LACNIC Network Security and Stability Initiatives

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LACNIC – Internet Resources Management

- LACNIC's main mission is the management of Internet number resources
  - IPv4, IPv6, ASN numbers

- Membership based, non-profit organization
  - Almost 3 thousand member organizations from 18 countries

- LACNIC has been working closely with the technical Internet community for more than 10 years
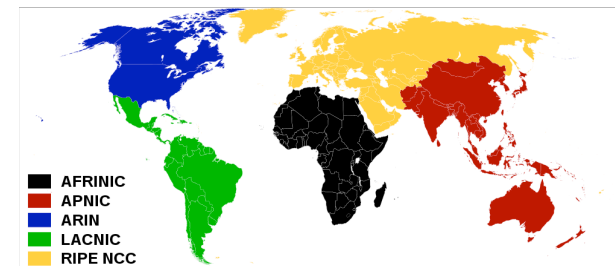
LACNIC and Cyber Security

- During our 2013-2015 strategic planning review we included a **secure** and **stable** Internet is a key element of our region's social and economic development

- **Security** and **stability** are two different aspects but addressing them shares a lot of common ground

LACNIC's work on Security

- Past and current projects, now under an unifying umbrella
  - Amparo
  - +Raíces
  - Training events
  - Development and promotion of RPKI
  - DNSSEC for the reverse and direct space
  - Promotion of new IXPs
  - CSIRT meetings
  - LACSEC – we host an annual security conference

LACNIC's Security Initiatives

- Our focus is on **technology** and **Internet infrastructure**
- Four pillars:
  - Capacity building
  - Internet infrastructure strengthening
  - Outreach, cooperation and dissemination
  - Cooperation for public policies discussion and development

Capacity Building

- Training
  - DNS / DNSSEC
    - Securing your DNS infrastructure is now more important than ever
  - Secure routing best practices
    - Are your packets reaching their intended destination? Do you know who you share routing information with?
  - IPv6 and security implications of IPv4 exhaustion
    - Have you heard that IPv4 addresses are running out? Using only IP addresses for incident handling and information requests will not be enough very soon
  - Security incident handling

Internet Infrastructure Strengthening

- Deployment of DNS root server copies in our region
  - Root server anycast copies critical for Internet stability
  - We partner with different organizations to host, deploy and operate these copies in our region
- DNSSEC for reverse DNS resolution
  - Also collaborating with other organizations
- WHOIS database upkeep
  - Did you know that WHOIS information for IP addresses from LAC is hosted and maintained by LACNIC ?
- Promotion of IXPs for interconnection growth

Outreach and Cooperation

- Outreach and Cooperation
  - Standardization activities
    - Internet Engineering Task Force (IETF)
  - Security conferences
    - FIRST, SEGURINFO
  - Cooperation
    - **OAS**: MoU recently signed
    - Other IG-related bodies

A word on technology

- RPKI
  - Resource Certification
  - In short: *issuing digital certificates that can be used to prove a 'right to use' in the Internet's routing system*

- DNSSEC
  - DNS Security Extensions
  - In short: *introducing digital signatures into the DNS system so resolvers (the 'users' of the system) can verify the answers they receive*

THANKS !