

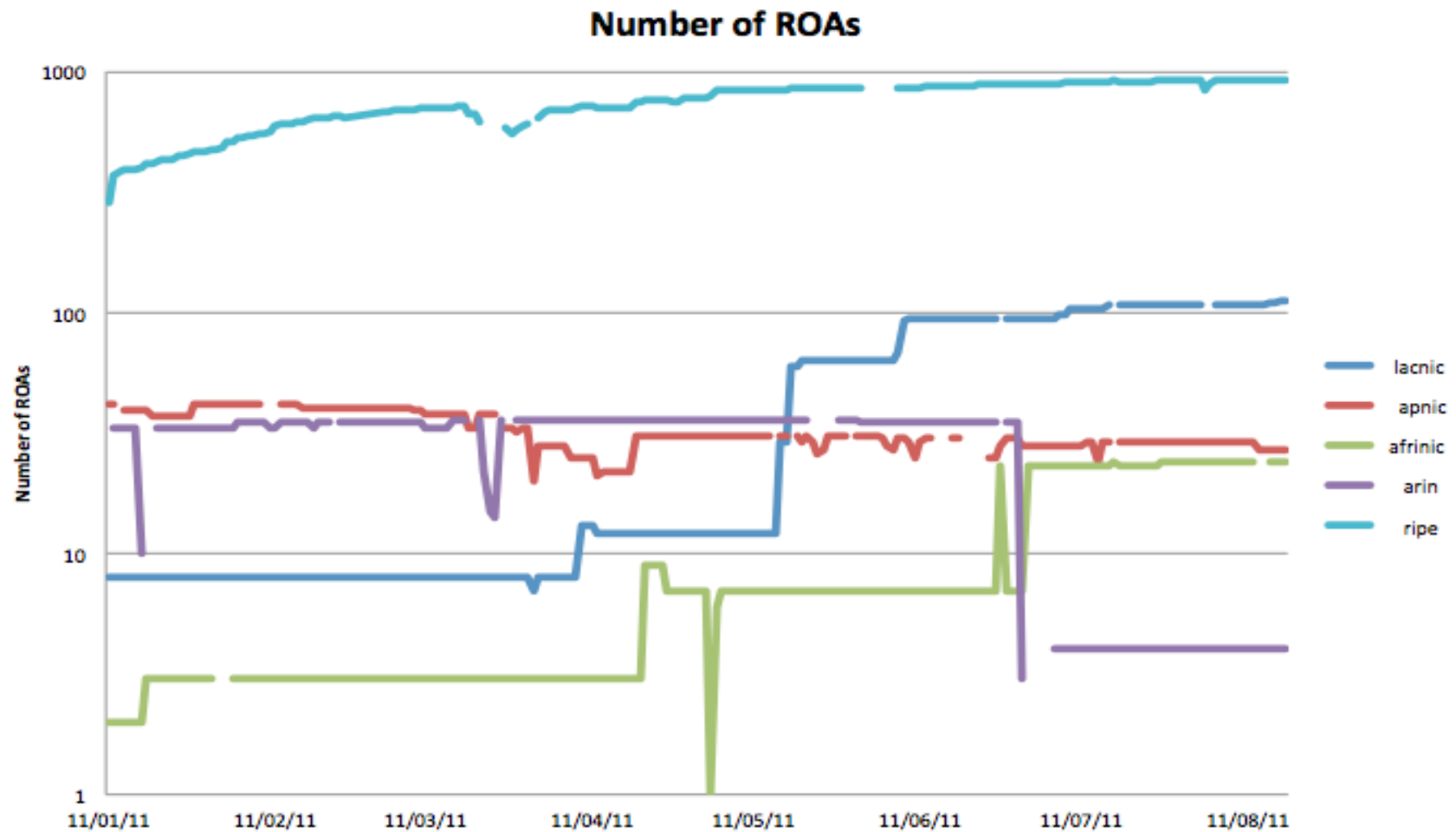
RPKI deployment in LAC region

Sofía Silva
Hostmaster - LACNIC

4th RIR in Size but...



...2nd RIR in Number of ROAs





What Have We Been Doing?

