Trustees. Please be as specific as possible.	For the past 5 years I have had responsibility for managing the Internet access products for my employer. I am a current member of NANOG and have been involved in the NANOG community on and off since 1994. Although not as recent, my previous experience includes technical positions in IP network, mostly in the engineering and management functions.
Describe the relevance of your technical and professional experience to serve on the Board of Trustees.	My professional experience, and certainly my technical experience, pales in comparison to the likes of Vint Cerf, Paul Vixie and Scott Bradner. But then again, there are not many people that can claim otherwise are there! What I can offer is a good grounding in both the technical and business aspects of operating Internet networks as a result of approximately 20 years of experience in the industry. I started my first business in 1992 at the age 19. What began as a Unix and networking consulting company later evolved into Tucson's first commercial dial-up Internet provider in late 1993. A software sale of our ISP billing software to a small, national backbone operator based in Phoenix by the name of Network 99 in late 1994 led me to a long-term consulting engagement with them lasting 9 months. During that engagement I not only learned the skills necessary to run a network of that size (as the sole engineer running the network), but I trained several entry-level Unix admins to help me operate the company's network, not only teaching them the basics of troubleshooting circuits, but also performing DNS server administration, IP subnetting and routing, and of course IP address allocation. One of my fondest memories of my career was with Network 99. I turned up one of the first production BGP sessions at Pacbell NAP and managed the network through the transition off the NSFnet backbone with my skeleton team of personally trained admins. After benefitting from that learning experience I went on to continue training network administrators around the country until 1998. In 1998, I joined Frontier GlobalCenter (who was known as Global Crossing until being acquired by Level 3 in October of last year) as a backbone architect. By 2001, I was Vice President of IP Engineering at Global Crossing. In 2004 I moved from the technical side of the business to product development, and 3 years later to product management where I have focused my development ever since. In my 5+ years in Product Management, I have learned market segmentation, product definition and targeting, financial evaluation, deal negotiation, P&L Management, and many other skills normally outside the realm of the typical network engineer. I have been able to draw from my technical knowledge and apply that expertise to my product position. This experience has taught me a great many applicable lessons, not the least of which is that you must always strive to understand your customer, their needs and their problems, before you create your product. The technical experience that I have has given me firsthand experience as an ARIN customer, and also gives me a foundation from which I can understand problems that other ARIN customers face. My business and marketing background gives me the ability to advise ARIN's ongoing efforts to educate its customers effectively and understand their needs to more effectively create new products or improve services for them. My management experience enables me to navigate the human aspects of running a business as well as be objective about the details of the business operations, such as financial health.
What Internet-related services do you or your current employer or organization provide?	My employer, Level 3 Communications, provides Internet Access and related services around the world to businesses and telecommunications carriers of all sizes. We also operate one of the largest free public DNS services (4.2.2.2).
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Board Member?	I do not foresee any personal conflicts arising from my election to the ARIN board of trustees.

<p><i>Describe any concerns or limitations on your ability to travel to attend Board Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?</i></p>	<p>I do not have any specific concerns regarding travel obligations. My employer does not require an excessive amount of travel for my role and conflicts with travel or other company meetings will be uncommon, although they will occur from time to time.</p>
<p><i>What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Board of Trustees?</i></p>	<p>I am a well-rounded individual with skills in IP networking engineering and operations, commercial negotiation, financial analysis, P&L Management, marketing, management and leadership. Along with a wealth of industry knowledge gained over a 20 year period, I would bring a balanced perspective and capability to the board.</p>
<p><i>How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?</i></p>	<p>The impending depletion of IPv4 space is the single biggest driver of change. While the migration to IPv6 is more painful than watching paint dry, the intensity of deployment is beginning. At the same time, organizations will protect their future interests by maintaining a presence on the v4 Internet and that will cause ARIN's role to become more focused on managing exchanges of IP addresses rather than allocations of new space. This does not change ARIN's function from its original intent, but the shift in transaction type is something ARIN will have to adapt to.</p>
<p><i>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</i></p>	<p>Efficient for the customer, or for ARIN? Both are important, and often complementary. If transfers are too inefficient for the customer, it may encourage other organizations to spring up to fulfill a need that ARIN isn't fulfilling. Such organizations may not adhere to the policies and guidelines that ARIN has set which may create unnecessary friction and confusion in the industry. Given the obvious projection of a shift of activity from IPv4 allocation to IPv4 transfer it is fairly logical to pursue an initiative in increased efficiency. Such improvements would likely benefit the customer in addition to requiring less human resource on behalf of ARIN's staff to administrate transfers. One aspect of the question that concerns me is the word "significant." In most investment decision scenarios, there are many levels of investment that could be made. Before arriving at a decision on the level of investment, each variation should be analyzed using a cost-benefit analysis. It is often the case that a substantially better financial outcome can be achieved by pursuing a less than the most "significant" investment and yet still provide a useful gain towards achieving the goal of your investment. It is likely that a better financial outcome for ARIN could be achieved by investing less than a "significant" amount of resources into efficiency gains and yet make a useful advancement towards the goal.</p>
<p><i>What suggestions would you, as a Board Member, make to gain broader participation in the ARIN policy development process?</i></p>	<p>Policy is going to become much more important to the average network administrator over the coming years due to IPv4 depletion. It may not require any specific action other than generating awareness in the community that policy involvement is desired. As the available resources become increasingly scarce, individuals will naturally want to have more input into the policies that govern their access to the scarce resource. More marketing efforts in this area are also necessary. For example, I was not even aware that ARIN desired any additional input into policies. Not only does the web site not facilitate this input, but at least since I have been monitoring NANOG more closely the past 6 months I have not seen any calls for input on that forum. I didn't know there was an ongoing policy discussion taking place until I joined the mailing list on policy discussion. This point raises a question in and of itself. Mailing lists appeal to a subset of the people that you want input from. These days, a great deal of discussion takes place on the "social web", web 2.0 or whatever buzzword you wish to apply. Discussion takes place on blogs, social sites such as facebook and Google+ and other forums that enable people to engage in a discussion on these subjects at a time of their choosing rather than reacting to a filling inbox (which none of us need more of, right?). These other forms of engagement should be considered for your goal of increasing input.</p>

