LACNIC Update

ARIN 41
Miami, 15-18 April, 2018

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Three Topics

1. **Excellence in Internet Number Resource Management.**

- Membership evolution
- New Membership Fee Schedule
- Soft landing policy phases status
- Resource Transfers
- Elections Board of Directors

2. **Continued strengthening of a secure, stable, open, and continuously growing Internet.**
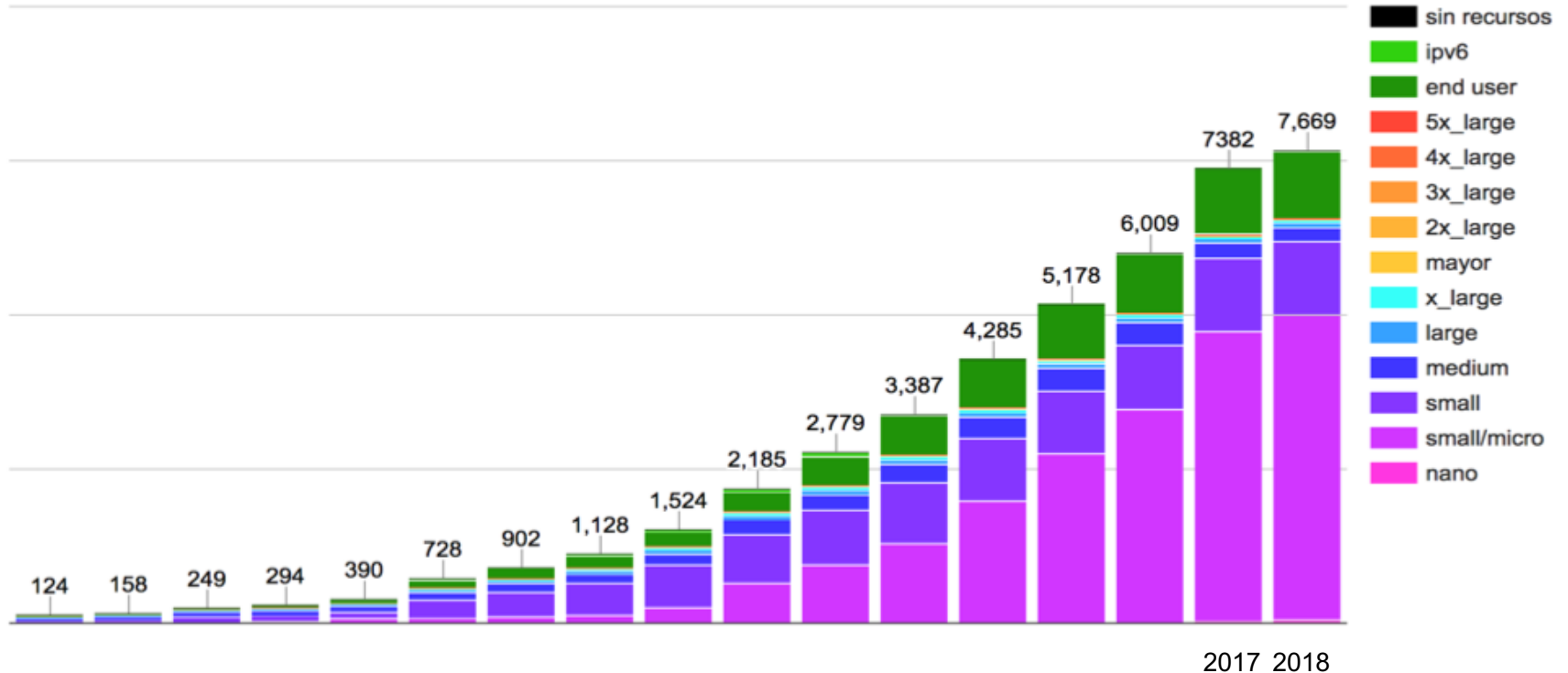
- Security, Stability, Resilience
- IPv6 Deployment
- Training

3. **Promoting and enriching a participatory, bottom-up Internet governance model.**

- PDP, news and proposals
- Community Building

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Resource Management
Membership evolution

New Membership Fee Schedule

• **New categories** for allocations smaller than /22 (NANO) and bigger than (2XL, 3XL…)

• **ASN Assignment fee was decreased** for categories Nano and Micro in order to facilitate smaller ISPs inclusion.

