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 !