<p><i>How can ARIN assist with IPv6 Adoption?</i></p>	<p>Education. Migrating to IPv6 isn't hard for a lot of people, they just haven't done it. I suspect people are delaying migration because they think it's harder than it is. Education can eliminate much of the FUD surrounding IPv6 deployments.</p>
<p><i>What are ARIN's three greatest challenges and how do you see ARIN addressing them? Be concise (200 words maximum).</i></p>	<p>1. IPv4 Transfers – both execution as well as managing policy 2. IPv4 reclamation – development of a suitable policy that is accepted by the community 3. IPv6 education and awareness</p>
<p><i>Should ARIN focus purely on Internet number registry services or should it also work with other organizations (such as NANOG and ISOC) to support Internet operational and training discussions? Please provide details on your view.</i></p>	<p>Engaging with the operational community is the primary way in which ARIN can seek to better understand its customers, their needs, and their problems. As long as the focus of those operational and training discussions is consistent with the mission of ARIN, then the engagement should be encouraged. There is always a danger that the involvement in those discussions could stray beyond the mission of ARIN. I would be start out by establishing consensus regarding the objectives of involvement of those discussions, insuring that the objectives are consistent with ARIN's mission, and from those objectives create a guidance document that would be provided to ARIN representatives for use in those discussions. Another possibility is to take advantage of the fact that many members/volunteers at ARIN are already members and participants in those other organizations and forums. If you get the ARIN membership fully up to speed on the goals and objectives of ARIN and elicit their help to evangelize these goals in those forums it may not be necessary to take much action other than monitor and assess the activity and progress that your common membership is taking.</p>

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Optionally provide one URL to any one blog, social media, or external website of your choice.	http://www.facebook.com/snowhorn
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Board of Trustees. Please be as specific as possible.	I have been a member of the Internet Peering Community for the last 13 years including being a co-founder of the Global Peering Forum (GPF – www.peeringforum.com). I have served 2 terms on the NANOG Program Committee and have hosted NANOG meetings 4 times while running peering at Terremark. I have presented on many occasions in global Internet and corporate events including NANOG, RIPE, APRICOT, EU Peering Forum, Global Peering Forum, SANOG, Brasil Peering Forum, LINX, CERN Presentation on Power and Cooling in the Data Center and other relevant conferences.
Describe the relevance of your technical and professional experience to serve on the Board of Trustees.	I was employee #6 at Terremark (www.terremark.com) involved in the design and construction of the NAP of the Americas facility and the creation of the Terremark Internet Exchanges in Miami, Brasil, Madrid and Istanbul. I have vast experience related to business and corporate governance at the executive level from my tenure as Vice President of Global Business Development, before and after their acquisition by Verizon. I am currently the Vice President and GM of Interconnection at CyrusOne, servicing in an Executive Management capacity at the company (www.cyrusone.com). I am deeply committed to the scaled growth and support of the Internet and have used my capacity in my corporate roles to support this principle. I feel my experience in the IX and Peering community and my corporate experience will allow me to fulfill the fiduciary responsibilities required as an ARIN Board of Trustees member.
What Internet-related services do you or your current employer or organization provide?	I am currently employed as a Senior Executive at CyrusOne which operates 23 large scale data centers throughout the U.S. with 2 smaller locations in London and Singapore. CyrusOne is a wholly owned data center subsidiary of Cincinnati Bell. CyrusOne is focused on the Fortune 1000 with a specialty in the Oil and Gas sector. I joined CyrusOne to create a statewide Internet Exchange in the State of Texas and to enhance the IP, Interconnect and other Telecom related services of the company.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Board Member?	None. I am fully committed to serve in this role.
Describe any concerns or limitations on your ability to travel to attend Board Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	None. I have spent my entire career traveling the world in support of my role and welcome the opportunity to do so for ARIN.
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Board of Trustees?	I possess many years of corporate governance experience from my previous and current employment roles that will allow me to serve the Board with a complete understanding of my fiduciary responsibility. ARIN is a business with budgets, employees and a role of stewardship that must be tempered for ever changing times; my experience will enhance and support the organization in this role.
How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?	ARIN is in flux as IPv4 transfers and ASN transfers dominate the PPML topic lists. I feel that ARIN's role will only grow in the next 3 years and address space constraint heats up. This role will likely shift slowly to IPv6 promotion concurrently and more substantially as IPv4 space disappears. The governance and support of this process is as a crucial juncture and must be carefully managed so ARIN can maintain it's role and responsibilities in good standing for many years to come.

<p>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</p>	<p>Absolutely. ARIN has a governance role to manage the address space allocation in region. That role also, I feel, requires that ARIN supports the desires of organizations who utilize these resources. If the users have a need for space that cannot be otherwise filled through traditional allocation methods then I fully support a market for those resources, with temperance.</p>
<p>What suggestions would you, as a Board Member, make to gain broader participation in the ARIN policy development process?</p>	<p>Currently the policy process is influenced by a very few vocal members. The few ruling the many is certainly not a form of justice I think can continue and I think work must be done to add participation on influencing policy. I would try to use my experience in marketing, promotion and social engineering to draw more members into the policy influence role. . . particularly from the large corporate users of the world who are rapidly realizing they need address space and have a role to play with regards to policy.</p>
<p>How can ARIN assist with IPv6 Adoption?</p>	<p>Stay the course and continue outreach. The difficulty lies with end consumers and demand. Until such time as the dam breaks with IPv4 the steady pressured course will lead to success for IPv6 Adoption.</p>
<p>What are ARIN's three greatest challenges and how do you see ARIN addressing them? Be concise (200 words maximum).</p>	<p>1. Addressing and supporting the IPv4 and ASN transfer process that the community demands. This directly falls in the stewardship role and I strongly support this process. ARIN must drive towards clarity of this process, which is currently lacking. Better participation and support of the community process with rapid resolution from the Advisory Council and Board of Trustees will help to address and solve this clarity issue. 2. Directly supporting and enhancing the process for IPv6 address space utilization. As stated in the question above the pressure must me maintained steadily to assure IPv6 uptake and use. The IPv4 transfer process to the detriment of the IPv6 space program must not distract ARIN. Direct outreach and continued resources must be resolutely pressed toward this uptake. 3. Relevance to the corporate community. ARIN has traditionally supported the few participatory members who vociferously voice their feelings related to ARIN governance. This does not serve the corporate community who has an ever-growing online presence. ARIN must bring in participation from a wider reaching community to continue the fiduciary stewardship role as outlined in the ARIN Bylaws.</p>
<p>Should ARIN focus purely on Internet number registry services or should it also work with other organizations (such as NANOG and ISOC) to support Internet operational and training discussions? Please provide details on your view.</p>	<p>RIPE, APNIC and LACNIC have done an extraordinarily good job in working with various organizations for outreach. I feel ARIN should greatly broaden cooperation with as many organizations as possible so the broader community feels they have involvement and knowledge of the goings on of ARIN. I would be honored to help enhance that role for ARIN.</p>



