



## Internet Assigned Numbers Authority

[Domains](#)

[Numbers](#)

[Protocols](#)

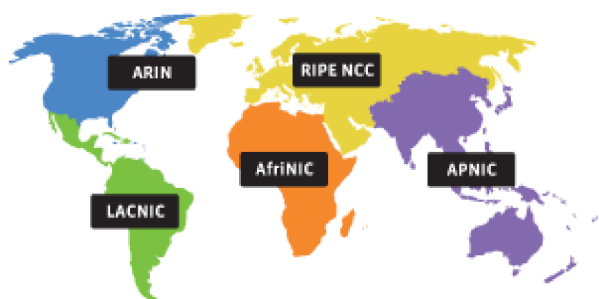
[About IANA](#)

### Number Resources

IANA is responsible for global coordination of the Internet Protocol addressing systems, as well as the Autonomous System Numbers used for routing Internet traffic.

Currently there are two types of Internet Protocol (IP) addresses in active use: IP version 4 (IPv4) and IP version 6 (IPv6). IPv4 was initially deployed on 1 January 1983 and is still the most commonly used version. IPv4 addresses are 32-bit numbers often expressed as 4 octets in "dotted decimal" notation (for example, 192.0.2.53). Deployment of the IPv6 protocol began in 1999. IPv6 addresses are 128-bit numbers and are conventionally expressed using hexadecimal strings (for example, 2001:0db8:582:ae33::29).

Both IPv4 and IPv6 addresses are generally assigned in a hierarchical manner. Users are assigned IP addresses by Internet service providers (ISPs). ISPs obtain allocations of IP addresses from a local Internet registry (LIR) or national Internet registry (NIR), or from their appropriate Regional Internet Registry (RIR):



Registry	Area Covered
<a href="#">AfrinIC</a>	Africa Region
<a href="#">APNIC</a>	Asia/Pacific Region
<a href="#">ARIN</a>	North America Region
<a href="#">LACNIC</a>	Latin America and some Caribbean Islands
<a href="#">RIPE NCC</a>	Europe, the Middle East, and Central Asia

The IANA's role is to allocate IP addresses from the pools of unallocated addresses to the RIRs according to their established needs. When an RIR requires more IP addresses for allocation or assignment within its region, the IANA makes an additional allocation to the RIR. IANA will not make allocations directly to ISPs or end users except in specific circumstances, such as allocations of multicast addresses or other protocol specific needs.

### IP Address Allocations

#### Internet Protocol Version 4 (IPv4)

[Internet Protocol v4 Address Space](#)

[Internet Protocol v4 Multicast Address Assignments](#)

#### Internet Protocol Version 6 (IPv6)

[Announcement of Worldwide Deployment of IPv6](#) (14 July 1999)

[IPv6 Address Allocation and Assignment Policy](#) (26 June 2002)

[IPv6 Address Space](#)

[IPv6 Global Unicast Allocations](#)

[IPv6 Parameters](#) (Parameters described for IPv6, including header types, action codes, etc.)

[IPv6 Anycast Address Allocations](#)

[IPv6 Multicast Address Allocations](#)

[IPv6 Sub-TLA Assignments](#) (DEPRECATED)

[IANA IPv6 Special Registry](#)

### Autonomous System Number Allocations

[Autonomous System Numbers](#)

### Emerging Regional Internet Registries

[Criteria for Establishment of New Regional Internet Registries \(ICP-2\)](#) (4 June 2001)

[IANA Report on Recognition of LACNIC as a Regional Internet Registry](#) (7 November 2002)

[IANA Report on Recognition of AfriNIC as a Regional Internet Registry](#) (8 April 2005)

### Documentation

[RFC 5156](#) — Special-Use IPv6 Addresses

[RFC 3330](#) — Special-Use IPv4 Addresses

[RFC 3177](#) — IAB/IESG Recommendations on IPv6 Address Allocations to Sites

[RFC 2928](#) — Initial IPv6 Sub-TLA ID Assignments

[RFC 2450](#) — Proposed TLA and NLA Assignment Rules

[RFC 3513](#) — Internet Protocol Version 6 (IPv6) Addressing Architecture

[RFC 2050](#) — Internet Registry IP Allocation Guidelines

[RFC 1918](#) — Address Allocation for Private Internets

[RFC 1518](#) — An Architecture for IP Address Allocation with CIDR

#### [About](#)

[Presentations](#)

[Performance](#)

[Reports](#)

[Projects](#)

[Site Map](#)

#### [Domains](#)

[Root Zone](#)

[.INT](#)

[.ARPA](#)

[IDN Repository](#)

#### [Protocols](#)

#### [Number Resources](#)

[Abuse Information](#)



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[Internet Corporation for Assigned Names and Numbers](#)

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