

# **Introduction to the Regional Internet Registries (RIRs)**

# What is an RIR?

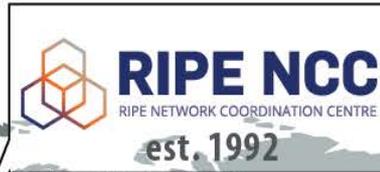
*A Regional Internet Registry (RIR) manages the allocation and registration of Internet number resources in a particular region of the world and maintains a unique registry of all IP numbers issued.*

***Number resources include IP addresses (IPv4 and IPv6) and autonomous system (AS) numbers***

# Regional Internet Registries



**ARIN**  
American Registry for Internet Numbers  
est. 1997



**RIPE NCC**  
RIPE NETWORK COORDINATION CENTRE  
est. 1992



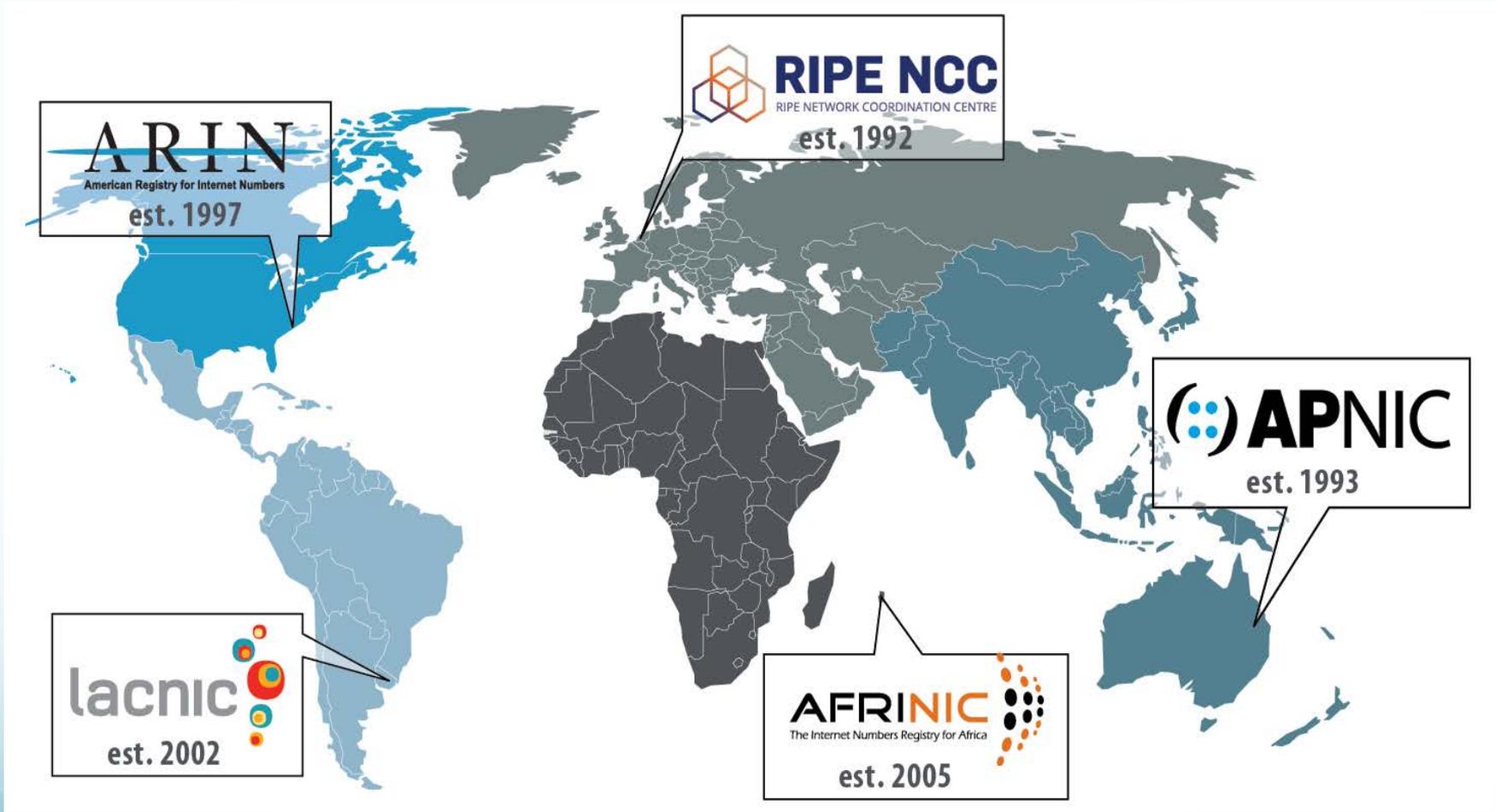
**APNIC**  
est. 1993



**lacnic**  
est. 2002



**AFRINIC**  
The Internet Numbers Registry for Africa  
est. 2005



# RIR Structure and Services

- **Structure**

- Not-for-profit membership based organizations
- 100% community funded, fees for services
- Open to all, broad based: anyone can participate or become a member
- Community developed policies, open and transparent processes and documents