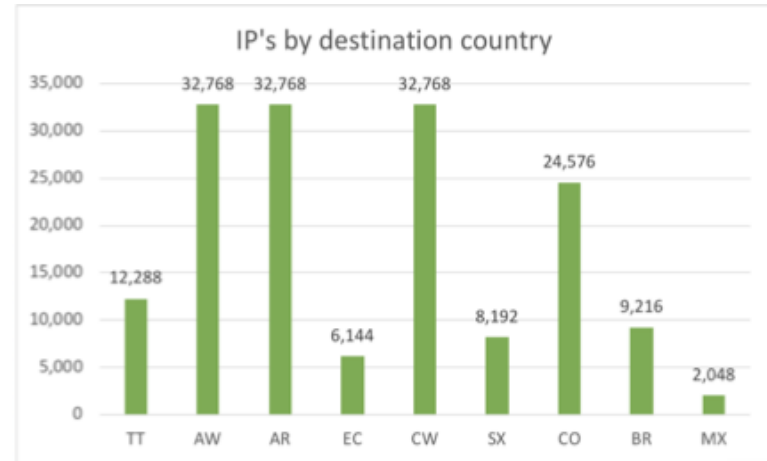|	Asociados	IPv4				IPv6	
		Prefijo IPv4	IPs Hasta	Cuota Min	Cuota Max	Prefijo IPv6	Cuota
01-Nano	0	</22	1,023	600	600	-	-
02-Micro	3.620	</20	4,095	1.000	1.000	-	-
03- Small	1.180	</18	16,383	2.100	2.100	<= /32	2.100*
04- Medium	226	</16	65,535	5.700	5.700	< /30	5.700
05- Large	77	</14	262,143	14.000	14.000	< /28	14.000
06- X Large	42	</12	1,048,575	28.000	28.000	< /26	28.000
07- 2X Large	19	</10	4,194,303	45.000	65.000	< /24	65.000
08- 3X Large	7	</9	8,388,607	85.000	105.000	< /22	105.000
09- 4X Large	3	</8	16,777,215	125.000	185.000	< 20	185.000
10- 5X Large	1	</7	33,554,431	205.000	345.000	< /19	345.000
11- 6X Large		>= /7	67,108,863	365.000	....	>= /19	....

Resource Management
Soft Landing Policy – Phase III

- Started in Feb 15th, 2017
  - "No IPv4 allocations or assignments will be made to organizations that have already been assigned or allocated IPv4 resources by LACNIC or by the organizations that preceded LACNIC in the region currently serviced by LACNIC."
- Maximum allocation size /22 (one time)
- Pool size /10 (4,2 million addresses)
- This phase is expected to last two years more.

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Resource transfers

- After policy 2.3.2.18 was implemented transfers that are not originated in M&A are allowed.
- Only intra-RIR transfers are permitted
- 15 transfers were approved during the last two years
- New Transfers Listing Service implemented in March 2018

Date	Size	From	To
2016	/20	Argentina	Trinidad & Tobago
2016	/18	Argentina	Aruba
2016	/17	Panamá	Argentina
2016	/20 /21	Ecuador	Ecuador
2017	/20 /20	Curazao	Sint Marteen
2017	/19	Panamá	Colombia
2017	/19	Panamá	Trinidad & Tobago
2017	/20 /20	Brasil	Brasil
2017	/18	Argentina	Aruba
2017	/19	Panamá	Colombia
2017	/22	brasil	Brasil
2017	/19	Panamá	Colombia
2017	/19 /19 /18	Curazao	Curazao
2018	/19	Panamá	Guyana
2018	/21	Panamá	México

IP's by destination country

Country	Value
TT	12,288
AW	32,768
AR	32,768
EC	6,144
CW	32,768
SX	8,192
CO	24,576
BR	9,216
MX	2,048

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LACNIC Board of Directors
(2017 elections)

- 13 candidates from 10 different countries were nominated.

