

LACTLD Anycast Update

Foz do Iguaçu - 20170524

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Status Participantes

- 5 nós anycast em produção
 - a[12] São Paulo (Nic.BR)
 - a3 Santiago (NIC Chile .cl)
 - a4 Buenos Aires (NIC Argentina .ar)
 - a5 Montevideo (LACNIC)
 - a6 Bogota (Punto.CO)
- 4 nós com alcance global
 - a[12] a3 a5 a6
- 1 novo nó em ativação
 - San José – (NIC Costa Rica) .CR
- 1 novo nó em negociação
 - Praga - (CZ NIC)

Status Clientes

- 70 zonas
 - ar, cr, ec, py, uy, lactld e reversos lacnic
- 5 ccTLDs
- 3 ccTLDs já delegados na raiz
 - cr, ec, py

Infra Estrutura

- Provisionamento e Monitoração Virtualizados
 - dhm.lactld.org
 - Distribuiton Hidden Master - BIND relay de provisionamento DNS entre masters e a rede anycast
 - monitor.lactld.org
 - Dashboard de Monitoração DNS
 - ICINGA Monitoração Serviços
 - Cacti Monitoração de tráfego
 - DSC Monitoração de tráfego DNS
 - RT ticketing

Capacidade / Uso

- Capacidade
 - 300 kqps (6 nodes 50 kqps/node)
 - 6 Gbits (6 nodes 1 gbits/node)
 - 16 GB memory
- Uso
 - 400 qps (750x)
 - 1.8 Mbits (3300x)
 - 1.9 GB (8.4x)

Escalabilidade

- Podemos adicionar centenas de novos nós anycast
- Podemos adicionar centenas de novas zonas limitados pela atual quantidade de memória dos nós. Notar que com.ar já está atualmente provisionado o que comprova que temos muita capacidade disponível (~10GB)

Operação

- 3 times de administração
 - BR, CL e LACNIC
 - compatilham todas as atividades
- Monitoração 7/24 NOC nic.br
- Interface com clientes/nodos
CL
- Reuniões de coordenação regulares

Pendências

- Atualização do site
 - Não temos informações de todos os nós
 - Não temos informações de clientes
- Acordos de adesão são hoje o maior entrave para adesão de novos membros/participantes
- Maior promoção da plataforma p/ membros

Dashboard



[IPv6 Index](#)

IPv4 - monitor.lactld.org

2017-05-22 18:18:13

Zones	Master	DHM	a	a1	a2	a3	a4	a5	a6	a7
lactld.org	618µs	507µs	605µs	695µs	688µs	50	30	41	202	194
lactld.net	619µs	464µs	546µs	568µs	393µs	50	31	41	205	195
lactld.info	763µs	133µs	305µs	317µs	357µs	50	29	41	202	193
lactld.com	636µs	145µs	365µs	351µs	338µs	50	30	41	203	193
igf2015.br	583µs	135µs	320µs	373µs	343µs	50	30	41	202	194
177.in-addr.arpa	908µs	163µs	357µs	373µs	370µs	51	30	41	202	193
179.in-addr.arpa	821µs	148µs	362µs	340µs	355µs	51	30	41	201	196
181.in-addr.arpa	728µs	188µs	383µs	389µs	317µs	51	30	41	203	195
186.in-addr.arpa	809µs	168µs	349µs	372µs	362µs	50	30	41	206	194
187.in-addr.arpa	844µs	175µs	366µs	370µs	337µs	50	29	41	205	193
189.in-addr.arpa	845µs	231µs	366µs	417µs	378µs	50	31	41	202	194
190.in-addr.arpa	647µs	185µs	368µs	349µs	367µs	50	32	41	206	193
191.in-addr.arpa	815µs	159µs	414µs	427µs	433µs	50	30	41	204	193
200.in-addr.arpa	826µs	183µs	367µs	461µs	336µs	51	31	41	204	195
201.in-addr.arpa	703µs	169µs	329µs	689µs	388µs	51	30	41	207	192
2.1.1.0.0.2.ip6.arpa	741µs	182µs	404µs	345µs	384µs	50	30	41	202	193
3.1.1.0.0.2.ip6.arpa	676µs	241µs	425µs	595µs	573µs	49	30	41	204	192
0.8.2.ip6.arpa	742µs	218µs	357µs	390µs	337µs	49	30	40	208	192
edu.uy	42	189µs	380µs	399µs	407µs	50	30	41	198	192
net.uy	43	197µs	345µs	406µs	344µs	50	30	41	206	193
org.uy	43	156µs	368µs	481µs	410µs	49	30	41	205	193
gub.uy	42	181µs	366µs	333µs	330µs	49	30	41	202	194
mil.uy	43	169µs	363µs	382µs	333µs	49	30	41	202	194
ar	30	164µs	376µs	361µs	341µs	50	30	41	205	194
com.ar	30	225µs	440µs	413µs	446µs	50	30	40	203	194
gob.ar	31	224µs	334µs	404µs	342µs	49	29	41	201	195
gov.ar	31	175µs	354µs	349µs	362µs	49	29	41	203	194