2012 ADVISORY COUNCIL CANDIDATES

Name	Jesse Geddis
E-mail Address	jesse@la-broadband.com
Optionally provide one URL to an external website of your choice.	http://www.facebook.com/sgeine Feel free to add me or shoot me an email.
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Advisory Council. Please be as specific as possible.	When I was 17 I designed the first DOCSIS cable modem network for Charter across New England before DOCSIS was even a standard. Since then I've worked as an architect for companies such as WorldCom, Sony, Technicolor, DreamWorks, Symantec, Helio, and Westfield before starting my own company, LA Broadband. I am intimately familiar with both the technical and business sides of telecom (having been personally responsible for budgets in excess of \$30 million) at companies large and small, carrier and enterprise.
Describe the relevance of your technical and professional experience to serve on the Advisory Council.	My architectural and practical experience is broadly based; encompassing multinational carriers, cable companies, movie studios, multinational enterprises, and health care. I'm also a business owner and am equally as savvy at starting and running a successful business from nothing. I have been dealing with ARIN since around 2000 both as an end user and a carrier and believe I could be a constructive source of process, policy, and technical knowledge when it comes to helping ARIN fulfill it's role of IP disbursement. Especially as it relates to IPv6. My goal, when I started building out LA Broadband, was to do it all IPv6 internally and externally. My 20k+ residential customers, for example, are all NAT'd IPv4 to conserve address space but all have their own IPv6 addresses. I place a high priority on IPv6 deployment.
What Internet-related services do you or your current employer or organization provide?	My company provides the following services: IPv4/6 transit dark fibre transport colo space Juniper VAR Residential and Corporate internet
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Advisory Council Member?	No conflicts
Describe any concerns or limitations on your ability to travel to attend Advisory Council Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	No concerns
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Advisory Council?	About 75% the AC is made up of just a couple carriers. I think it's important to make the AC representative of the community at large. Two years ago I started my company alone, choosing to base it natively on IPv6. I don't seek this role to further my own business interests as my needs are already set. I seek this role to help others gain access to the resources necessary to start their own businesses, to grow their current ones, to evangelize IPv6, and to help ARIN find ways to facilitate such. The AC should be a source of unbiased advice to the board. As I read the emails coming through I don't always see that. Too often I see members making self interested policy suggestions. I think we can do better. Our role, on the AC, should be to make sure we provide solutions that prevent ARIN from being a roadblock to acquiring address space. To encourage, through policy and process IPv6 adoption and an organized transition away from IPv4. Randomly selected example: http://lists.arin.net/piper-mail/arin-discuss/2012-May/002310.html "I like this idea... I really like it a lot. (Of course, I might be biased because I think my company would be well represented in such links)." "Again, I really like this idea. Since we turn up hundreds if not thousands of IPv6 users every month, I'm sure this would be good for us." Lets do our best to set aside our own interests and get the ball rolling on adoption and needs based assignments
How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?	The obvious one is the transition from IPv4 to IPv6. ARIN's role will likely change dramatically once it becomes a central player to people buying and selling IPv4 address space. Up until recently ARIN's role has been a management disbursement of IPv4. ARIN has been transitioning to evangelizing IPv6 and creating policies and programs to further it's rapid adoption.

<p><i>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</i></p>	<p>I think this is an important area for ARIN to be involved in. ARIN has disbursed an enormous amount of address space and being intimately involved in the transfers allows ARIN to have another look at the needs of both parties and whether or not they meet policy. Many many companies do not and these transfers provide a perfect opportunity to bring organizations back in line.</p>
<p><i>What areas of policy, if any need more attention and why? Be concise (200 words maximum).</i></p>	<p>ARIN is in a state of transition from conserving IPv4 space to pushing IPv6 space. On the whole I think ARIN has done a tremendous job but there is still more work to be done in the areas of IPv6 adoption and transitioning from IPv4 disbursement to being a clearing house for IPv4 transfers.</p>
<p><i>How do you separate your personal opinions from those of your employer and those of the community?</i></p>	<p>My role on the advisory council would be to suggest policies, programs, and processes consistent with ARIN's mission statement. To facilitate the broad adoption of IPv6 and the organized transfers and migration from IPv4</p>

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Optionally provide one URL to an external website of your choice.	http://www.oregon.gov
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Advisory Council. Please be as specific as possible.	I am the Senior Network Engineer for the State of Oregon. The state provides network services and application hosting for government agencies, counties, cities, non-profits and K12 schools. My network experiences spans 25+ years. I have been the technical lead for the state, in deploying IPv6. My responsibilities include backbone and data center designs; IP allocation management, developing and document network standards as well as provide network guidance for local and non-profits organizations.
Describe the relevance of your technical and professional experience to serve on the Advisory Council.	Working with state and local governments including public safety. I noticed a lacking of involvement from the public sector. I feel that my experiences would be an asset to the Advisory Council.
What Internet-related services do you or your current employer or organization provide?	The State of Oregon provides governmental applications and critical network services to all Oregonians and the Pacific NW. These government services for the public include public safety information, road conditions, health and family services and unemployment services, just to name a few. The public uses the Internet to access all of these services.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Advisory Council Member?	No • The only real conflict that could pose a problem would be the event of a major network outage. • The only perceived conflict would be the event of a natural or man-made disaster.
Describe any concerns or limitations on your ability to travel to attend Advisory Council Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	There are no concerns of traveling for the duties of the Advisory Council.
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Advisory Council?	I have noticed that ARIN Advisory Council lacks public sector/non-profit members. With 20+ years of experiences in the public sector and working with non-profits, I feel that I would be great asset to the ARIN community and Advisory Council.
How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?	I do not see ARIN's function or role as a governing process to change in the near future.
Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?	Yes. Since IPv4 is still predominant in the Internet, businesses will continue to expand their IPv4 infrastructure. IPv4 transfers policies will need to evolve, as business needs change.
What areas of policy, if any need more attention and why? Be concise (200 words maximum).	As the Internet transitions to the IPv6, we as a community will need to refined and develop IPv6 policies that will work for everyone. This is will be an ongoing project for years to come. I see myself involved in the evolution of the IPv6 polices.