- Voting 13th - 20th October 2017.

- Results:
  - Gabriel Adonaylo renewed.
  - Rosalia Morales was elected for first time.

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# Strengthening a Secure, Stable, Open, and Continuously Growing Internet

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Security, Stability and Resiliency Initiatives

- Security and stability for routing
  - Resource Certification
    - RPKI Trust Anchor Alignment (AKA "0/0")
    - RPKI outreach

- DNS security and stability
  - K-Root IPv6 enabled, global node @Montevideo, UY.
  - I-Root instances being installed throughout the region
    - Paraguay just became active last week
  - **LACNIC is not a Root Server Operator.**

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Secure, Stable, Open and Resilient Internet.
Networks announcing IPv6 prefixes
(%ASN 28/Feb/2018)

- There are 6888 visible ASNs in the region, 2619 (38.2%) of which are announcing IPv6 prefixes.

- Highest coverage in the five regions.
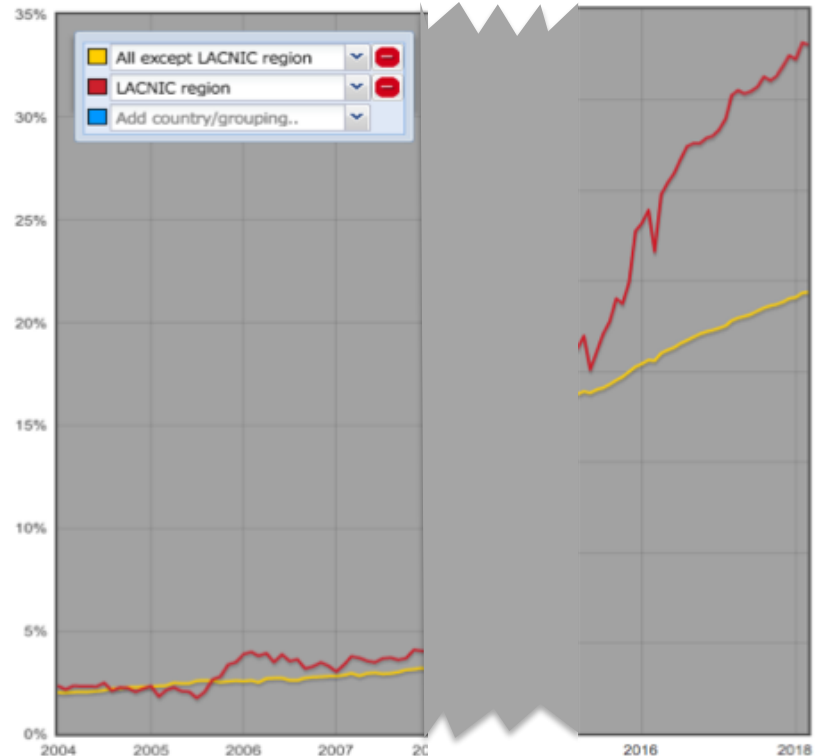
Source:
http://v6asns.ripe.net/v/6?s=_ALL;s=_RIR_LACNIC

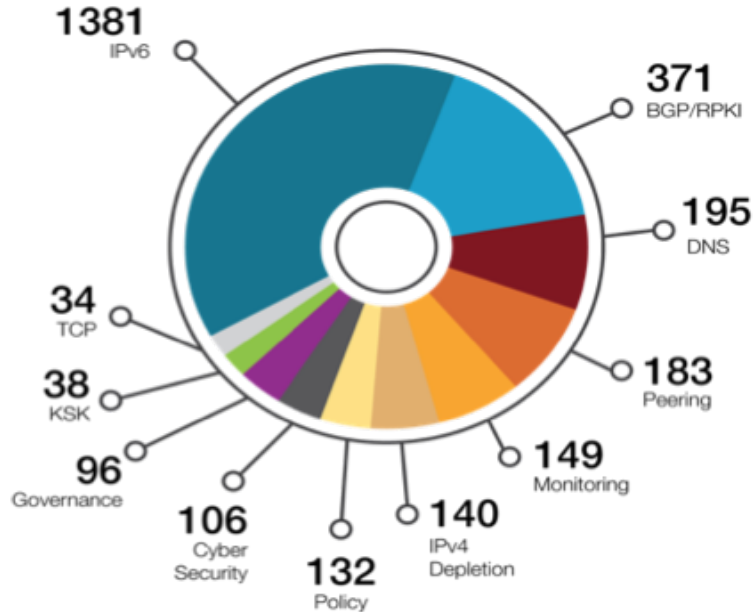# Secure, Stable, Open and Resilient Internet.
IPv6 Users per Country