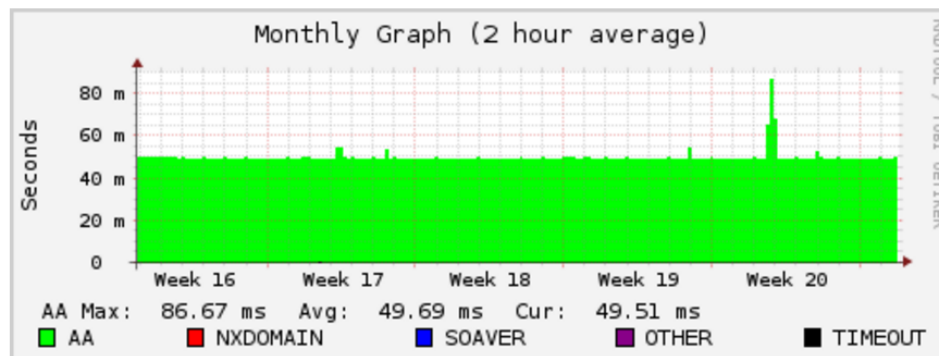
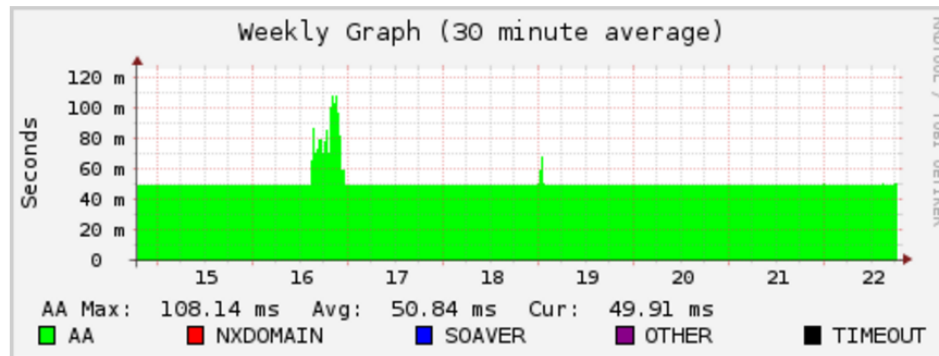
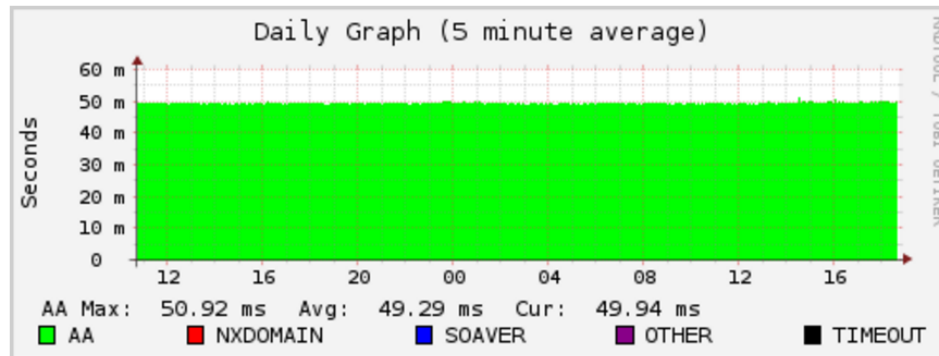
Dashboard zone



