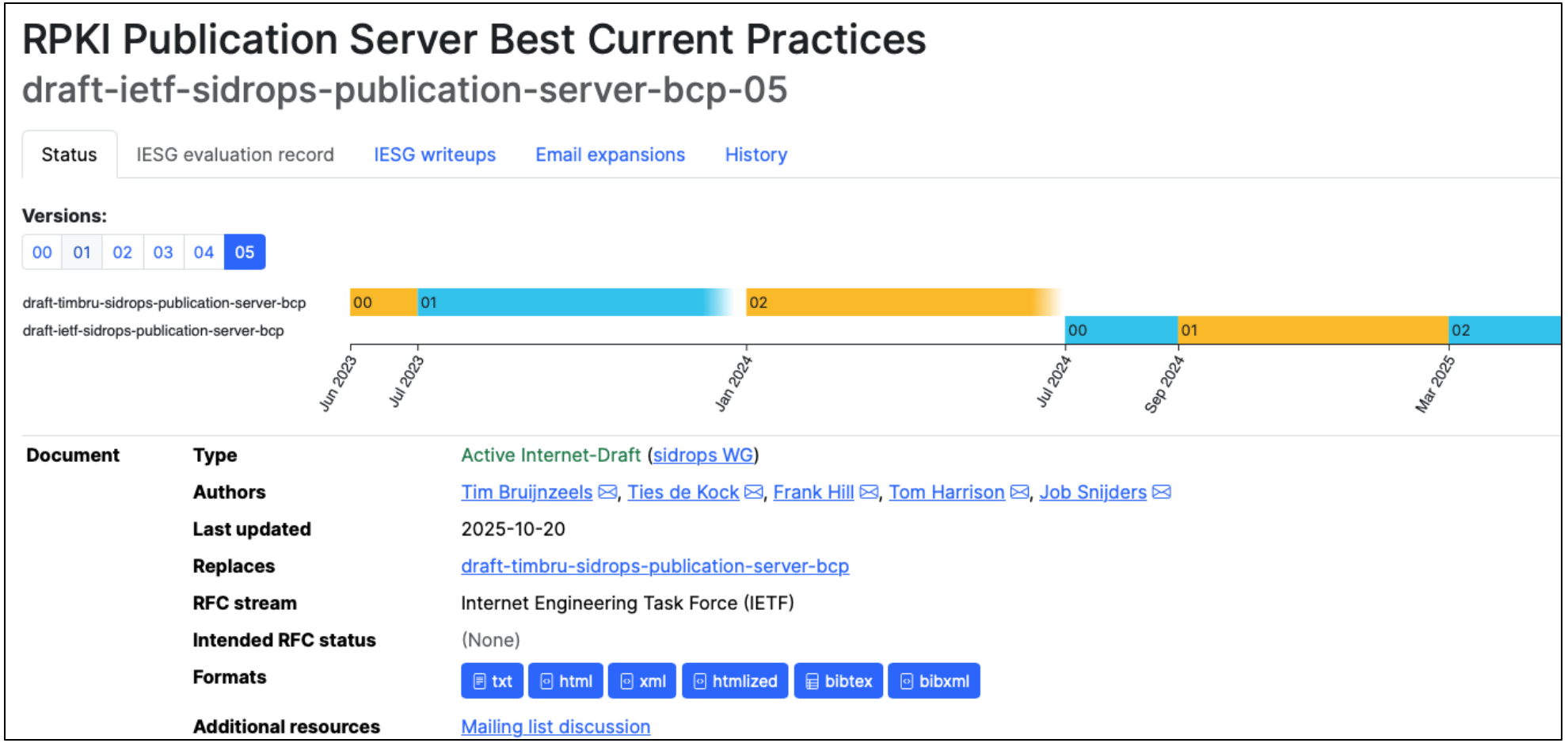
Good, better, best: Assessing common RPKI publication practices

Lisa Bruder | SURFnetworking 2025

Motivation



RPKI Publication Server Best Current Practices

draft-ietf-sidrops-publication-server-bcp-05

Status | IESG evaluation record | IESG writeups | Email expansions | History

Versions:

00 | 01 | 02 | 03 | 04 | 05

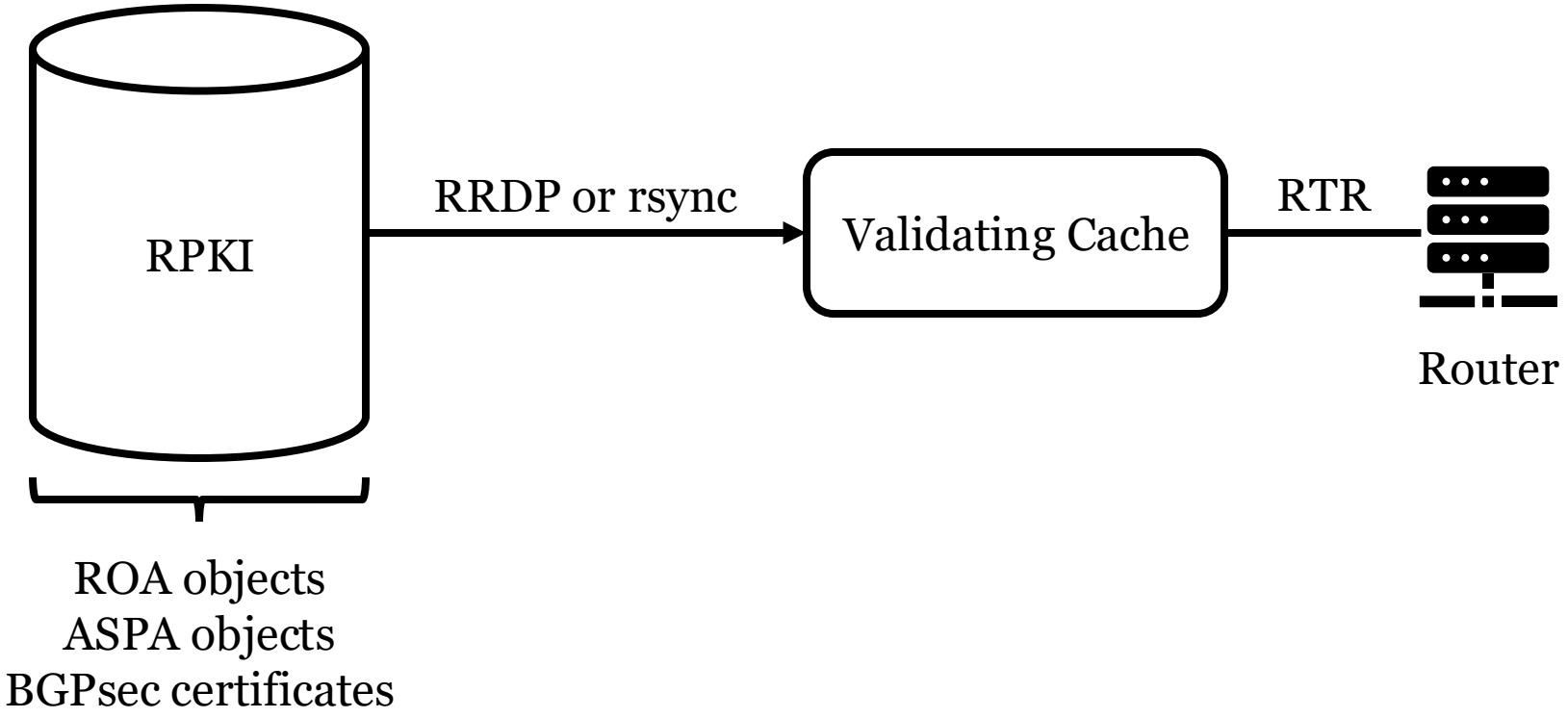
draft-timbru-sidrops-publication-server-bcp: 00, 01, 02

