

MAnycastR: A daily census of anycast

Remi Hendriks, Matthew Luckie, Mattijs Jonker,
Raffaele Sommese, Roland van Rijswijk-Deij
Mail: <remi.hendriks@utwente.nl>

Anycast provides **resilience**
for critical Internet infrastructures
to protect against e.g., **botnets**

Goal: Creating a public daily
anycast census

Anycast is the practice of announcing IP
addresses at multiple locations.

Widely used by **cloud providers**.

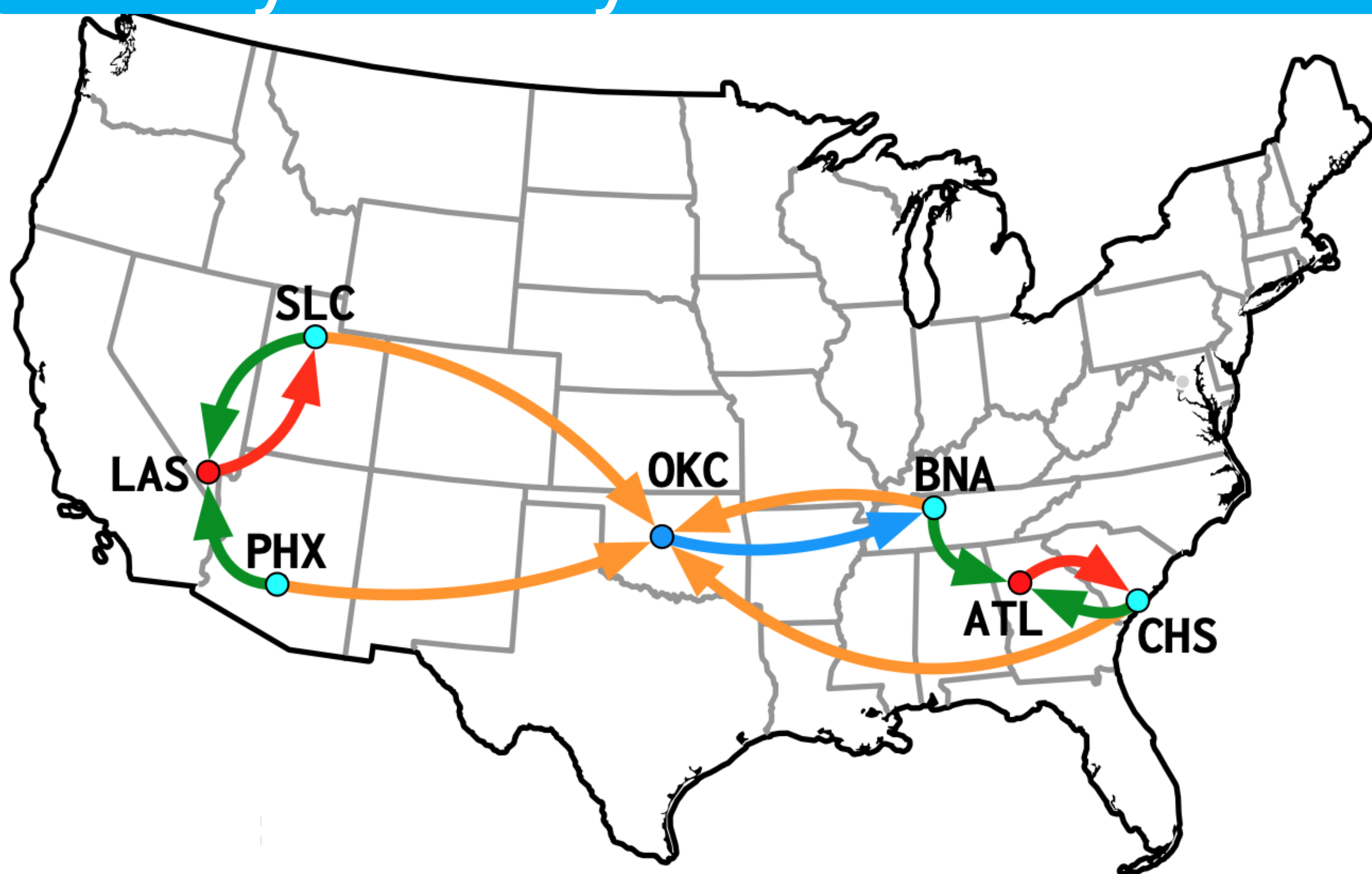
Problem anycast is opaque.

Which Internet services are anycasted?