a3.a.lactid.org - py

[Index](#) | [py](#)

Última atualização: 2017-05-22 18:40



Monitoração Serviços

9 UP

0 / 0 / 0 DOWN

0 / 0 / 0 UNREACHABLE

0 PENDING

0 / 9 TOTAL

70 OK

0 / 0 / 0 WARNING

0 / 0 / 0 CRITICAL

0 / 0 / 0 UNKNOWN

0 PENDING

0 / 70 TOTAL



9 / 0 / 0

4.01 / 4.23 / 4.075 s

0.03 / 0.22 / 0.156 s

70 / 0 / 0

0.01 / 4.23 / 0.568 s

0.03 / 0.40 / 0.189 s

General

Home

Docs   www

Search:

Status

Tactical Overview

Host Detail

Service Detail

Hostgroup Overview

Hostgroup Summary

Servicegroup Overview

Servicegroup Summary

Status Map

Problems

Service Problems

Unhandled Services

Host Problems

Unhandled Hosts

All Unhandled Problems

All Problems

Network Outages

System

Comments

Downtime

Process Info

Performance Info

Scheduling Queue

Reporting

Trends

Availability

Alert Histogram

Alert History

Alert Summary

Notifications

Event Log

Configuration

View Config

Tactical Monitoring Overview

Last Updated: Mon May 22 18:42:21 BRT 2017 - Update in 34 seconds [pause]

Icinga Classic UI 1.13.3 (Backend 1.13.3) - Logged in as ?

Network Outages

0 Outages

Hosts

0 Down

0 Unreachable

9 Up

0 Pending

Services

0 Critical

0 Warning

0 Unknown

70 Ok

0 Pending

Host Checks

Active

9 Enabled

Passive

No Passive Checks

Service Checks

Active

70 Enabled

Passive

No Passive Checks

Monitoring Features

Flap Detection

All Services Enabled

No Services Flapping

All Hosts Enabled

No Hosts Flapping

Notifications

9 Services Disabled

All Hosts Enabled

Event Handlers

All Services Enabled

All Hosts Enabled

Network Health

Host Health:

Service Health:

DSC nodes

Servers/Nodes

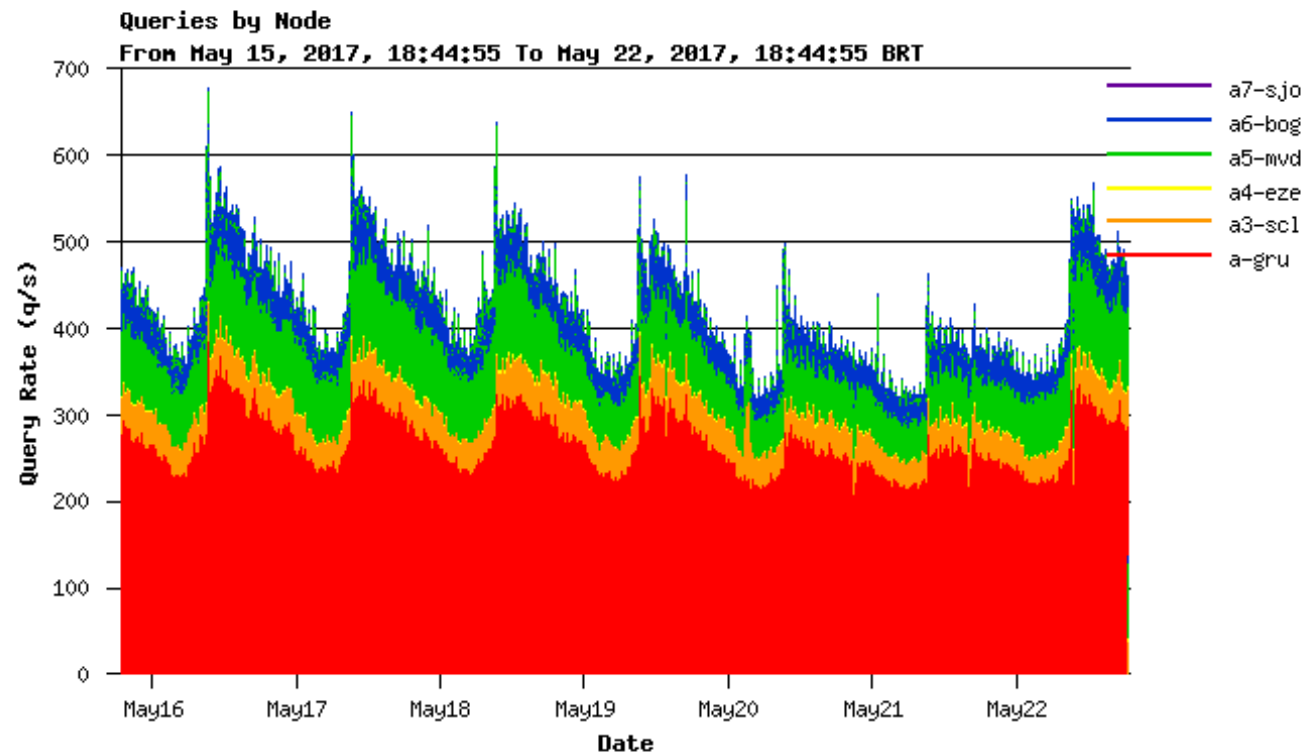
LACTLD

- › a-gru
- › a3-scl
- › a4-eze
- › a5-mvd
- › a6-bog
- › a7-sjo

Plots

By Node

- Qtypes
- Rcodes
- Classification
- Client Geography
- TLDs
- 2nd Level Domains
- 3rd Level Domains
- Rcodes by Client Address
- Popular Names
- IPv6 root abusers
- Opcodes
- Query Attributes
- CHAOS
- IP Version
- DNS Transport
- IP Protocols
- Qname Length
- Reply Lengths
- Source Ports
- Priming Queries
- Priming Responses



The **Queries by Node** plot shows the amount of queries coming from each node in the server cluster. If you would like to see the traffic for a single node, select the node name in the Servers/Nodes menu on the left.

Note that the *By Node* option disappears from the Plots list when you are viewing the data for a single node. It reappears if you click on the Server name in the Servers/Nodes menu.