How do you separate your personal opinions from those of your employer and those of the community?

Working for State Government, our opinions are welcomed and respected. In the ARIN community I look, learn, listen and respond from a global perspective. My employer encourages involvement in groups such as these.

Name	Stacy Hughes
E-mail Address	ipgoddess@gmail.com
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Advisory Council. Please be as specific as possible.	I have served 11 years on the AC, and will remain equally dedicated in the future. I am active in the NANOG, RIPE, and AFRINIC communities. Further, I am active in the Global Peering arena, and a founding member of CAGeeks.
Describe the relevance of your technical and professional experience to serve on the Advisory Council.	I have been an IP Address administrator for 12 years. I and my team hold the principles of conservation of IPv4 and the encouragement of IPv6 paramount. I was a peering coordinator for different companies for 3 years. I achieved my JNCIA in 2008.
What Internet-related services do you or your current employer or organization provide?	I currently work for tw telecom - we are an enterprise class USA ISP and voice provider.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Advisory Council Member?	No conflicts.
Describe any concerns or limitations on your ability to travel to attend Advisory Council Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	In the immortal lyrics of Michael Jackson, I'll be there.
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Advisory Council?	My experience on the AC, and in different facets of the community, both domestically and globally, differentiate me.
How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?	I think we're headed in the right direction with the Transfer Policy, and accepting the bitter pill of v4 exhaustion. I applaud the efforts the registry has made for v6 outreach, and also international coordination. Uniqueness is the foundation for all of us, as administrators and operators. ARIN will preserve this in the future.
Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?	I believe ARIN is doing everything it can on both a domestic and international level, in our own region and out of it.
What areas of policy, if any need more attention and why? Be concise (200 words maximum).	As an AC member, there is only so much that is up to you. Historically, I have been a listener, more than an initiator, which shows respect to The Community. I will entertain anyone's ideas, and offer my opinion, and ultimately my vote.
How do you separate your personal opinions from those of your employer and those of the community?	"The good of the one must not outweigh the good of the many" Mr. Spock

Name	George Morton
E-mail Address	ccie18532@gmail.com
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Advisory Council. Please be as specific as possible.	Solutions Architect with Madison Solutions supporting Federal and Enterprise clients. Dr. Morton is responsible for providing management and subject-matter expertise in the management and deployment of network services. As a Solutions Architect Dr. Morton offers senior management with network methodologies to achieve strategic business goals, within a risk - reward commercial framework, playing an intrinsic part entire transformation life-cycle from concept to transfer or exit. Current clients include: CSC, DHS-HQ, DHS Data Center 1, NARA, TSA, and a number of small ISP's. Membership and Certifications: IEEE, and dual CCIE, (CCIE 18532) Router/Switch and Security.
Describe the relevance of your technical and professional experience to serve on the Advisory Council.	First network experience AT&T 1984 with AT&T Data Systems. Active dual CCIE extensive experience with the issues facing IPv4 as well as the security and deployment issues for IPv6. Educational experience: Ph. D. Computer Science, MBA, MS-Computer Information Systems, MS Telecommunications. Management and engineering experience include: CIO: VerID; Internet verification services, (sold to EMC, \$130 million), CIO: Chapman Technologies; gps/cellular manufacturing, CIO for Florida Broadband a Wireless ISP.
What Internet-related services do you or your current employer or organization provide?	Extensive network IP design for the federal space, currently running TSA IPv6 Test/Development Lab where the issues of IPv6 for security and deployment are being explored for deployment. Current issues include the lack of vendor support for compatible IPv4 to IPv6 services, as well as information leaks with IPv6 eui-64 interface MAC addresses to the Internet. The need for non-Public IPv6 space for asset tagging services, and the inability to manage IPv6 space from ISP's requiring re-IPv6'ing a network when the ISP changes.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Advisory Council Member?	Not to my knowledge
Describe any concerns or limitations on your ability to travel to attend Advisory Council Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	None, visit the DC area every month, taking time for AC meetings is not an issue with any clients.
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Advisory Council?	What I can bring to the ACD is the end-user experience. The team is well staffed with ISP's and IP managers, what is missing is the nuts and bolts network engineers working with the day-to-day engineers and clients resolving there IP requirements. Some examples that I am working on with IPv6: 1. When using eui-64 for DHCP users and gateway address the complexity of the IP addresses requires DNS or Active Directory services to map actual users. This has called for more complex IEEE standards to be deployed to support the network, (IEEE 802.1x with RADIUS). 2. With eui-64 and the Internet, government has been asking what the risk is. The answer, if you were using a specific secure NIC with eui-64 DHCP you will be announcing the appliance to all in-line ISP's as the traffic traverses the Internet. Foreign governments could know the source location, type of computer with MAC address profiling, and may compromise the end-user and the mission. 3. The need for private IPv6 for internal services and tagging. 4. The need for blocking with ARIN IPv6 services, if a /32 was offered to GE. IS the block for Internet or microwave ovens? If microwave ovens why not have that information in the ARIN database to help ISP's and Security Operations to know that the block should be blocked at the Firewalls. 5. The distribution of IPv6 needs to be expanded and the costs for a /48 should be free with automatic authorization to companies with D&B registrations. This would allow companies to use IPv6 and not be locked in with one ISP provider having to re-IPv6 there entire network every time they change ISP's. 6. Push for GUI management of IPv6 and IPv6 Subnet calculators. 7. The ability to NAT the eui-64. 8. Expand the private BGP ASN numbering scheme, with the new ASN 32 numbering plan large clients like the Federal Government would take advantage of the expanded private range for MPLS and BGP location services. I personally like the idea of 10,000 ASN's to be added to the ASN range. These are just some of the issues that I face when working with IPv6 for clients. I think that this type of experience can be of great help to the Advisory Council