draft-ietf-sidrops-publication-server-bcp: 00, 01, 02

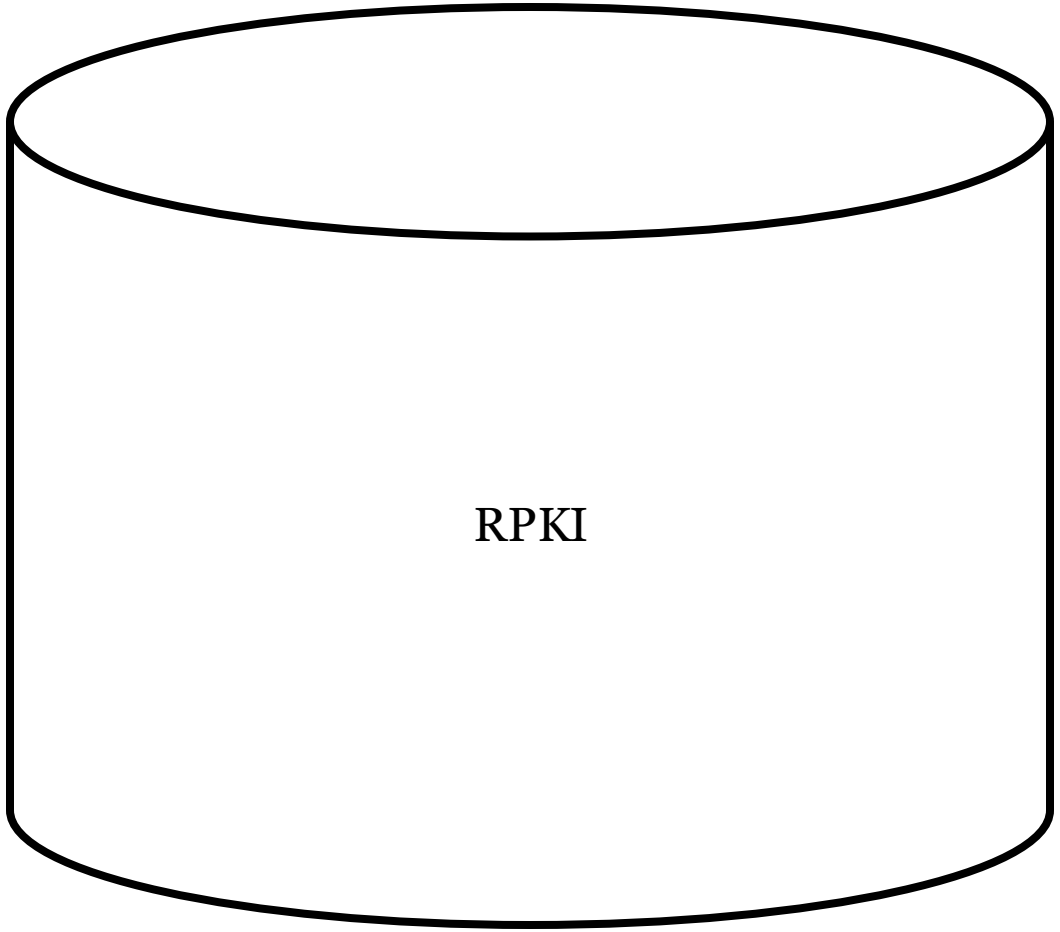
Jun 2023, Jul 2023, Jan 2024, Jul 2024, Sep 2024, Mar 2025

Document	**Type**	Active Internet-Draft (sidrops WG)
	Authors	Tim Bruijnzeels, Ties de Kock, Frank Hill, Tom Harrison, Job Snijders
	Last updated	2025-10-20
	Replaces	draft-timbru-sidrops-publication-server-bcp
	RFC stream	Internet Engineering Task Force (IETF)
	Intended RFC status	(None)
	Formats	txt, html, xml, htmlized, bibtex, bibxml
	Additional resources	Mailing list discussion