- Workshops, Seminars, Web (Virtual) Seminars
- Helping on-site
- RPKI in real life demo
- Keep it alive
- Info, statistics and news available
- Plan future activities

Workshops and Seminars



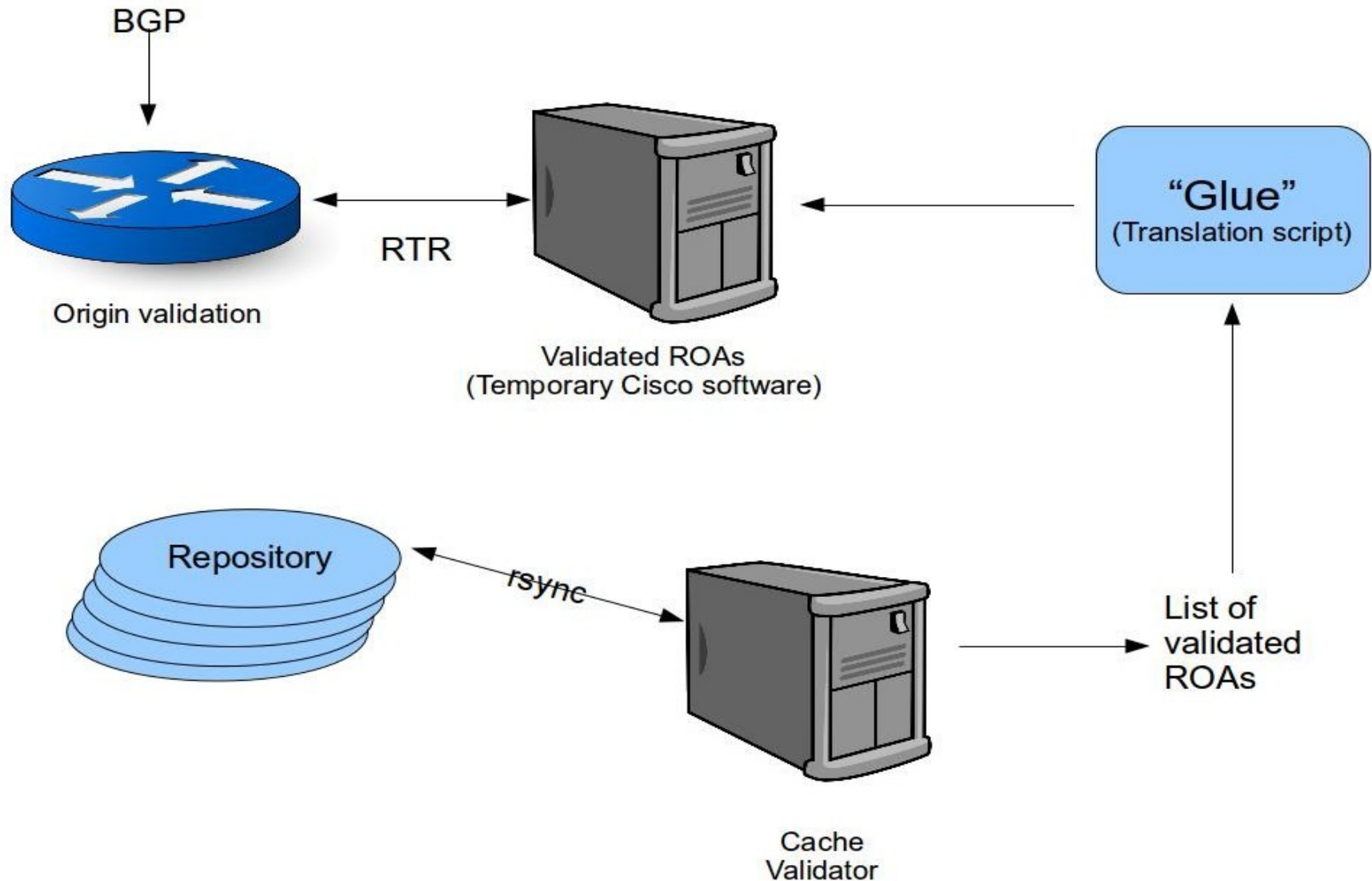
- Several workshops and seminars in different countries around the region.
- Webinars: One per month until the end of the year
 - 1.RPKI Intro
 - 2.LACNIC's RPKI system
 - 3.WebEx Appointments
 - 4.Info about new projects (RPKI enhancements)

Helping On-Site



- Encourage technical contacts to sign their organization's space while we are there with them
 - Make the most of every event and conference
- Coordinate efforts between Registration Services Area and RPKI experts
 - For example, is very common that users do not remember their passwords
- Showing them the Demo RPKI System so they can familiarize with the RPKI System.