DSC zones

Servers/Nodes

LACTLD

- › a-gru
- › a3-scl
- › a4-eze
- › a5-mvd
- › a6-bog
- › a7-sjo

Plots

By Node

Qtypes

Rcodes

Classification

Client Geography

TLDs

› valid

› invalid

› numeric

2nd Level Domains

3rd Level Domains

Rcodes by Client Address

Popular Names

IPv6 root abusers

Opcodes

Query Attributes

CHAOS

IP Version

DNS Transport

IP Protocols

Qname Length

Reply Lengths

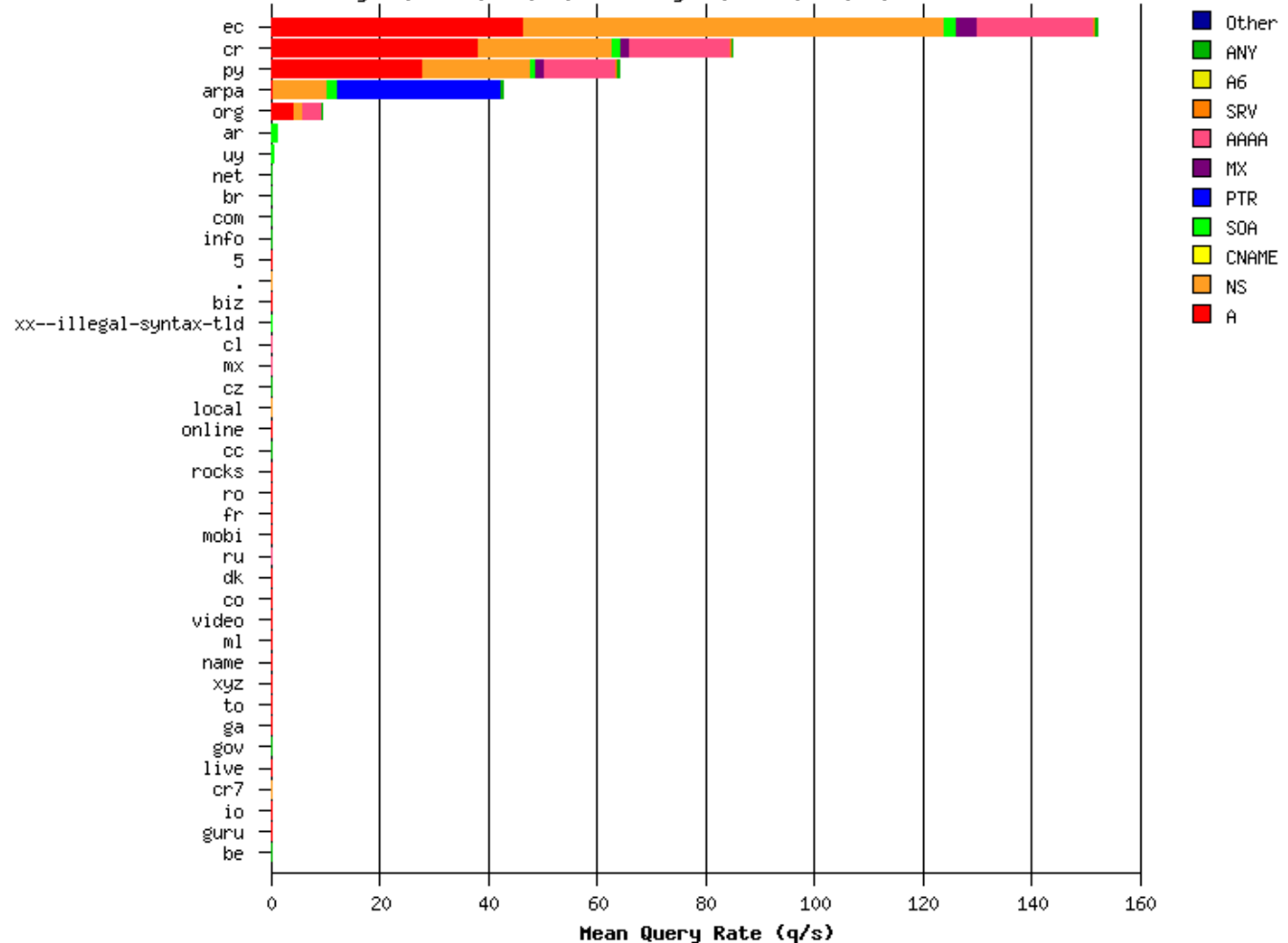
Source Ports

Priming Queries

Priming Responses

Most Popular TLDs Queried

From May 19, 2017, 21:00:00 To May 22, 2017, 18:47:01 BRT



DSC qtype

Servers/Nodes

LACTLD

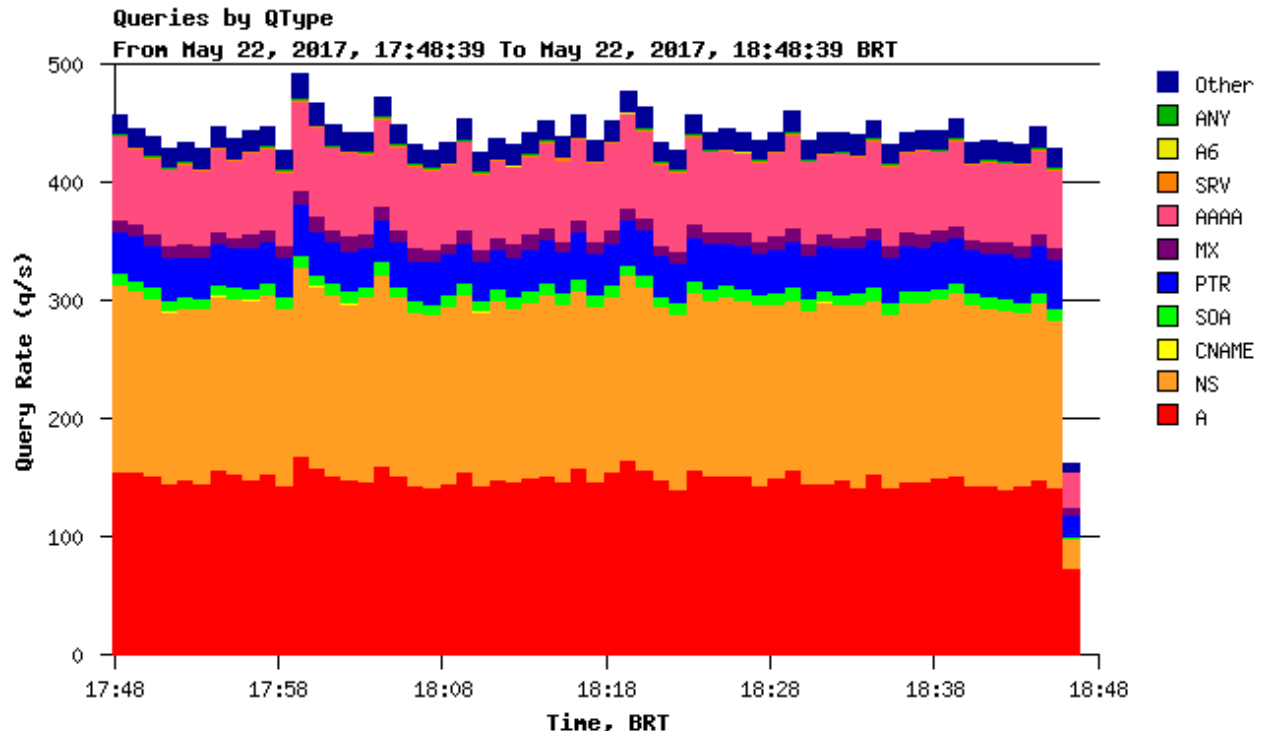
- › a-gru
- › a3-scl
- › a4-eze
- › a5-mvd
- › a6-bog
- › a7-sjo