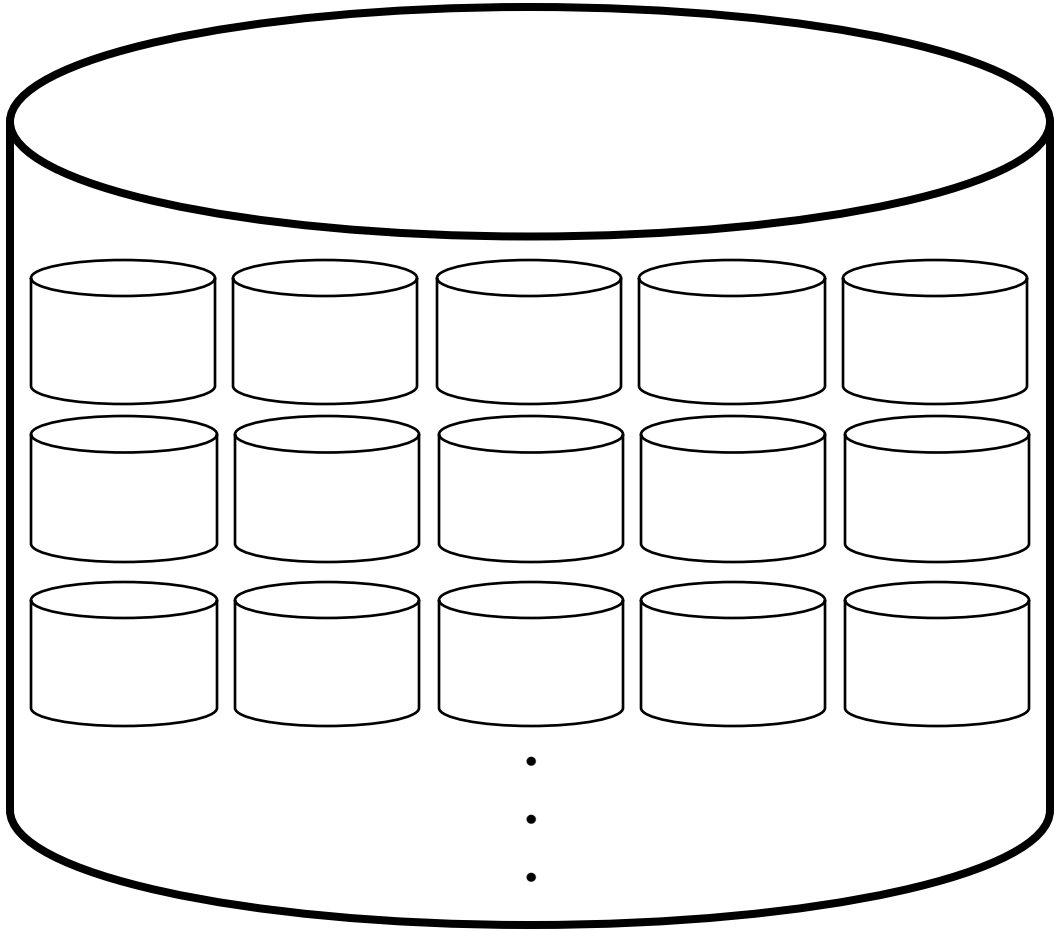
RPKI


RPKI
RRDP or rsync
Validating Cache
RTR
Router
ROA objects
ASPA objects
BGPsec certificates