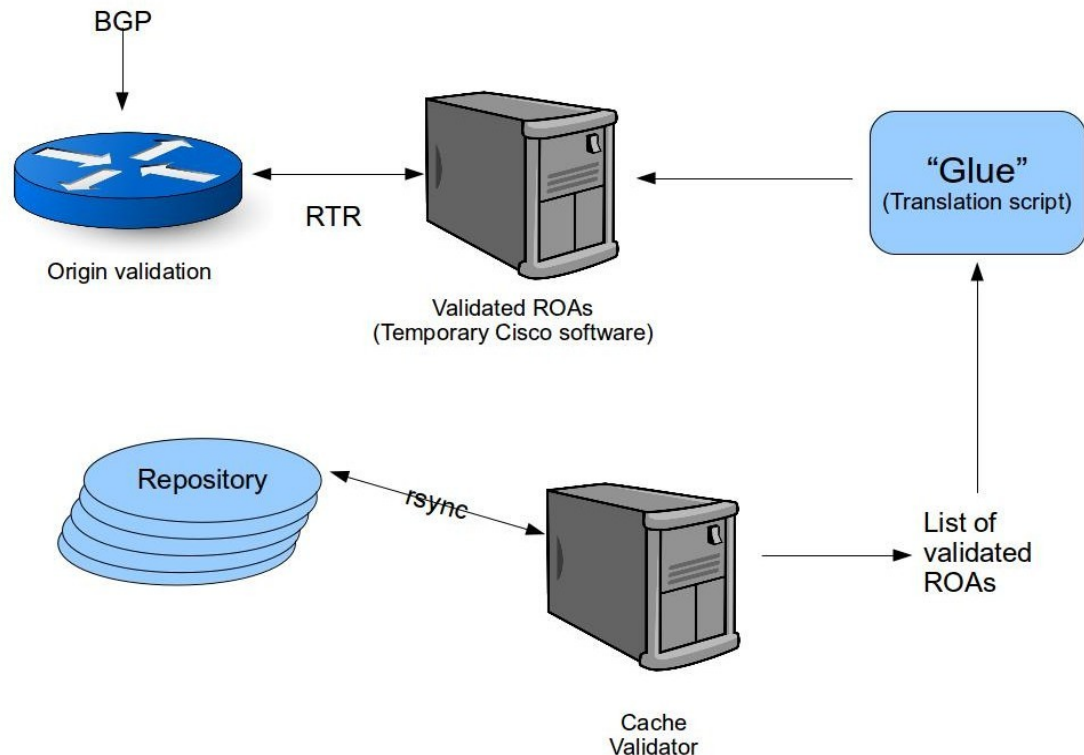
RPKI in Real Life Demo



RPKI in Real Life Demo



- Show how their routers should be configured in order to validate announcements from our repository.
- Use of router software with origin validation support
 - Cisco 7200
- Implementation of a translation script



RPKI in Real Life Demo



```
route-map rpki permit 10  
  match rpki invalid  
  set local-preference 50
```

```
route-map rpki permit 20  
  match rpki incomplete  
  set local-preference 100
```

```
route-map rpki permit 30  
  match rpki valid  
  set local-preference 200
```

RPKI in Real Life Demo



```
uut1# show ip bgp rpki-table
```

12 BGP sovc network entries using 1056 bytes of memory

13 BGP sovc record entries using 208 bytes of memory

Network	Maxlen	Origin-AS	Color	Source
1.1.0.0/16	24	1	0	0
3.0.0.0/24	24	2	0	0
4.0.0.0/24	24	3	0	0
4.0.0.0/8	8	3	0	0
5.0.0.0/24	24	4	0	0
8.0.0.0/4	6	200	0	0
8.2.0.0/8	24	36394	0	0
9.2.0.0/16	24	34000	0	0
10.0.0.0/6	8	100	0	0
11.0.0.0/16	24	100	0	0
12.0.0.0/8	16	13979	0	0
12.0.0.0/8	8	7018	0	0
20.137.0.0/21	21	4237	0	0