<p><i>How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?</i></p>	<p>The need to migrate to IPv6 which is a core ARIN responsibility fits the current IPv4 - ISP model but ARIN does not have a practical business model with where there might be millions of business subscribers. ARIN does not fit the needs of small businesses that could use their own /48. One answer might be for a /48 to be managed and offered by the DNS registers. "Free GoDaddy IPv6 /48 with registered DNS name" might be a solution.</p>
<p><i>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</i></p>	<p>The issue is not IPv4 transfers but how to get America on to IPv6.</p>
<p><i>What areas of policy, if any need more attention and why? Be concise (200 words maximum).</i></p>	<p>With my experience support businesses and government agencies the need is to change the face of ARIN to support a larger business audience. The process for acquiring IP space should be as easy as acquiring a domain name. If that became a goal then the answer is to wholesale IPv6 space to DNS providers, or appliance providers, "buy a firewall and get a /48". Other issues that face ARIN deal with the very nature of services like reverse DNS or IPv6. ARIN is easy for the experienced network manager or ISP. For the growth of the Internet, ARIN will need to look to service a larger audience with partnerships, ease of use services, coordination with ISP's who will be reluctant to support client /48's on their networks, etc.</p>
<p><i>How do you separate your personal opinions from those of your employer and those of the community?</i></p>	<p>I am the employee and employer. As for my personal opinion that is what my clients want. They have Cisco speak, ISP speak, they want someone to help meet the agency/business goals and not speak for the vendors.</p>

Name	Milton Mueller
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Optionally provide one URL to an external website of your choice.	http://faculty.ischool.syr.edu/mueller/Home.html
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Advisory Council. Please be as specific as possible.	I am Professor in the School of Information Studies at Syracuse University, where I directed the Masters of Science program in Telecommunications and Network Management. From 2008-2010 I held a Chair on the Privacy and Security of Internet users endowed by the Dutch Internet Service Provider, XS4All. I am also the Director of the Internet Governance Project, where since 2004 we have monitored Internet governance institutions and applied research and scholarship to current Internet policy issues. I served on the Advisory Council of Public Interest Registry (.org) for many years. I have played a significant role in the formation of ICANN and in its policy development processes. I was a founder of the Noncommercial Users Constituency (NCUC) in ICANN's Generic Names Supporting Organization (GNSO) and have served as its chair. I am currently on the Executive Committee of ICANN's Noncommercial Stakeholders Group. I have been elected to the GNSO Council twice and have chaired a working group that developed policy for the divestiture of the .org domain in 2002-3. I have also served and made significant contributions to ICANN working groups on Whois-privacy and vertical integration of registries and registrars. I have attended a few RIR meetings and have been an active participant on the policy lists of RIPE and ARIN.
Describe the relevance of your technical and professional experience to serve on the Advisory Council.	My professional experience has brought me into contact with nearly all of the relevant actors shaping Internet resource policies, from high-level government officials to small-scale ISPs, to large telecom firms to civil society digital rights advocates. I understand the basic policy choices facing the Internet community at the global level. My research has required me to look at those issues more critically and independently than most, taking nothing for granted and being willing to challenge entrenched worldviews and myths.
What Internet-related services do you or your current employer or organization provide?	My employer is a University and provides educational services. Our School pioneered online degree delivery in 1992 and, with the migration of more of the classroom and course administration to online platforms, these educational services might be called an Internet-related service. Of course, Syracuse University provides extensive broadband internet services to its students and faculty and holds a legacy address block or two. As a program director and teacher in the Telecommunications and Network Management program, I have often interacted with the networking technicians in the Information Technology Services department - but am not part of ITS itself.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Advisory Council Member?	I don't think so. My status as an academic researcher gives me an unusual degree of independence from business-related conflicts of interest. IGP gets no financial support from industry or from government policy makers; it has only been supported by foundations and research grants from scientific agencies. My main interest is in correctly analyzing the effects of policies and in understanding how governance institutions actually work - including what makes them perform well or poorly. Other than the 3-year XS4All Chair, which is finished, I have not been affiliated with any Internet service provider. Occasionally we have asked Internet companies for small donations to support academic conferences or student projects. The sums involved are small and the positions taken by the academic researchers are unrelated to the support.
Describe any concerns or limitations on your ability to travel to attend Advisory Council Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	As an academic I have a relatively flexible schedule, bounded by teaching commitments. I have been regularly attending ICANN meetings and IGF meetings since 1999; those commitments are the main reason my personal attendance at RIR meetings has been limited. In the event I am elected to the AC the ICANN commitments would be scaled back to make room for ARIN meetings.

<p><i>What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Advisory Council?</i></p>	<p>ARIN needs an independent voice. Whether you agree with me or not, I have a rare combination of expertise that synthesizes policy and economics with technical knowledge of Internet addressing and routing. Since 2006, my academic research has focused on IP addressing issues. My research and publications have investigated many of the economic and technical issues related to the IPv4 - IPv6 migration, the emergence of IPv4 markets, RPKI, the policies that might be applied to IP address Whois, and the relationship between governments and private-sector internet institutions.</p>
<p><i>How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?</i></p>	<p>I believe that ARIN is on the cusp of some very important changes. I realize, however, that the AC is in no position to initiate or direct those changes. The economic forces created by IPv4 scarcity and IPv6 migration, as well as cybersecurity concerns and the rising power of national governments over the internet, all need to be dealt with creatively. I think ARIN needs to adjust certain attitudes and practices in order to open a viable path to the future. Some people fear these changes but it would be useful to have an advocate of change, someone who embraces rather than resists challenges, on the AC.</p>
<p><i>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</i></p>	<p>Yes, though doing so would not necessarily be resource-intensive. ARIN needs to work with other RIRs to globalize the transfer market and it needs to re-think needs assessment. It also needs to standardize and routinize its relationship with legacy holders involved in transfers.</p>
<p><i>What areas of policy, if any need more attention and why? Be concise (200 words maximum).</i></p>	<p>Looking ahead, maintaining the accuracy, integrity, uniqueness and completeness of the IP address registration data, while respecting legitimate confidentiality and data protection concerns, should be ARIN's primary focus. This is where major resource commitments may be needed. Creative new ways of interacting with market intermediaries must be found to provide better incentives for maintaining and updating the data. RPKI and alternative security practices also will need attention in the future. The RIRs' relationship to ICANN and to the US government may also become major issues.</p>
<p><i>How do you separate your personal opinions from those of your employer and those of the community?</i></p>	<p>Separating my opinions from my employer will be easy - my employer has virtually no interest in IP addressing issues. As for the community, it is not homogeneous but contains a very diverse set of views. When all the groups agree or are near agreement, then it is easy to make the separation. When, as is more often the case, there are factions putting forward different views, then one must take account of the way the positions advocated serve or harm the interests of various actors. One must assess whether objections are reasonable and raise public interest issues, or simply self-serving and obstructionist. My approach in cases of disagreement within the community would be to throw out my own 'favorite' policy while also discounting views from the community that, in my opinion, were obviously wrong or self-seeking. Working within those parameters, I would look for solutions that resolve the conflicts while promoting the smooth and stable functioning of addressing and routing. Basically, it is a matter of avoiding favoritism and seeking just but efficient proposals. I have experience doing this from ICANN working groups and Councils.</p>