RPKI

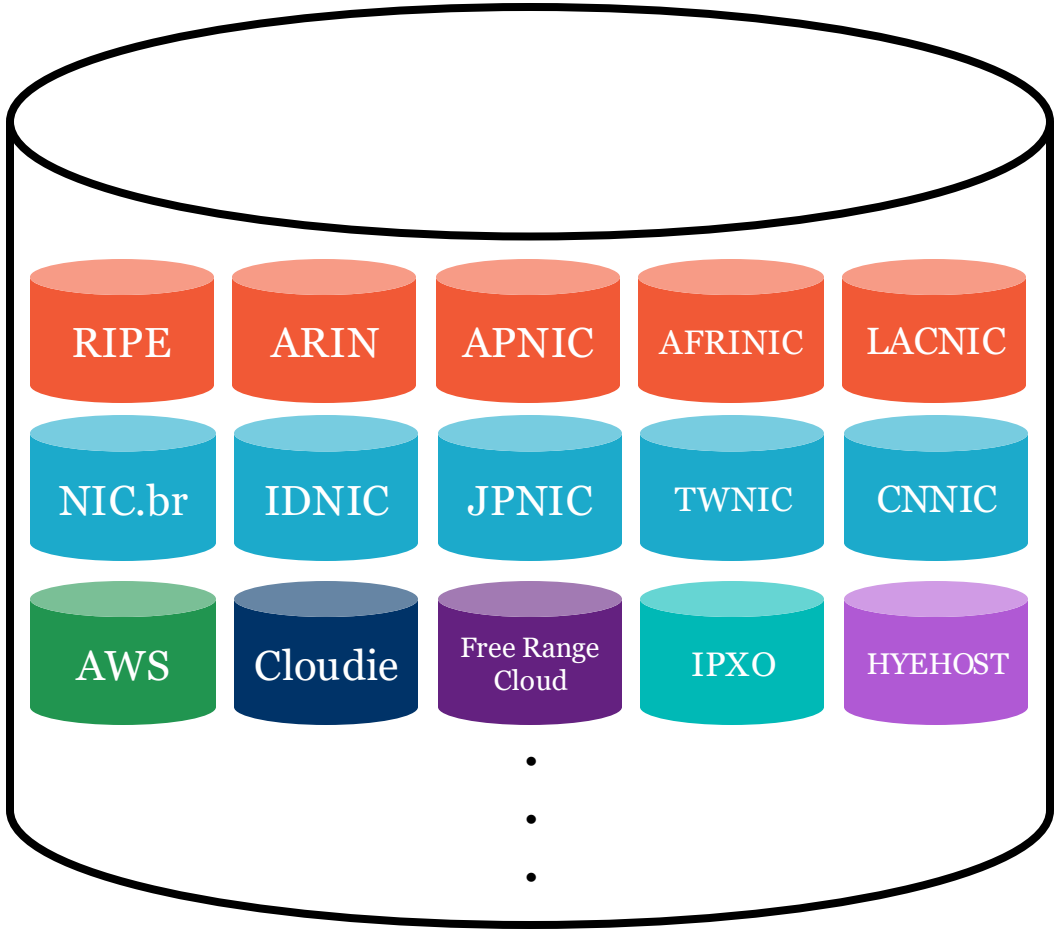


RPKI



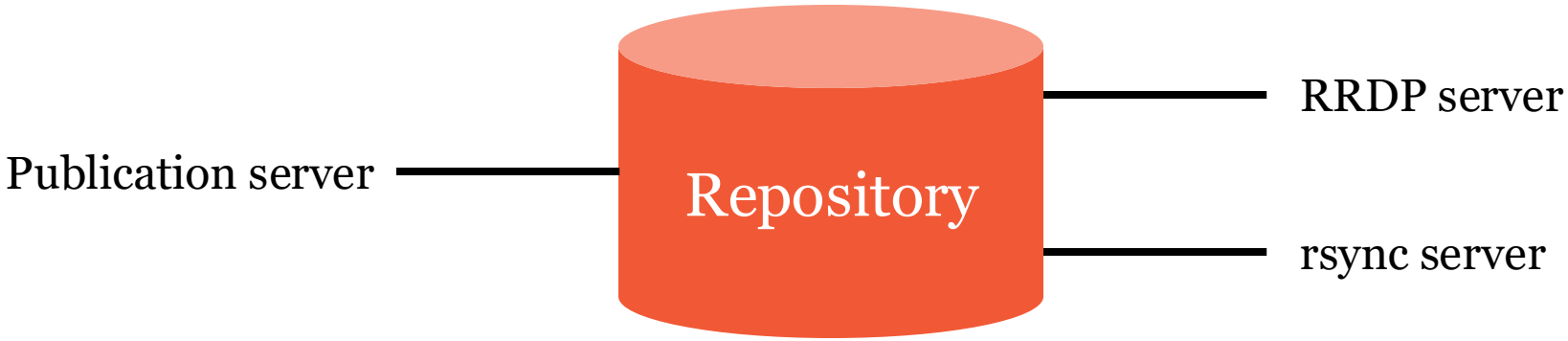
Repositories

RPKI



Repositories

RPKI



What did we measure?