Keeping the topic alive and people informed

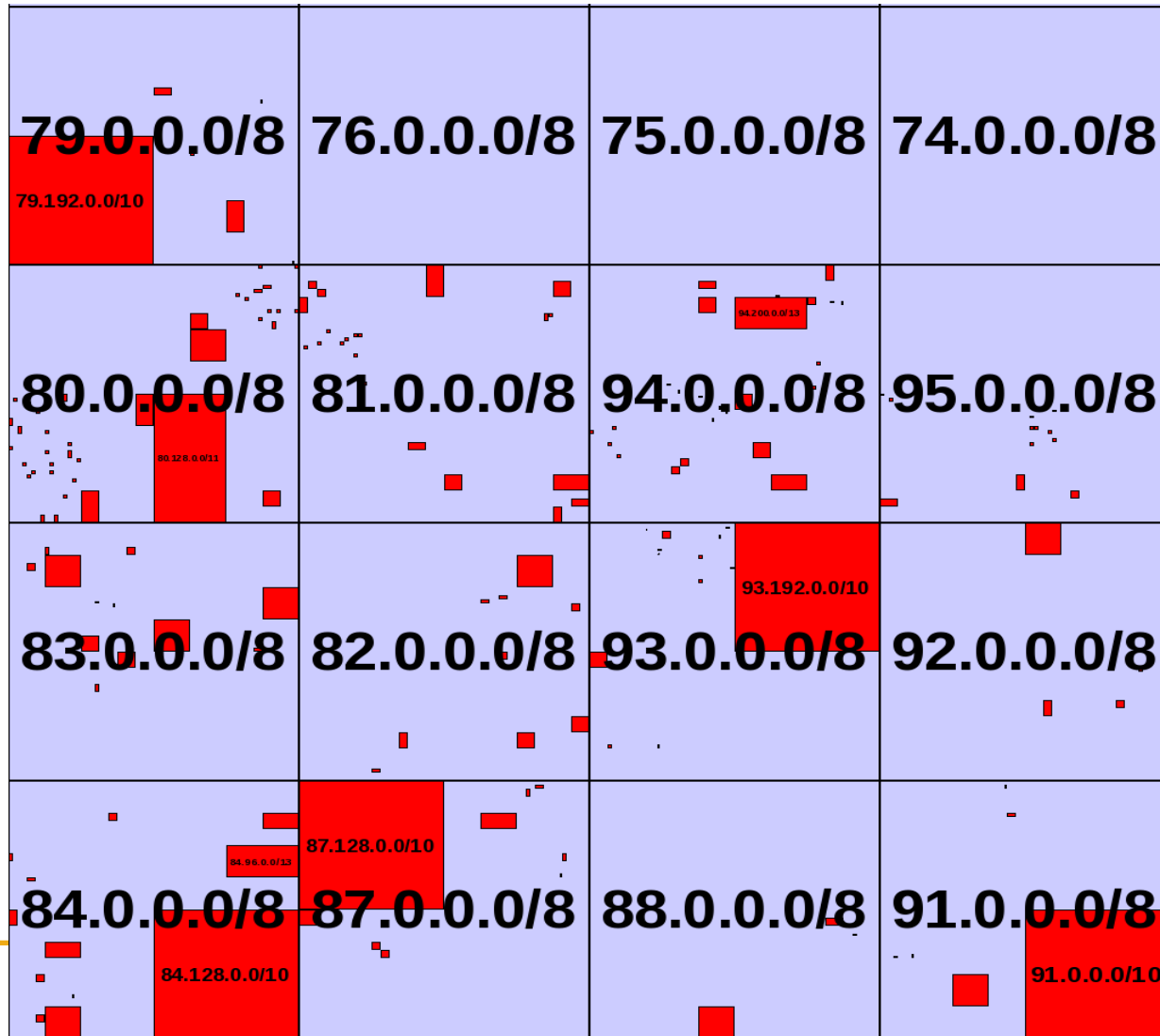


- Mention RPKI in different Workshops and Seminars
 - Even when RPKI is not the main topic it quickly grabs the attention of the audience
- Publish general information, metrics, statistics and news:
 - <http://www.labs.lacnic.net/drupal/rpki>
 - RPKI ROA Heatmaps
 - Evolution Reports