Plots

By Node

Qtypes

- › DNSSEC Qtypes
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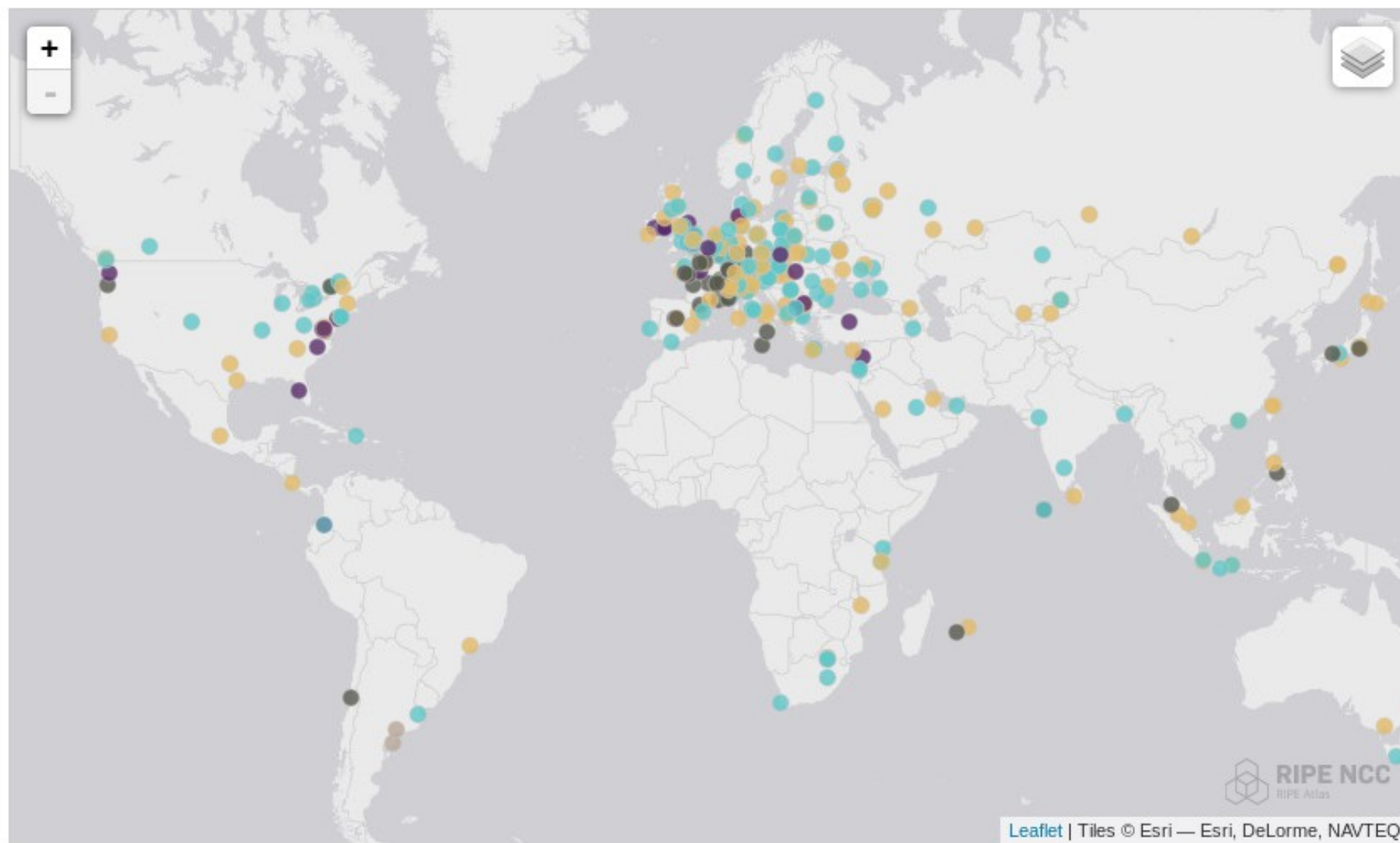


The **Queries by Qtype** plot shows the breakdown of queries by DNS query type:

- A - Queries for the IPv4 address of a name. Usually the most popular query type.
- NS - Queries for the authoritative nameservers for a particular zone. These are usually rare because end users (and their software agents) do not normally send NS queries. NS records are normally included in the authority section of every DNS message.

Click on the legend to view the queries for a specific type.

Anycast Global Visibility



Medição via Ripe Atlas – Hugo Salgado

<https://atlas.ripe.net/measurements/8688329/?filter=&diversity-picker=4&aggregator=#!map>

Perguntas / Obrigado