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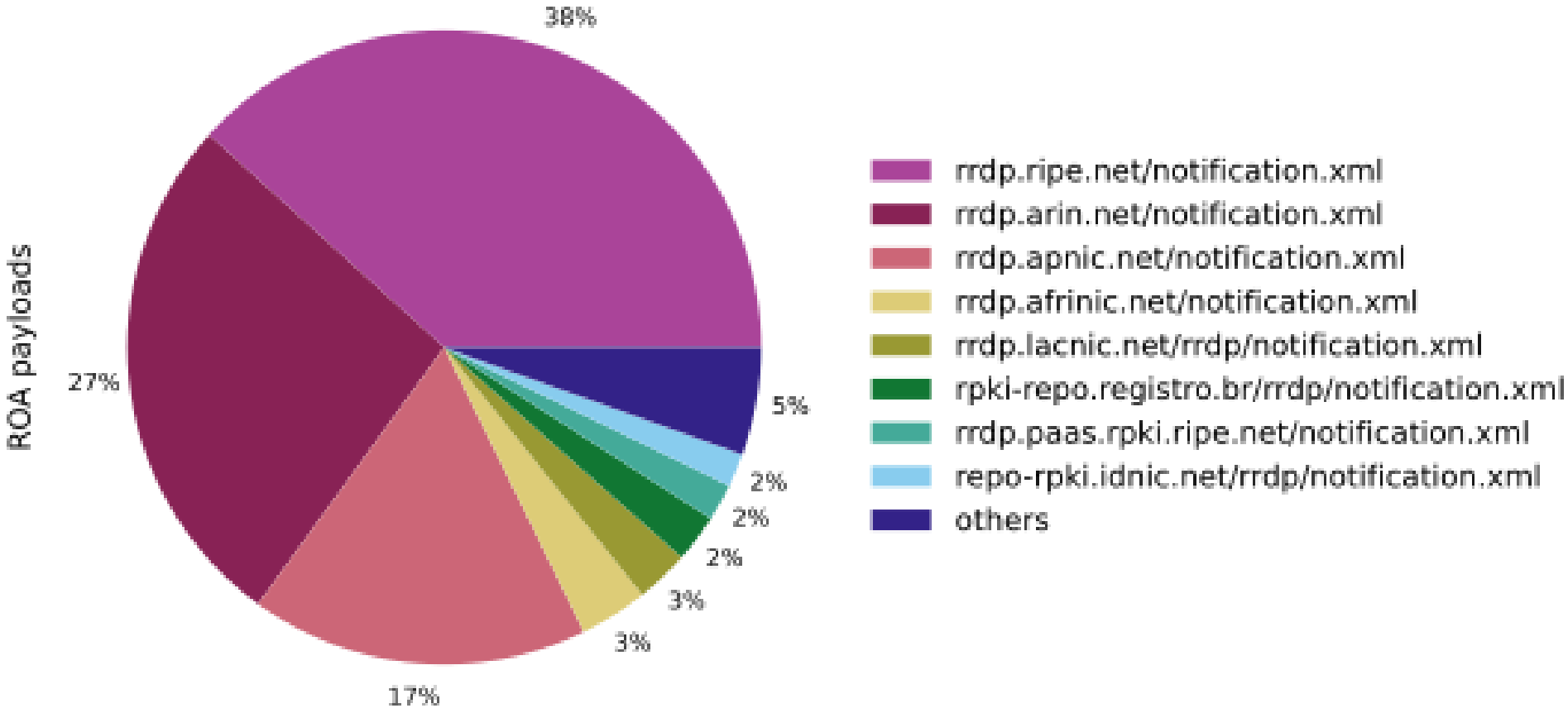