RPKI ROA Heatmaps



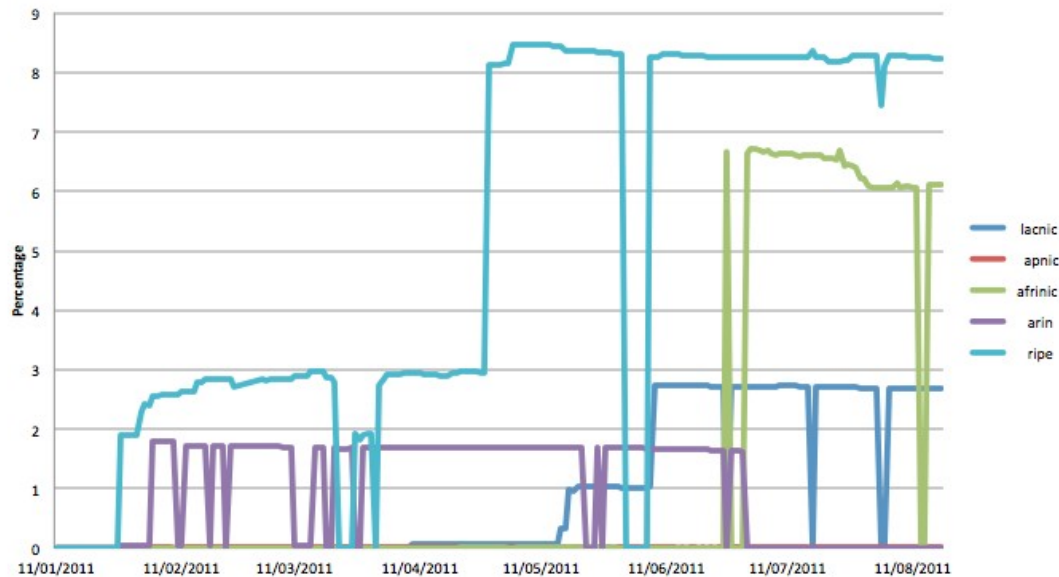
RPKI ROA Heatmaps



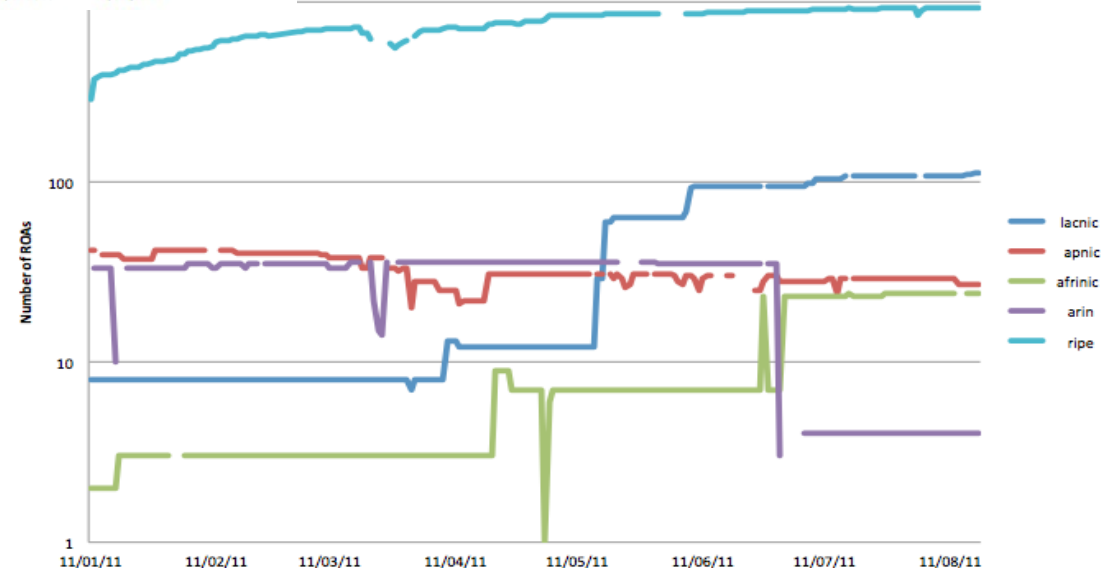
Signed space monitoring



Percentage of Signed Space per RIR



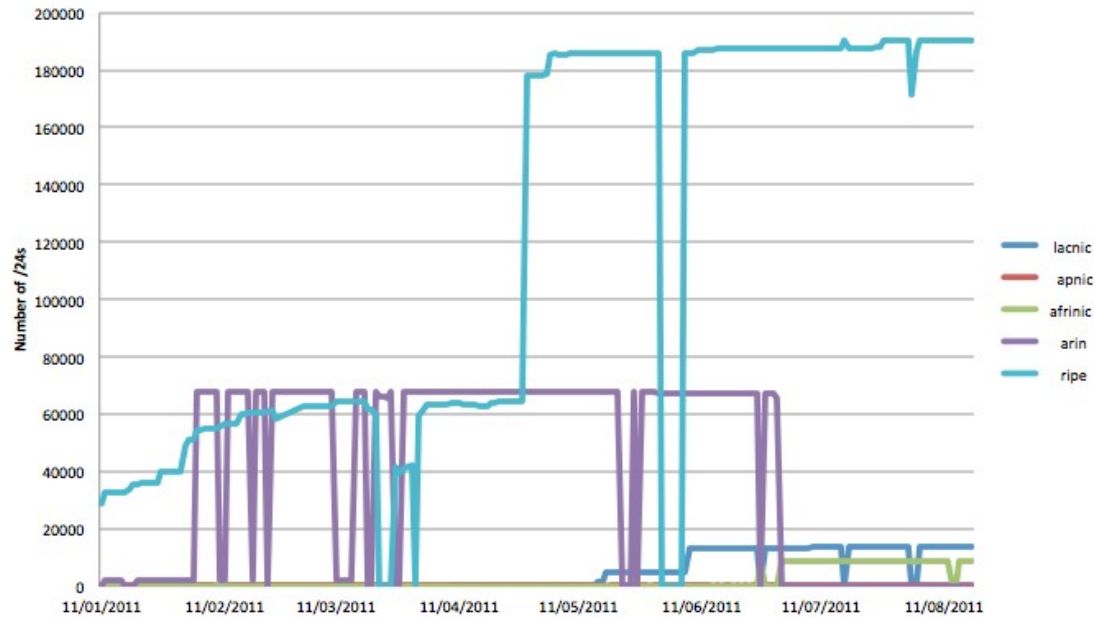
Number of ROAs



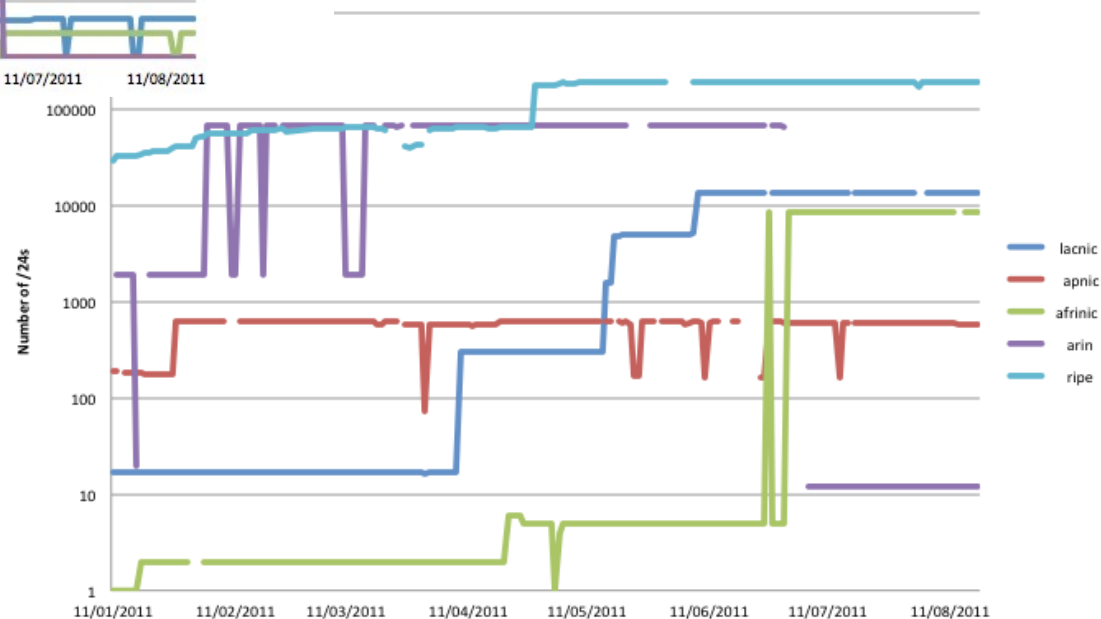
Signed space monitoring



Signed Space in /24



Signed Space in /24



Future Activities (I)



- Actively engaging the community
 - Every time a new block is allocated/assigned we will send an email encouraging the technical contacts to create their certificates and sign their space
- Contact big ISPs who have not signed their space or created certificates
 - Large ISPs can have a dramatic impact on RPKI growth
- Actively engaging manufacturers

Future Activities (II)

- Enhancements of LACNIC's RPKI System
 - Up/Down implementation
 - _ Delegated CAs
 - Improvements to the user interface
 - _ Make it easier to construct ROAs
 - Add control mechanisms at login
 - Create a public area with info about ROAs and certificates
-

Thank you !

sofia@lacnic.net

are::you:IPv6:ready?