

**The first year of**



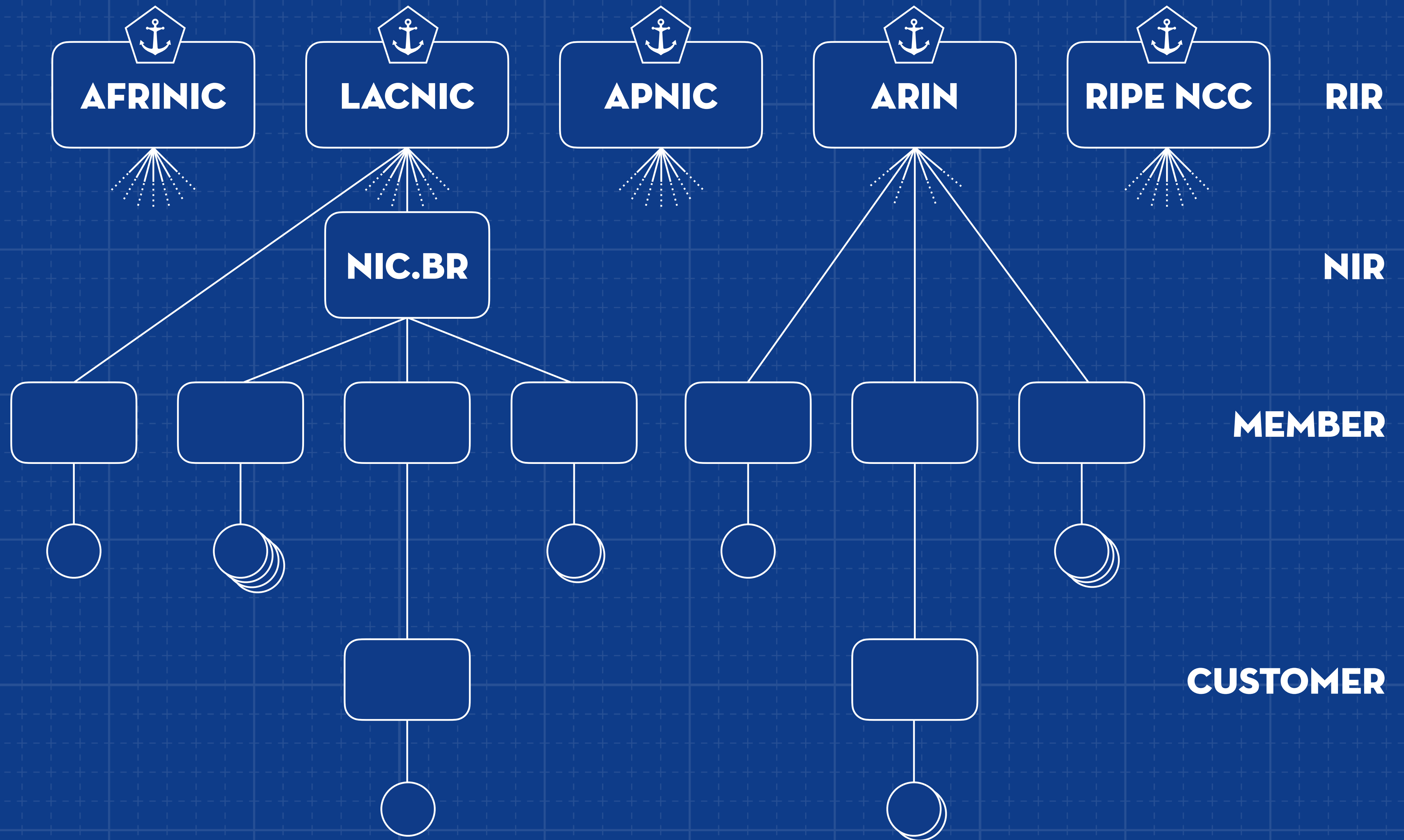
**GTER-49 — GTS-35**

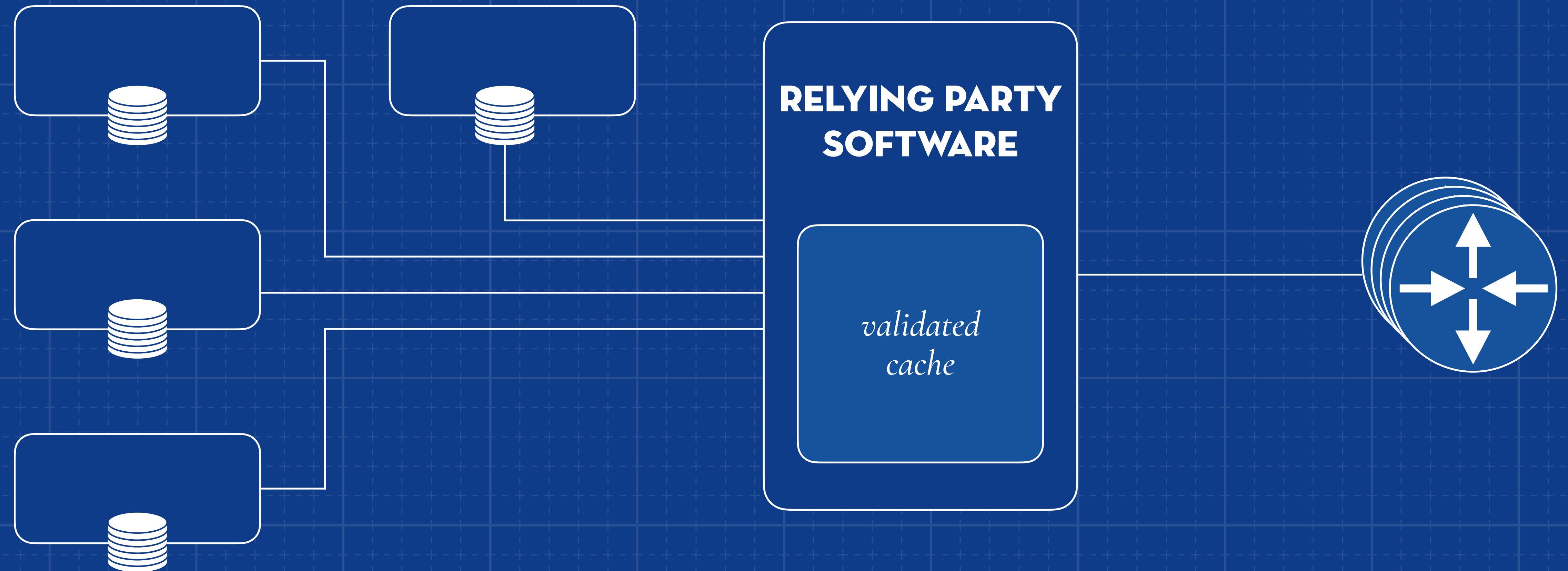
# RPKI RECAP

*“Is this BGP route origination authorised  
by the legitimate holder of the IP space?”*

# NIC.BR: DELEGATED RPKI

- Run an RPKI Certification Authority (CA) as a child of the RIR/NIR/LIR
- Install and run Krill
- Generate a resource certificate, have it signed by the parent CA
- Publish signed objects yourself, or ask your parent to do it for you
- Anyone can download and use the data for Route Origin Validation (ROV)









# CORE FUNCTIONALITY

- ✓ Seamlessly operate under multiple parent CAs
- ✓ Act as a parent CA for customers and subdivisions
- ✓ Manage Route Origin Authorisations (ROAs)
- ✓ Stand-alone publication server
- ✓ Allow remote publication



# ESSENTIALS

- ✓ Installation from source, Debian/Ubuntu packages or Docker
- ✓ Command Line Interface, User Interface and a REST-like HTTPS API
- ✓ Prometheus monitoring and alerting
- ✓ Audit log

# CLOUD MARKETPLACE

- ✓ Krill is available on the AWS Marketplace and DigitalOcean Marketplace
- ✓ You only pay the cost of the VM
- ✓ One-click setup
- ✓ Integrated updates, backups, logging, monitoring, TLS certificate setup and renewal

# USER INTERFACE

- ✓ Multi-language support (includes Brazilian Portuguese)