Name	Brandon Ross
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Optionally provide one URL to an external website of your choice.	http://www.linkedin.com/pub/brandon-ross/0/154/a00
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Advisory Council. Please be as specific as possible.	<p>Following leadership roles at MindSpring, NetRail, Sockeye and Comcast, more recently I served as the Director of Backbone Engineering for Internap where I was responsible for all new technology and products going into the network. In 2007, I joined Xicom as the Director of Network Engineering, where I played an integral role in building and designing networks internationally, including a wireless backbone network in the Dominican Republic, a citywide network in Kigali, Rwanda, and several networks in rural areas of the US. Since June of 2010, I have lead professional services engineering teams focusing on network architecture for service providers and enterprises, culminating in founding Network Utility Force in December of 2011. In nearly all of the roles that I have served in throughout my career, I have been responsible for IP address management and acquisition. I have a B.S. in Telecommunications from the University of Florida. I'm also an active participant in the North American Network Operator's Group (NANOG) and play an integral role as team lead for the InteropNet which supports the Interop trade show.</p>
Describe the relevance of your technical and professional experience to serve on the Advisory Council.	<p>My experience with a large variety of types of service providers, from small service providers such as Xicom, to some of the largest in North America such as Comcast gives me a unique perspective on IP address management. Additionally my international experience allows for a unique perspective on the needs of less common types of service providers.</p>
What Internet-related services do you or your current employer or organization provide?	<p>Network Utility Force provides professional services to both service provider and enterprise customers, focusing on network architecture and design, including a focus on IPv6, MPLS, and security needs.</p>
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Advisory Council Member?	<p>The only potential perceived conflict would be that Network Utility Force at times helps it's clients with acquiring IP address space, including from ARIN, other RIRs, and anticipates helping customers with the transfer market as well.</p>
Describe any concerns or limitations on your ability to travel to attend Advisory Council Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	<p>There are no concerns or limitations, I anticipate being able to attend all ARIN meetings in person as well as serving for the entire 3-year term. I already attend at least 1 ARIN meeting per year, and have for the last several years.</p>
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Advisory Council?	<p>In my current role, I regularly interact with many different stakeholders in the community. Because of these interactions, I am uniquely positioned to understand how addresses are being used in the community and can represent the problems and needs of a large variety of organizations.</p>

<p><i>How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?</i></p>	<p>Clearly dramatic changes are afoot for ARIN as IPv4 runout takes its course. ARIN's challenge will be to remain relevant when the specter of a denied ARIN request is no longer a driver keeping organizations engaged in working with ARIN and following the rules. There's already a large amount of outdated and incorrect information in the Whois database, this will only get worse once a majority of traffic has moved to IPv6. The community must carefully balance the need for maintenance of uniqueness in IPv6 space against ARIN's policies. Big changes will be necessary within ARIN if/when IPv4 transfers are no longer common because of a migration to IPv6.</p>
<p><i>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</i></p>	<p>Yes, facilitating IPv4 transfers to be as easy as possible is needed to help lubricate the IPv4 transfer market such that companies that still depend on IPv4, which today is EVERYONE, can acquire the IPv4 space that they need. This doesn't necessarily mean that ARIN needs to invest large amounts of resources in making it easier, however. More importantly, the community should continue to consider policies that remove resource intensive activities required during a transfer.</p>
<p><i>What areas of policy, if any need more attention and why? Be concise (200 words maximum).</i></p>	<p>Clearly policy relating to the transfer market is a hot topic right now and for good reason. IPv4 transfers are one of the most important areas of policy for ARIN today. This includes not only transfers within ARIN, but also inter-RIR transfers. It is clearly a challenge for the AC to continue to work with the community to help mold and develop these policies.</p>
<p><i>How do you separate your personal opinions from those of your employer and those of the community?</i></p>	<p>Being able to separate personal opinions from those of my employer is a trivial task for me, as Network Utility Force's opinions are essentially mine as the organization's leader. Separating personal opinions from the duty of serving the community's interests is hardly a foreign concept, I often have to put myself in my clients' or team members' positions, and those often do not align with my own opinions.</p>

Name	Bill Sandiford
E-mail Address	bill@sandiford.com
Optionally provide one URL to an external website of your choice.	http://twitter.com/bill_sandiford
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Advisory Council. Please be as specific as possible.	I am the President and CTO of Telnet Communications, a growing CLEC and ISP operating in the Greater Toronto Area of Canada. I have over 16 years of experience in the ISP and telecommunications business with expertise not only in technology but also regulatory and business processes. In my current role, responsibilities include the design, deployment, and operation of all aspects of Telnet's network and overseeing Telnet's application development and professional services departments. I also have group governance experience as a former member of the board of the Toronto Internet Exchange and as President of the Canadian Network Operators Consortium (CNOc). In addition, I have 3 years of experience as a valued member of the ARIN Advisory Council. I have spent my entire career working for Telnet Communications since I co-founded the company in 1995 after attending Laurentian University in Sudbury, Canada. Outside of work I enjoy hockey, rugby, scuba diving, and piloting my Cessna aircraft to exotic destinations around North America and the Caribbean.
Describe the relevance of your technical and professional experience to serve on the Advisory Council.	I have been involved with the administrative and technical operations of our company since I co-founded it in the mid '90s after attending Laurentian University in Sudbury, Ontario, Canada for Computer Science. Outside of our own organization, I have used my skills to assist many others with all aspects of their networks. With regards to ARIN, I have 3 years of experience on the Advisory Council.
What Internet-related services do you or your current employer or organization provide?	Telnet Communications has been in the ISP business since 1995. Services provided included dial-up and broadband internet, and website hosting. Since 2007 Telnet Communications has been recognized by the CRTC in Canada as a CLEC providing VoIP services as well as legacy telecommunication and Hosted PBX services.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Advisory Council Member?	I am not aware of any conflicts, real or perceived, that might arise should I be re-elected as an ARIN Advisory Council Member.
Describe any concerns or limitations on your ability to travel to attend Advisory Council Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	I am not aware of any concerns or limitations on my ability to travel to attend Advisory Council Meetings and Public Policy Meetings in person. I have attended every Public Policy Meeting in person for the last 3.5 years. I am not aware of any concerns or limitations on my ability to serve the entirety of a 3-year term.
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Advisory Council?	As indicated in the bio, my varied skill set and vast experience makes me uniquely suited to serve another term on the ARIN AC. My ability to set aside my personal views and those of my employer and act in the best interest of ARIN and its community is an important skill that I possess.
How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?	It is difficult to predict how ARIN's function, scale or role will change as we continue to move towards IPv6. One thing that is clear is that changes will be forthcoming. For example, the current desire being expressed by the ITU to be more involved in IP resource numbering could influence or cause these changes.