- **Core Services**

- Distribute and register Internet Number Resources: IPv4, IPv6 and Autonomous System Numbers (ASNs)
- Maintain directory services including Whois and routing registries
- Provide reverse DNS
- Facilitate the policy development process: publish policy documents, maintain mailing lists, conduct public policy meetings
- Conduct outreach and training

# What is the NRO?

- **Number Resource Organization**
  - NRO MoU, 24 Oct 2003
  - Lightweight, unincorporated association
- **Mission**
  - Provide and promote a **coordinated Internet number registry system**
  - Promote the **multi-stakeholder** model and **bottom-up** policy development process in Internet governance
  - Coordinate and support **joint activities** of the RIRs
  - Act as a **focal point** for input into the RIR system
  - Fulfill the role of the ICANN Address Supporting Organisation (ASO)

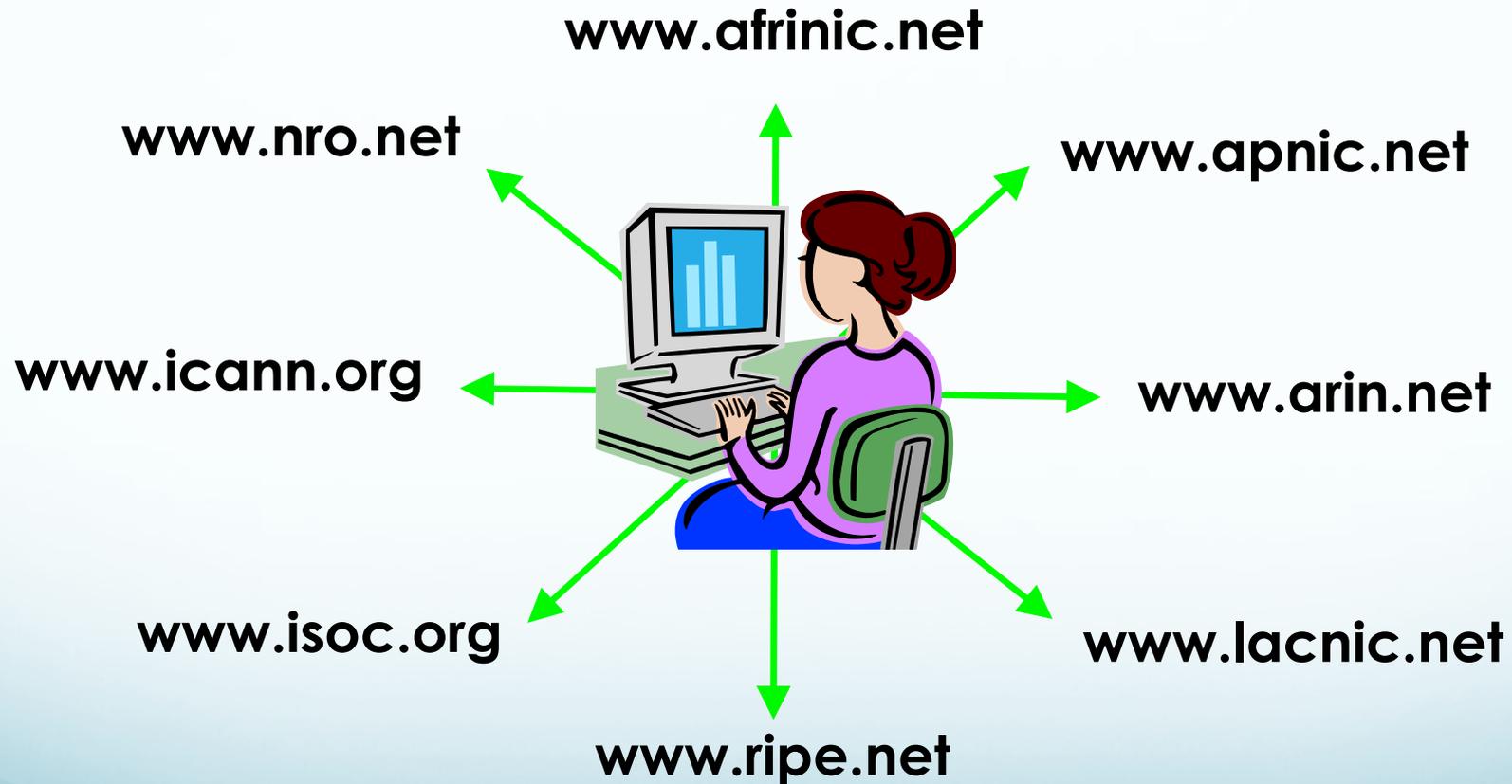


# Internet Corporation for Assigned Names and Numbers

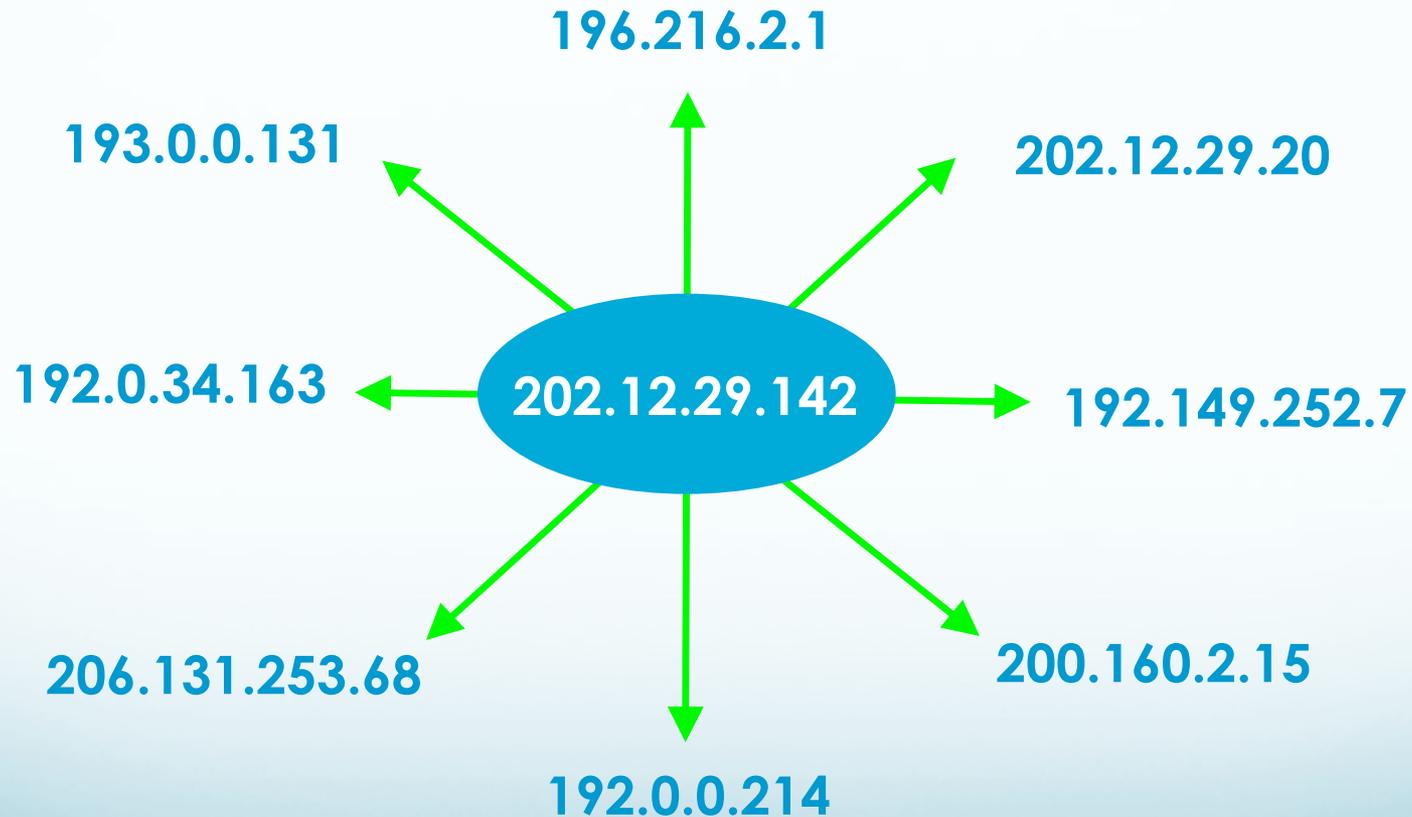
ICANN

<b>Mission</b>	<b>Structure</b>	<b>Organization</b>
<ul style="list-style-type: none"><li>◆ Top Level Technical Coordination of the Internet<ul style="list-style-type: none"><li>❖ Names</li><li>❖ Numbers</li><li>❖ Root Servers</li></ul></li></ul>	<ul style="list-style-type: none"><li>◆ Non Profit</li><li>◆ Self-Regulatory</li><li>◆ Global</li></ul>	<ul style="list-style-type: none"><li>◆ Supporting Organizations<ul style="list-style-type: none"><li>- ccNSO</li><li>- gNSO</li><li>- <b>ASO</b></li></ul></li><li>◆ Advisory Committees</li></ul>

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# What is an IP Address?

- Unique identifier for a computer or device on a TCP/IP network that facilitates moving data between networks
  - Every device directly connected to the Internet needs a unique IP address

# IP Addresses are *Not* Domain Names

- **IP Address [Identifier]**

- “Computer-friendly”
- Unique number identifies computer on Internet
- Used for routing (moving information across an inter-network from a source to a destination)

- **Domain Name [Reference]**

- “People-Friendly”
- Maps host name to unique IP address
- A means of storing and retrieving information about hostnames and IP addresses in a distributed data base

**Questions?**