

Shared Internet Resources

Smooth operation of the Internet depends upon a **global, coordinated, community-driven** approach to managing key shared resources

ROLES

Policy >

Policies are the agreed upon rules developed through community-based processes by which shared Internet resources are managed.

Oversight >

Oversight to ensure policies and implementation are aligned promotes the coherent long-term development and use of shared Internet resources.

Implementation >

Implementation of shared Internet resources in a neutral and responsible manner guided by the relevant policy and oversight processes.

Source: Internet community leaders' meeting in Miami, Florida, USA in February 2011

Learn more at: www.internetsociety.org/resources

IETF STANDARDS

SHARED RESOURCES

Protocol

```
FTP      SFTP
SMTP     SSL
Telnet   TLS
HTTP     POP
HTTPS    Et
```

Protocols describe communications standards that enable basic end-to-end communication on the Internet. To ensure smooth deployment, the codes and numbers must be coordinated.



IETF
Community



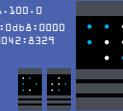
IAB



IANA

Numbers

```
198.51.100.0
2001:0db8:0000
ff00:0042:8329
```



Shared Internet number resources include Internet Protocol addresses (IPv4 and IPv6) and Autonomous System Numbers (ASN) which are used by various routing protocols.



RIRs
Community



NRO



IANA

Names



Top-level domain names (TLDs), including generic TLDs (gTLDs) such as .com and .org, as well as country code TLDs (ccTLDs) help locate resources connected to the Internet.



ICANN
Community



ICANN



IANA

Shared Internet Resources

The Internet's incredible growth and success as a platform for innovation and economic development has been due in large part to its shared global ownership, use of open standards, and freely accessible processes for technology and policy development. The Internet continues to thrive because of open, transparent, and collaborative processes that are accessible to users around the world.

Internet Engineering Task Force (IETF)

The IETF is a large, open, international community of network designers, operators, vendors, and researchers concerned with the evolution of the Internet architecture and the smooth operation of the Internet. It is open to any interested individual. The mission of the IETF is to make the Internet work better by producing high quality, relevant technical documents that influence the way people design, use, and manage the Internet. This includes defining the technical foundations for protocols, number resources, and domain names.

<http://www.ietf.org>

Internet Architecture Board (IAB)

Internet Architecture Board (IAB) The IAB is chartered as a committee of the Internet Engineering Task Force (IETF) and as an advisory body of the Internet Society (ISOC). Its responsibilities include architectural oversight of IETF activities, Internet Standards Process oversight and appeal, and the appointment of the RFC Editor. The IAB is also responsible for the management of the IETF protocol parameter registries.

<http://www.iab.org/>

Other parties with shared Internet resource roles

VeriSign manages the authoritative DNS root zone file under a cooperative agreement with the United States Government. Responsibility for the IANA functions are assigned through a contract with the United States Government.

Regional Internet Registries (RIRs)

Regional Internet Registries (RIRs) RIRs oversee the allocation and registration of Internet number resources within a particular region of the world. Each RIR consists of the Internet community in its region and a member of the Number Resource Organization (NRO). RIRs include AfriNIC in Africa (<http://www.afrinic.net>), the Asia Pacific Network Information Centre (APNIC) (<http://www.apnic.net>), the American Registry for Internet Numbers (ARIN) (<http://www.arin.net>), the Latin American and Caribbean Internet Addresses Registry (LACNIC) (<http://www.lacnic.net>) and the RIPE Network Coordination Centre (<http://www.ripe.net>).

The Number Resource Organization (NRO)

The Number Resource Organization (NRO) is a coordinating body for the five Regional Internet Registries (RIRs) that manage the distribution of Internet number resources including IP addresses and Autonomous System Numbers. The NRO exists to protect unallocated Number Resource pool, to promote and protect the bottom-up policy development process, and to act as focal point for community input into the RIR system.

<http://nro.org/>

ICANN

ICANN is a not-for-profit public-benefit corporation that coordinates the system of unique names and numbers needed to keep the Internet secure, stable, and interoperable. An inclusive community-focused approach raises and identifies issues for ICANN to address. The ICANN community encompasses domain name registries and registrars, Internet Service Providers (ISPs), intellectual property advocates, commercial and business interests, non-commercial and non-profit interests, as well as representation from more than 100 governments, and a global array of individual Internet users.

<http://www.icann.org/>

Internet Assigned Numbers Authority (IANA)

The Internet Assigned Numbers Authority (IANA) is responsible for the global coordination of the Domain Name System (DNS) Root, Internet Protocol (IP) addressing, and other Internet protocol resources.

<http://www.iana.org/>