



The Regional Internet Registry Policy Development Process

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The Regional Internet Registries (RIRs) are responsible for allocating Internet Protocol (IP) resources within their assigned regions. These resources include IP addresses and autonomous system numbers (commonly referred to as number resources). Currently, there are four recognized RIRs: APNIC (the Asia Pacific Network Information Centre), ARIN (the American Registry for Internet Numbers), RIPE NCC (the Réseaux IP Européens Network Coordination Centre), and the most recent RIR recognized by ICANN, LACNIC (the Latin American and Caribbean Internet Addresses Registry). A fifth RIR, AfriNIC, has been proposed for the continent of Africa (which is currently serviced by APNIC, ARIN, and RIPE NCC).

The RIRs are all structured similarly. They are not-for-profit, member-based organizations that facilitate the development of consensus-based policies in a bottom-up, industry self-regulating manner in response to the requirements of the many and varied stakeholders in their respective communities. The RIR structure provides service in a fair, responsive, neutral, and impartial manner. All four RIRs have an open membership policy. Each hosts public policy meetings that are open to all stakeholders regardless of membership status, who are interested in discussing IP-related issues, and in developing number resource management

Expanded Coverage from ISOC

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Examples in the News

The Internet Protocol Journal, December 2001
The current system of managing Internet address space involves *Regional Internet Registries* (RIRs), which together share a global responsibility delegated to them by the *Internet Assigned Numbers Authority* (IANA). This regime is now well established, but it has evolved over ten years from a much simpler, centralized system. Internet number spaces were originally managed by a single individual "authority," namely the late Jon Postel, co-inventor of some of the most important technical features of today's Internet.
http://www.cisco.com/warp/public/759/ipj_4-4/ipj_4-4_regional.html

Relevant IETF RFCs

There are many RFCs related to IP number resource allocation and management, however the most important one for the Regional Internet Registries and the IANA is RFC 2050 - Internet Registry IP Allocation Guidelines. This RFC was co-written by the RIRs and the IANA, and is the basis for all IP management and allocation policies for each of the Registries.

Other pertinent RFCs worth mentioning include:
RFC 3177 IAB/IESG Recommendations on IPv6 Address Allocation to Sites

policies. Such meetings, along with open mailing lists, allow the RIRs to gain a broad perspective on the issues that impact the community. The Registries make concerted efforts to build consensus within the framework of the policy at hand and to ensure that policies are applied fairly and consistently, including those that are in common with other regions.

Due to the inherent regional differences, the RIRs take slightly different approaches to support the development and implementation of policies. Regardless of the implementation process used, the RIRs share a common goal: ensuring the fair distribution and responsible stewardship of number resources in order to maintain the stability of the Internet. The managerial, administrative, and technical oversight provided by the RIRs is an integral part of the infrastructure needed to keep the Internet operating efficiently.

Although existing as separate entities that meet the needs of their respective communities, the RIRs work closely together, coordinating activities that support policies that are common to all. In 1999, the three RIRs (APNIC, ARIN, RIPE NCC) and ICANN created the Address Support Organization (ASO) by signing a Memorandum of Understanding: <http://www.aso.icann.org/docs/aso-mou.html>. In November 2002, LACNIC signed a joinder to the MOU as the fourth RIR. In order to carry out the advisory functions tasked to the ASO, the Address Council was formed. It is comprised of three representatives from each of the four RIR regions. The ASO works within the existing policy structure. This recognizes the long-standing history of community-created, bottom up policy development.

RFC 3152 Delegation of IP6.ARPA
RFC 1930 Guidelines for creation, selection, and registration of an Autonomous System (AS)
RFC 1881 IPv6 Address Allocation Management

For More Information

Additional details about the RIR's and on obtaining IP number resources can be found at:

www.apnic.org
www.arin.net
www.ripe.net
www.lacnic.net
www.afrinic.org

Related Organizations

Internet Corporation for Assigned Names and Numbers
www.icann.org
Address Supporting Organization
www.aso.icann.org
Internet Assigned Numbers Authority
www.iana.org

About the Authors

This article was co-authored by staff from APNIC, ARIN, LACNIC, and RIPE NCC. The Regional Internet Registries (RIRs) are charged by their communities with ensuring the fair distribution and responsible management of IP address space and autonomous system numbers.

APNIC, the Asia Pacific Network Information Center, is headquartered in Brisbane, Australia. It provides services to the Asia Pacific Region, and is comprised of 62 economies in Asia and Oceania.

ARIN, the American Registry for Internet Numbers, is headquartered in Chantilly, Virginia. It manages the Internet numbering resources for Northern America, parts of the Caribbean, and sub-Saharan Africa.

The Latin American and Caribbean Internet Addresses Registry (LACNIC), is located in Montevideo, Uruguay. It manages the Internet numbering resources for Latin America and parts of the Caribbean.

In summary, the RIR framework provides an open, transparent, and documented process for developing number resource policy that is in step with the needs of the RIRs' constituencies. It contributes to their common goal and purpose of ensuring fair distribution, responsible management, and effective utilization of number resources necessary to maintain the stability of the Internet.

Implications and ISOC Position

The RIRs have a long history of successful operation. ISOC strongly supports their independence from commercial and governmental interests and their fair and open principles and practices in the administration of the Internet's most important technical resource, its address space.

The RIPE NCC, headquartered in Amsterdam, the Netherlands, performs activities primarily for the benefit of its membership in Europe, the Middle East, Central Asia, and African countries located north of the equator.

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