- Several countries with growing adoption rates
  - UY ~29%
  - BR ~25%
  - TT, EC ~19%
  - PE ~16%
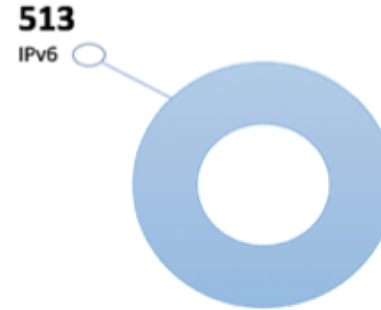 - AR, BO, GT, MX ~ 5-7%
  - DO ~ 1.0%

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Training and Webinars

Online Training, Webinars & In-Person participants

People trained by topic in 2017: 2825

1381 IPv6
371 BGP/RPKI
195 DNS
183 Peering
149 Monitoring
140 IPv4 Depletion
132 Policy
106 Cyber Security
96 Governance
38 KSK
34 TCP

People trained by topic in 2018

513 IPv6

CAMPUS LACNIC 2018

-IPv6 Basic 1st ed: 323 people trained

Plan
- IPv6 Basic Course: 5 editions
- IPv6 Advanced Course: 3 editions
- BGP+RPKI course: 3 editions

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Additional Approach: IPv6 for Decision Makers

- Guyana:
  - Guyana Telephone & Telegraph (Operator);
  - Catherine Hughes (Ministry Telecomm);
  - eGovernment Unit Guyana

- Suriname:
  - Telecommunicatie Autoriteit Suriname (Authority)
  - Telesur, Parbonet (Operators)
  - De Nationale Assemblée (Parliament)
  - Mr. Ashwin Adhin (Vice President)

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FRIDA

FRIDA is the Regional Fund for Digital Innovation.

Activities in 2018
- Donors: LACNIC, IDRC and Internet Society
- FRIDA offer 4 grants and 3 awards for US$95,000.
- Call for proposals is currently open.
- Supported Topics: (1) Community Networks and (2) Gender and Technology.

In recent years, FRIDA has become **very competitive fund**
- 2016: 551 applications for 10 funding opportunities available
- 2017: 312 applications for the 3 funding opportunities available

Examples of **projects supported in 2017**
- An IoT initiative for climate change and disaster management in Dominica.
- Promotion of digital rights of LGBT communities in the LAC region.

Ayitic Goes Global

http://www.ayitic.net/en/

Pilot program that seeks to increase women's access to digital **employment** through **capacity building** and the **strengthening of Internet infrastructure** in **Haiti**. Funded by **IDRC**.

Began with a **research phase** aimed at identifying skills required in the market and connectivity challenges in Haiti. Papers can be accessed here: http://www.ayitic.net/en/reportes-2017.html.

First round of online trainings for 50 women to begin on May 16. The goal is to train 300 by June 2019. Modules include: The basics of being digital, Data Practitioner and Internet Practitioner.