<p><i>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</i></p>	<p>I believe that significant resources should be invested to ensure that all of ARIN's activities and processes are as efficient as possible. This includes, but is not limited to, IPv4 transfers. Until IPv6 adoption rates increase significantly, many organizations will rely on IPv4 transfers for their continued numbering needs. Those transfers need to be as efficient as possible.</p>
<p><i>What areas of policy, if any need more attention and why? Be concise (200 words maximum).</i></p>	<p>I believe that as IPv4 exhaustion continues, more attention to policy relating to IPv6 and to the IPv4 transfer market will be required.</p>
<p><i>How do you separate your personal opinions from those of your employer and those of the community?</i></p>	<p>In all cases when serving on boards or advisory councils of organizations I have been easily able to separate my personal opinions from those of my employer. I am keenly aware that when serving on boards or advisory councils that I must act in the best interest of that particular community and/or organization regardless of the impact to my employer and/or myself. I have demonstrated this on many occasions in the past and will continue to conduct myself in this manner in the future.</p>

Name	Heather Schiller
E-mail Address	heather.schiller@verizonbusiness.com
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Advisory Council. Please be as specific as possible.	I am a Principal Network Security Engineer at Verizon Business (formerly UUnet). I was first elected to the ARIN Advisory Council in October of 2006 and re-elected in 2009.
Describe the relevance of your technical and professional experience to serve on the Advisory Council.	I was previously responsible for all Verizon Business (formerly MCI/UUnet) customer and backbone address assignments and overall management of number resources for 5 years. I am currently responsible for mitigating denial of service attacks, routing security and backbone infrastructure protection, across Verizon wireline networks.
What Internet-related services do you or your current employer or organization provide?	I was previously responsible for all Verizon Business (formerly MCI/UUnet) customer and backbone address assignments and overall management of number resources for 5 years. I am currently responsible for mitigating denial of service attacks, routing security and backbone infrastructure protection, across Verizon wireline networks.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Advisory Council Member?	No
Describe any concerns or limitations on your ability to travel to attend Advisory Council Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	None
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Advisory Council?	I was previously responsible for all Verizon Business (formerly MCI/UUnet) customer and backbone address assignments and overall management of number resources for 5 years. I am currently responsible for mitigating denial of service attacks, routing security and backbone infrastructure protection, across Verizon wireline networks.
How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?	ARIN's scale may be streamlined in the coming years with IPv6 adoption, however its role remains important as ever. I would like to see ARIN continue its role as a steward of number resources as well as improving efforts in educational outreach. It is an interesting challenge to balance conflicting goals such as efficient utilization and aggregation through IPv4 free pool depletion and the creation of an IPv4 transfer system. ARIN should continue work to increase understanding, within the global community, of current practices and the importance of technically driven policies. It would be wonderful if ARIN expanded efforts in the areas of research, tools and services offered. Functions such as ARIN online and RPKI are at the beginning of their evolution, successful deployment by ARIN will positively impact community adoption.

<p><i>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</i></p>	<p>ARIN should invest organizational and policy development resources into whatever policies the internet community wishes to work on. If the existing policies do not meet the needs to the community they should be improved. If the ARIN community wishes to continue tinkering with IPv4 transfer policy, then so be it. Should ARIN attempt to make IPv4 transfer more efficient, depends on what is meant by efficient transfers? I do think ARIN should continue to be a steward of transferred IP space. If the intent of the question is, "Should the ARIN community continue working on policy to make IPv4 transfers more efficient?" I think the answer depends on where efficiency is desired. Existing policy is already very efficient with regard to requirements on both the resource holder and the recipient. Requirements on the recipient to justify need are the same as any other applicant. Requirements on the resource holder are designed to ensure the resource holder is authorized to release the resource and that they can not make a game of washing through the remainder of the freepool at the expense of others. I think all of these fall in line with ensuring fair and equitable distribution of address space. At the moment, I don't think the underlying requirements need significant change as it is worth gaining additional experience from processing transfers before declaring the process either efficient or inefficient. In the meantime there may be things that ARIN can do to facilitate resource holders and requesters ahead of initiating a transfer.</p>
<p><i>What areas of policy, if any need more attention and why? Be concise (200 words maximum).</i></p>	<p>The entire IPv6 policy section is beginning to get a bit unwieldy. We seem to create policy in a vacuum while creating dependencies on other sections of policy without regard to the overall impact on the NRPM. Also we seem to have significant difficulty with using consistent vocabulary in the NRPM. This seems to create a fair bit of confusion. It still would be great to create an operations manual to go alongside the NRPM.</p>
<p><i>How do you separate your personal opinions from those of your employer and those of the community?</i></p>	<p>When discussing policy, I try to be clear on whether I am relaying my opinion, that of my employer, what I've heard from the community, or my perception of what the majority of the community wants. To facilitate this, I often outline all of the policies up for discussion, the pros/cons and whether I am for or against the policy. Separately, at work we have held policy review ahead of an ARIN meeting, involving representatives from various groups as needed, such as Engineering and Legal. We review each policy up for discussion and what it's impact would be on our organization and customers. At policy meetings and on the mailing list, I make notes about comments and concerns members of the community have made for and against each policy.</p>