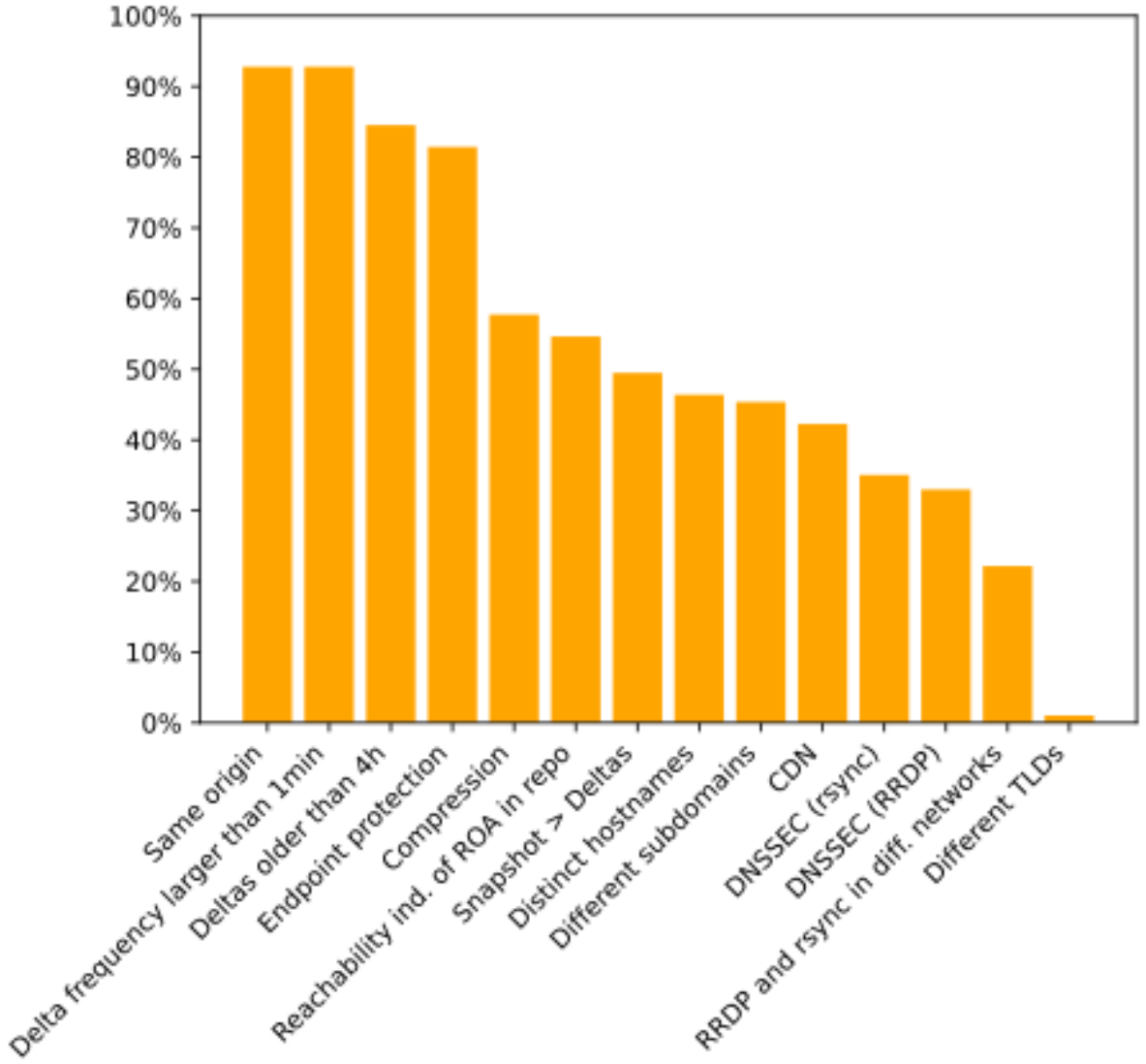
What did we measure?