In terms of **strengthening Internet infrastructure,** the program will:
- Train 300 IT Professionals on Networking and Security
- Reinforce the local IXP
- Support IPV6 deployment in 2 local ISPs

Google/LACNIC Interconnection Workshops

Joint initiative for second half of 2018

LACNIC and Google will offer Interconnection Workshops for ISPs and NAPs/IXPs in three countries of Central America and Caribbean:
- Trinidad and Tobago
- Panama
- Nicaragua

Skills building to center around
- Management aspects: benefits of local traffic, decision making, trust building and business models.
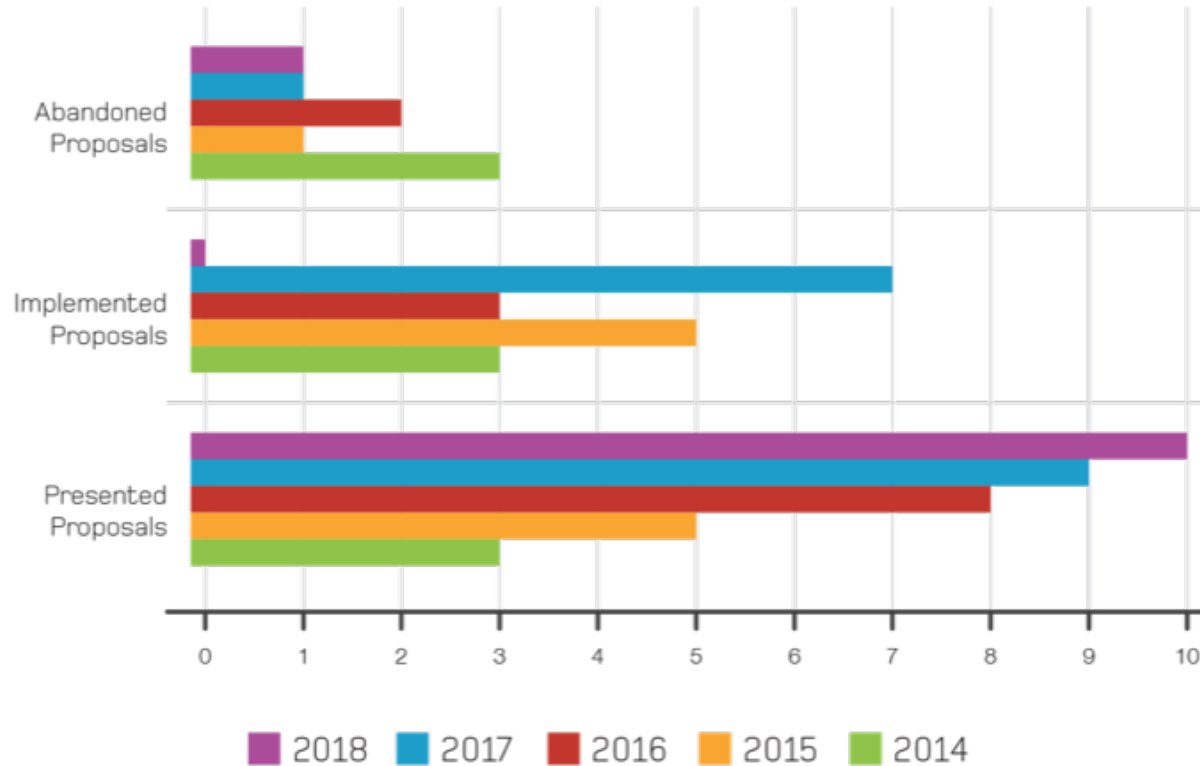- Technical aspects: IPv6, BGP, RPKI, best routing practices, open standards and root servers.

Courses will be complemented with other activities for local Digital Entrepreneurs.

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Internet Governance Participative Model and Community Building

Number of Policy Proposals at LACNIC

Community Building

- **LACNIC on the Move (LOTM)**
- Smaller local events jointly organized with regional and local Institutions, with different topics related to LACNIC activities, usually a day and a half. Last year 2017:
  - Guatemala (.GT, SIT, ISOC GT, ISOC, ICANN).
  - Guyana (MTOP, CaribNOG, ISOC, ICANN, CTU).
  - Medellín, CO (MINTIC, RENATA, EAFIT, IPv6 Spectrum).

- LOTM 2018
  - Paraguay, June 5th - 7th (CNC, COPACO, IXP PY)
  - Nicaragua: TBC

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LACNIC 29 – Panama
30th April- 4th May 2018

Remote Participation: http://www.lacnic.net/lacnic29-streaming

LACNIC 30 - LACNOG 2018
24th - 28th September 2018

Host: CABASE (Argentina)

Thank you!

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