- ✓ Parent CA and Publication Server configuration
- ✓ ROA suggestions and alerting based on BGP route collectors
  - Invalid announcements (incorrect ASN or prefix length), too permissive ROAs, redundant ROAs, etc.

Autoridade Certificadora (CA) **NLnet Labs**

ROAs   CAs-pai   Repositório

🔍 Pesquisar por ASN, prefixos, estados



Download CSV



Mostrar informações BGP

ASN ▲

Prefixo ▲

Estado ▲



8587

2a04:b900::/29-29

VISTO

1



Autoriza 1 anúncio(s)

Desabilita 0 anúncio(s)

ASN

Prefixo

ASN

Prefixo

8587

2a04:b900::/29

No data



8587

185.49.140.0/22-22

VISTO

1



14618

2a04:b902::/32-32

NÃO VISTO



14618

185.49.143.0/24-24

NÃO VISTO



asn

v4

185.49.140.0/22

v6

2a04:b900::/29

## Análise de ROA



Por favor, consulte as seguintes alterações sugeridas para suas ROAs. [Saiba mais \(texto em inglês\)...](#)

<input type="checkbox"/>		ASN	Prefixo	
<input type="checkbox"/>		14618	2a04:b902::/32-32	Velho
<input type="checkbox"/>		14618	185.49.143.0/24-24	Velho

Cancelar

Confirmar



# 2021 ROADMAP

- 1.0 Release: stable API
- Multi-user support based on OpenID Connect
- Clustering support
- BGP listener: manage ROAs based on your own router's view
- Hardware Security Module (HSM) support: PKCS#11 and KMIP
- User interface refinements: audit log, bulk editing, etc.