Overview: ROA payloads

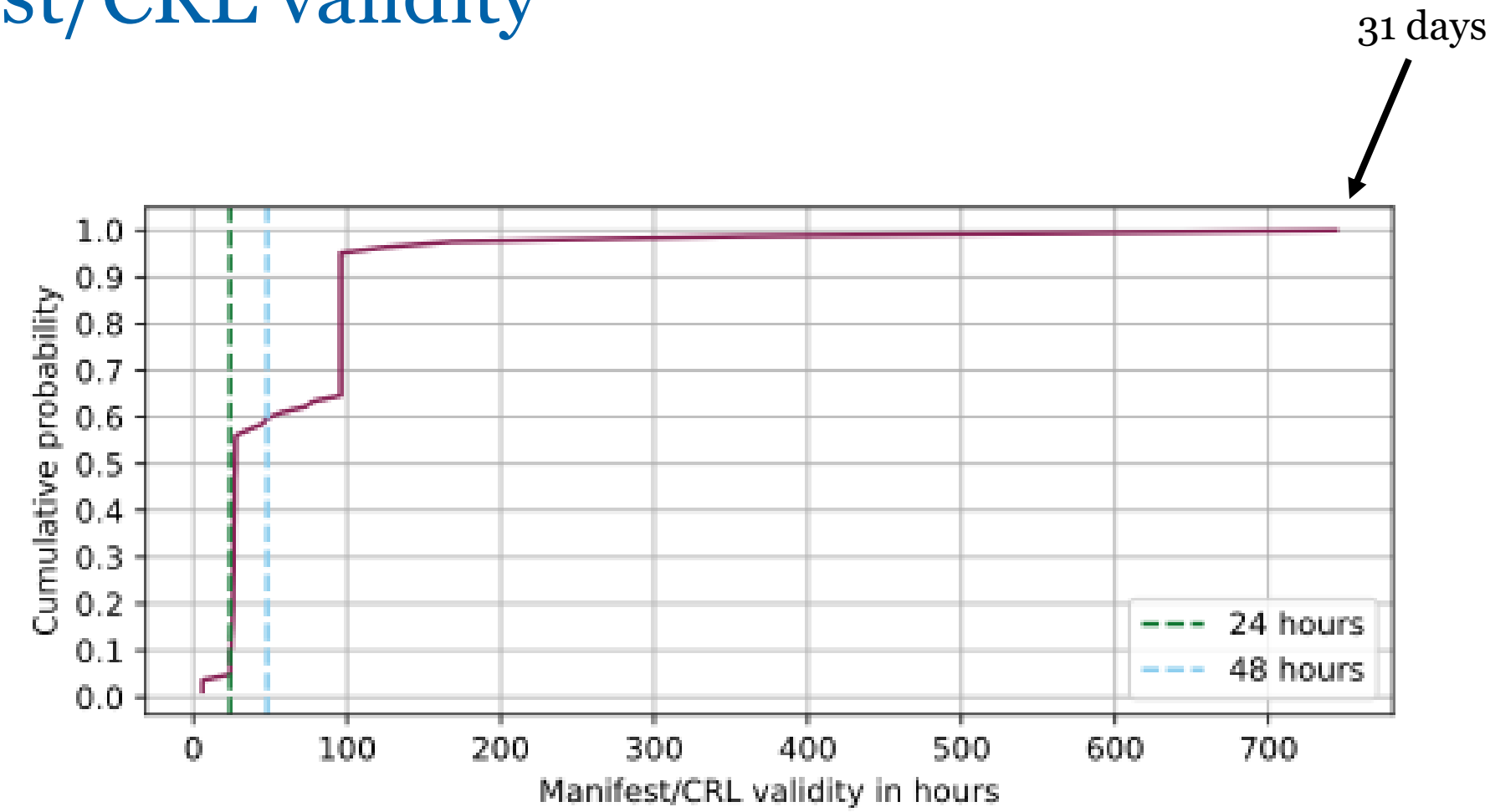


All numbers based on a measurement on 06-12-2025.

Top 5 least followed BCPs



Manifest/CRL validity



All numbers based on a measurement on 06-12-2025.

One repository = one RRDP sever?

AWS has **26 RRDP servers** for their repository.

Grouped together they host **6.6% of ROAs** and **2.9% of ROA payloads**.

Open questions:

- Why does AWS use several RRDP servers?
- How does that impact the load on validating caches?
- Is this a problem?

Conclusion

1. **Major share of objects** are published by servers that already implement many of the suggested best practices.

2. But some recommendations are barely implemented:
   are these really "best" practices?

3. Subset of recommendations is **still quite vague**.

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Thank you for your attention!

Are there any questions?