



# IANA Update



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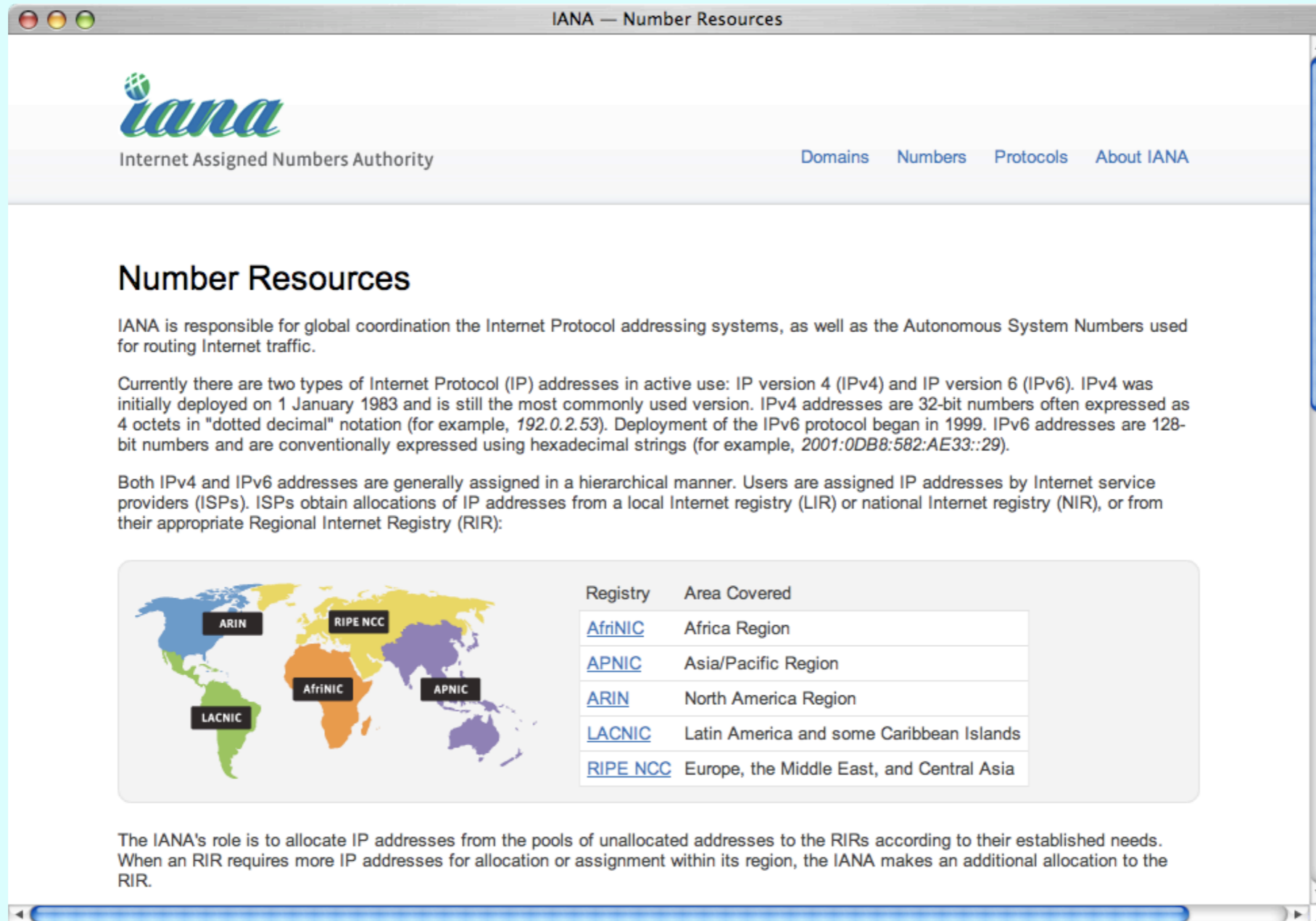


# Overview

- Our New Web Site
- Recent Number Allocations
  - Allocations to RIRs
  - Returned to IANA
- IPv6 News
- DNS Work
  - In-addr.arpa
  - DNSSEC
- New IPv4 Registry Format

# New Web Site

<http://beta.iana.org>



The screenshot shows a web browser window titled "IANA — Number Resources". The page features the IANA logo and navigation links for Domains, Numbers, Protocols, and About IANA. The main content is titled "Number Resources" and includes an introductory paragraph, a detailed paragraph about IPv4 and IPv6, and a paragraph about IP address assignment. A world map highlights the regions of the five Regional Internet Registries (ARIN, RIPE NCC, AfriNIC, APNIC, LACNIC). To the right of the map is a table listing each registry and its area covered.

**Number Resources**

IANA is responsible for global coordination 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.



# Allocations to RIRs in 2007

- 9 /8s allocated by August 2007
  - 5 to APNIC
  - 4 to RIPE NCC
- 196/8 marked as AfriNIC



# Allocations returned to IANA in 2007

- 46/8 - returned by BBN
- 14/8 - to be returned by its users
- 49/8, 50/8 returned by US DoD
- Possibly one more coming back...

# ((( BREAKING NEWS )))

- IPv6 has arrived...
  - We have received an **urgent** request for an update to ip6.arpa
- IPv6 is only used by nice, polite people...
  - We have never received an abuse complaint with about an IPv6 address



# DNS Services

- IANA will take administrative and technical control of in-addr.arpa from ARIN
- IANA will take administrative and technical control of the new mcast.arpa zone
- Will be managed in house
- Will be DNSSEC signed



# DNSSEC

- DNSSEC deployment is continuing
- Richard Lamb has developed our systems
- Details available in his recent IEPG presentation
  - [http://www.iepg.org/2007-07-ietf69/DNSSEC\\_at\\_IANA\\_IETF.pdf](http://www.iepg.org/2007-07-ietf69/DNSSEC_at_IANA_IETF.pdf)





# New IPv4 Registry Format

- No more “Various Registries”
- RIR listed for former “Various Registries” listing and RIR unicast assignment
- Whois server for all the above unicast assignments

# Questions