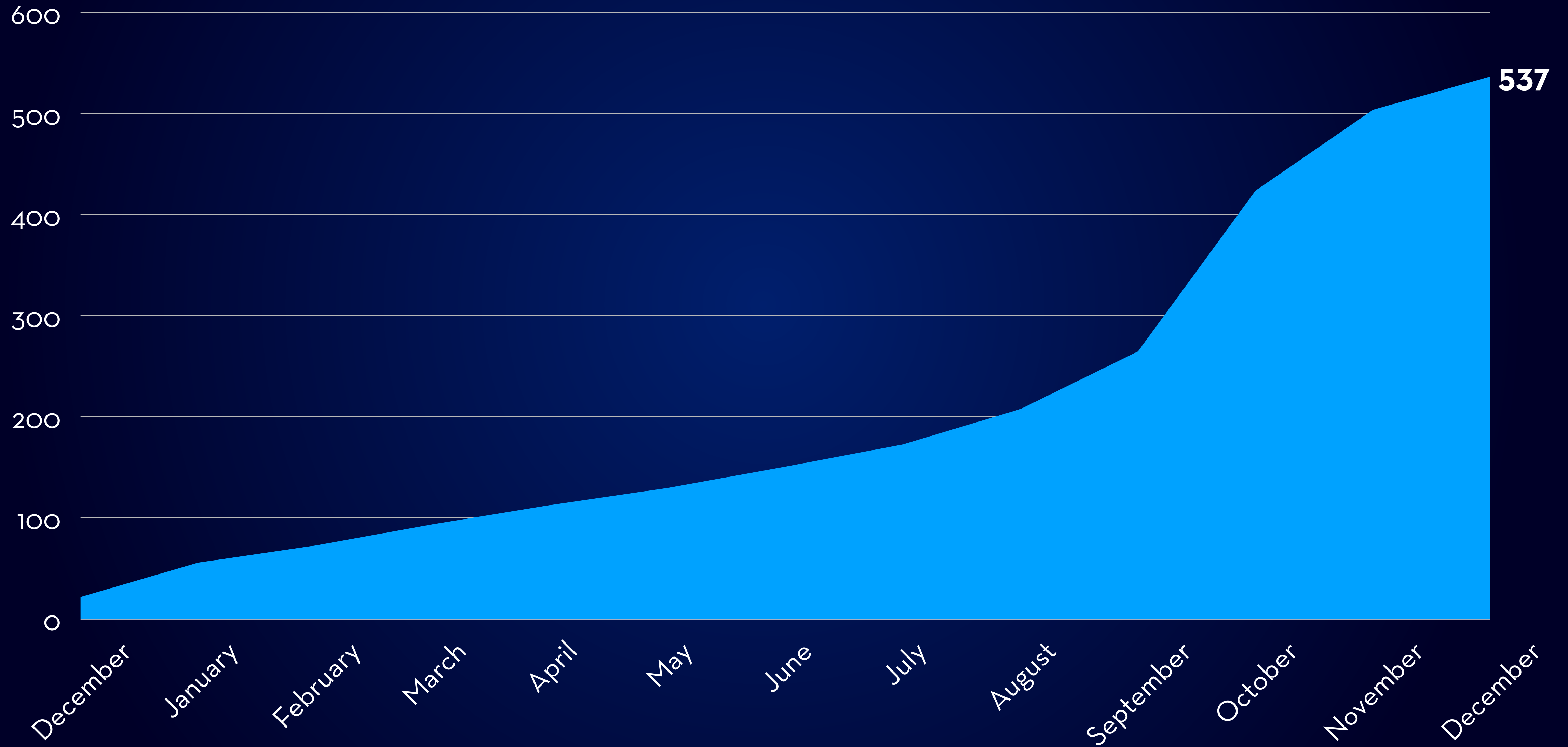


**in Brazil**

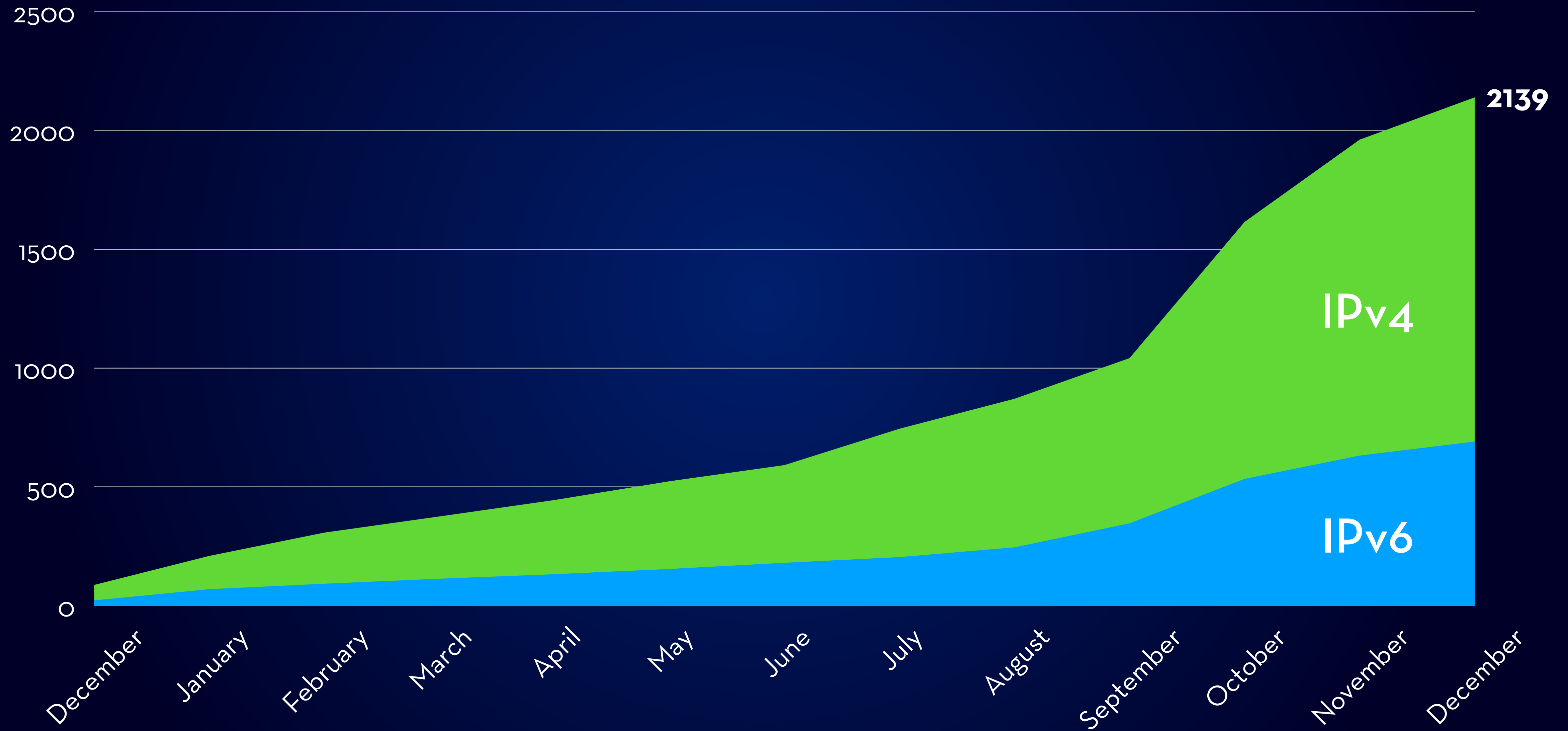




# CERTIFICATE AUTHORITIES



# VALIDATED ROA PREFIXES



**9.1% COVERED**

# YOU MAKE A DIFFERENCE

- Dropping RPKI Invalid routes has gained significant momentum in 2020

Telia Carrier, Cogent, GTT, NTT,  
Cloudflare, Hurricane Electric, Netflix,  
Scaleway, Wikimedia Foundation, TATA,  
PCCW, AT&T and many more...

source: [rpki.exposed](https://rpki.exposed)

# VIBRANT ECOSYSTEM

- [rpki.readthedocs.io](https://rpki.readthedocs.io) – Documentation and FAQ
- [JDR](#) – A tool to help you explore, inspect and troubleshoot anything RPKI
- [rpki@lists.nlnetlabs.nl](mailto:rpki@lists.nlnetlabs.nl) – Mailing list with 500+ subscribers
- [From Zero to RPKI Hero](#) – Webinar on ROV with RIPE NCC, NLnet Labs, Cloudflare, Cisco, Arista, Juniper and Nokia

 @krillrpki & @routinator3000