Name	Robert "RS" Seastrom
E-mail Address	rs@seastrom.com
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Advisory Council. Please be as specific as possible.	I work as a Principal Engineer in the ATG Architecture Group at Time-Warner Cable. In the industry for over 20 years, I have been employed by a TLD operator, a continental scale ISP, a small consumer ISP, a consultancy, and a CDN. I have been a co-founder and president of a small cooperative ISP. In a nutshell, I am sensitive to the needs of organizations that are just starting out as well as those that have an ongoing need for number resources.
Describe the relevance of your technical and professional experience to serve on the Advisory Council.	My nine years of service on the ARIN AC combined with service on other Internet-related and non-Internet-related non-profit boards has given me insight into the fiduciary responsibilities of Boards of Directors and sensitivity to the need to craft policy that will be technically sound, deployable, and acceptable to the extent possible to all stakeholders.
What Internet-related services do you or your current employer or organization provide?	Time Warner Cable is an MSO serving customers in 29 states. We offer residential and commercial Internet/TV/phone products as well as commercial transport, MPLS, and related services.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Advisory Council Member?	I personally hold and use a minute amount of legacy number resources (an IPv4 /23 and an ASN) and am an LRSA signatory. I do not believe that being a resource holder represents a conflict of interest but am noting it here in the spirit of full disclosure.
Describe any concerns or limitations on your ability to travel to attend Advisory Council Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	No concerns or limitations.
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Advisory Council?	I want to continue what I've been promoting for the past nine years on the AC - good policy that serves the constituency and advances deployment of IPv6 as a solution for the IPv4 address space exhaustion problem. In a larger sense this is giving back to the community where I have made my living for over two decades.
How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?	ARIN's mission statement begins "Applying the principles of stewardship". The embodiment of that stewardship standard and what constitutes an appropriate level of management oversight has changed over the course of ARIN's history and will continue to progress. Transition from a free-pool-drawdown to an empty-RIR-free-pool ecology is likely to affect demand for registration services in both the short and long terms. We have already seen a precipitous decline in the run-rate of allocations as a result of the 3-month rule. Likewise, evolution from slow-start with its many trips to the well under IPv4 to a large-allocation fields-of-plenty regime under IPv6 will result in less need for registration services, and perhaps reduced revenue in the intermediate term, which should be taken into consideration when planning ARIN's funding, outreach, education and subsidization strategy. The IPv6 era will leave ARIN smaller, leaner, and yet with a very important role to play in ensuring the stability of the Internet.

<p><i>Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?</i></p>	<p>Different people mean different things when they speak of efficiency. I believe that the STLS provides an excellent method to incent those who are holding underutilized resources to get them into play. We ought to pay careful attention to corner cases and look for opportunities to correct oversights in the policy that leave resources stranded. Unfortunately, an austerity environment and long-neglected resources that suddenly have value presents a tempting opportunity for so-inclined people to commit fraud. Address hijackings at the RIR level (not the routing table level) in the distant past generally involved bored techies with no significant involvement of career criminals. When we speak of making IPv4 address *transfers* more efficient, we must be careful to not accidentally make IPv4 address *theft* more efficient.</p>
<p><i>What areas of policy, if any need more attention and why? Be concise (200 words maximum).</i></p>	<p>I believe that our policy ought to be forward-looking rather than backward-looking, and that measures which increase IPv6 uptake and facilitate migration are to be earnestly embraced in preference to policies that are engineered to wring another drop of blood out of IPv4.</p>
<p><i>How do you separate your personal opinions from those of your employer and those of the community?</i></p>	<p>As a member of the Advisory Council, my responsibility is to the community first and foremost, and I believe my management chain shares those values. My personal opinions in the policy arena are shaped by the goal of doing what is fair and right by the community, so separation of personal agenda vs. community agenda is, in practice, a non-issue.</p>

Name	John Springer
E-mail Address	springer@inlandnet.com
Provide a brief biography of recent experience, associations, and affiliations relevant to serving on the Advisory Council. Please be as specific as possible.	I have been responsible for growing Inland Telephone's Internet business from less than a hundred dial up customers on a 56K frame relay circuit to our current 2K+ broadband customers on several Gigabit Ethernet circuits spanning Washington and Idaho. I have been the POC and DMR for Inland Telephone since our original IPV4 allocation in 2005 and have attended all but 2 ARIN meetings since then. I have been a PPML lurker since before that and have recently begun posting more after some urging. I have participated in multiple technology metamorphoses including converting our telco switching environment to softswitches. I served 4 years on the Metaswitch Users Group Board, one year as Chairman.
Describe the relevance of your technical and professional experience to serve on the Advisory Council.	Most of my professional experience has been serving with rural ILECs. This group is under represented on the AC.
What Internet-related services do you or your current employer or organization provide?	Inland Telephone Company is a rural ILEC with 5 exchanges spanning 400 miles in Washington state and Idaho. We have been providing Internet services to our exchanges and nearby communities since April 1996. During that time, it has been my mission to bring broadband services to the areas within my reach. We currently supply ADSL, cable modem, fixed 802.11x, dialup and a variety of direct connections to our customers.
Are there any conflicts real or perceived that might arise should you be elected as an ARIN Advisory Council Member?	Having read the ARIN documents on the matter, no.
Describe any concerns or limitations on your ability to travel to attend Advisory Council Meetings and Public Policy Meetings in person or to serve the entirety of a 3-year term?	None currently known or anticipated.
What differentiates you as a candidate, or makes you uniquely suited to serve on the ARIN Advisory Council?	ARIN currently very adequately represents the interests of the very large organizations but is under representative of perspectives from smaller organizations. Of course, many AC members have a wide spectrum of experience and all large organizations were once small. Nevertheless, the rural telephony industry has embarked on a period of great change and a window into that experience may prove of value to the community. I think it is important to continue dialogue with all who wish to contribute to the discourse in a constructive manner.
How do you foresee ARIN's function, scale, or role in the community changing in the future? What forces might influence or cause these changes?	Meh, pure guesses here. The RIR system is a thing of beauty, inclusive and open, with a track record unparalleled by humans. I was attracted to it years ago by necessity and stayed, among other reasons, to cultivate conversation, an activity that still has a place here. This system is under pressure from forces that may yet prevail. I think the RIRs, ARIN among them, will continue to be successful by adapting to increasing market forces and efforts by governments to exert control, but the outlook is opaque.
Should ARIN invest significant organizational and policy development resources into making IPv4 transfers more efficient?	Barring unforeseen circumstances, almost certainly. No one knows how things are going to turn out and there are countless assertions. Yet the fact of IPV4/IPV6 reverse incompatibility will be causing unexpected problems for years, if not decades. Besides, cui bono?

<p><i>What areas of policy, if any need more attention and why? Be concise (200 words maximum).</i></p>	<p>Transfer policy and transition mechanism facilitation. The business with the Canadian cable systems is unexpected and seems to need some attention at several levels.</p>
<p><i>How do you separate your personal opinions from those of your employer and those of the community?</i></p>	<p>Easily. I almost never speak on behalf of my employer or the community. Sometimes I speak as to my opinion of the opinion of the community, but that and all else is my opinion.</p>