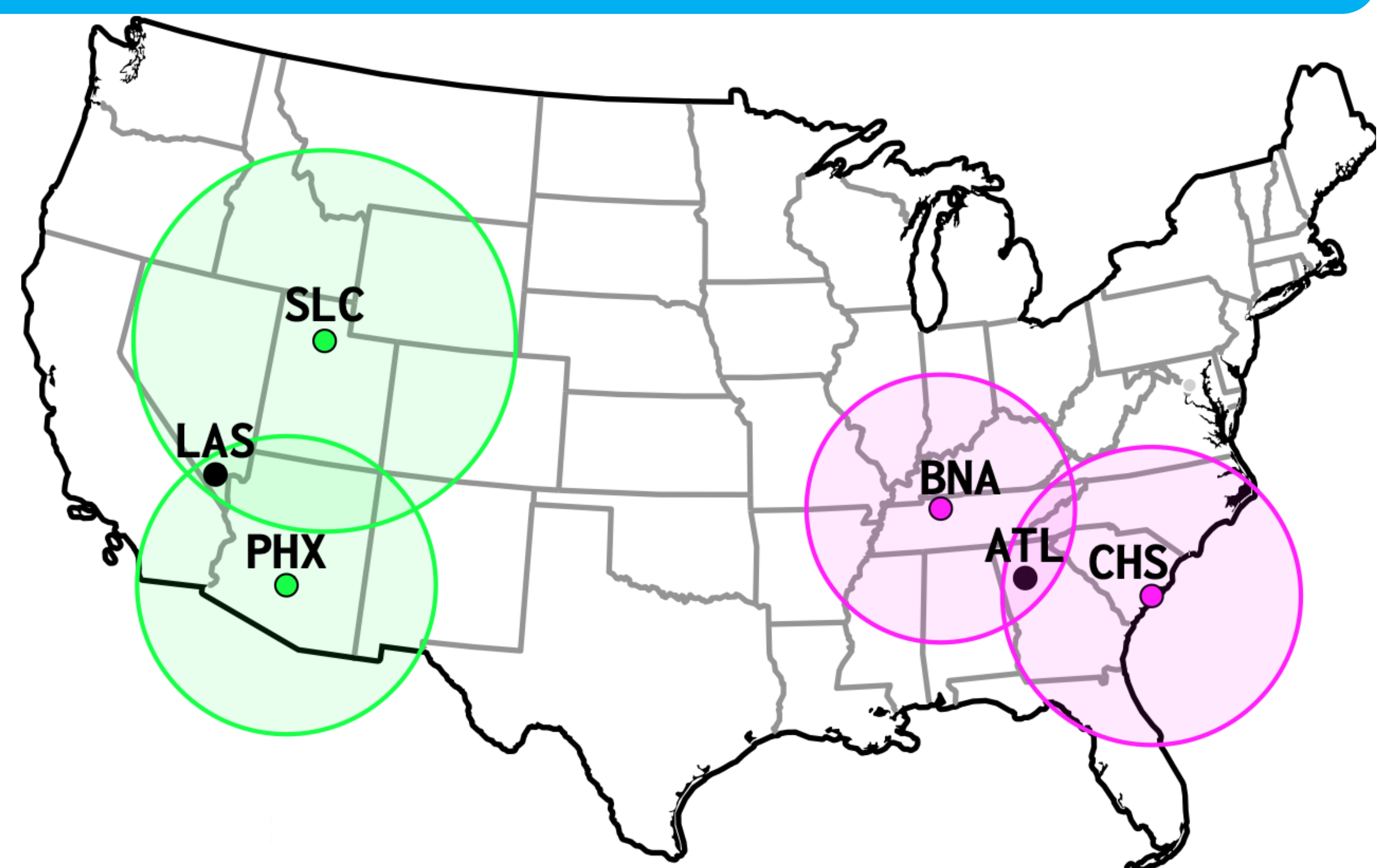
Where are they located?

Realizing proof-of-concept
MAnycast² by Sommese et al.

Integrating iGreedy by
Cicalese et al.

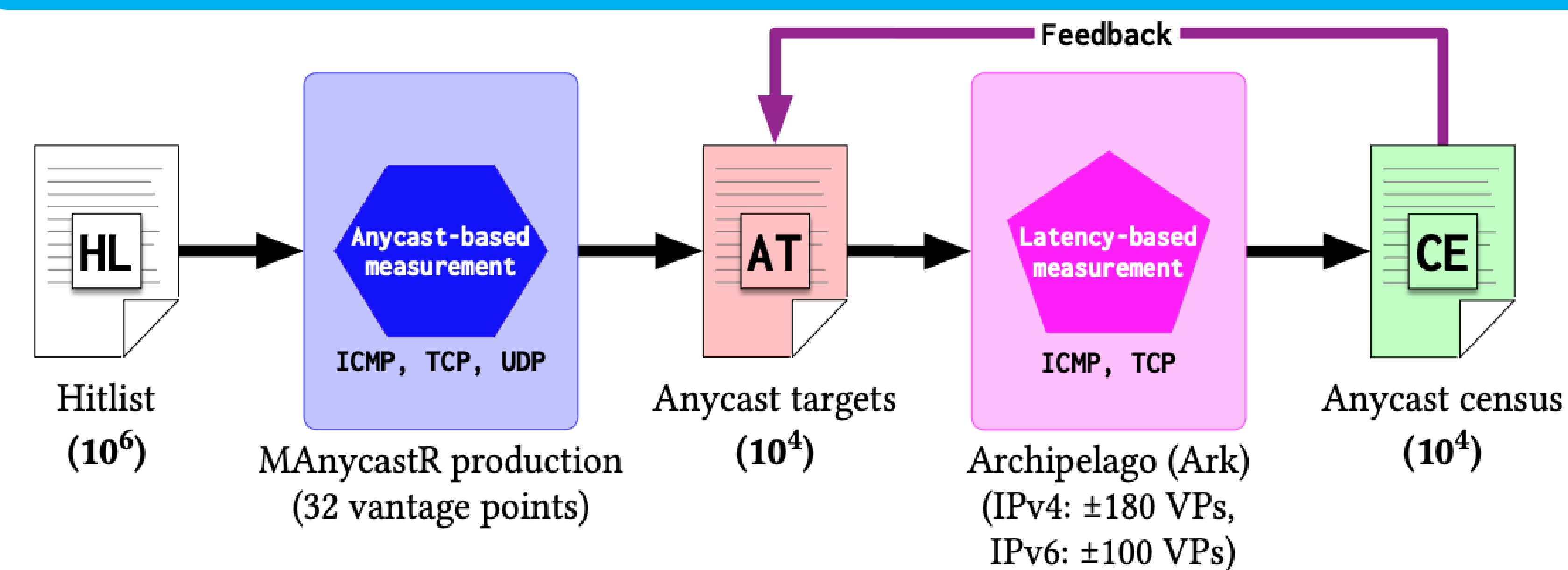


Measuring anycast using anycast



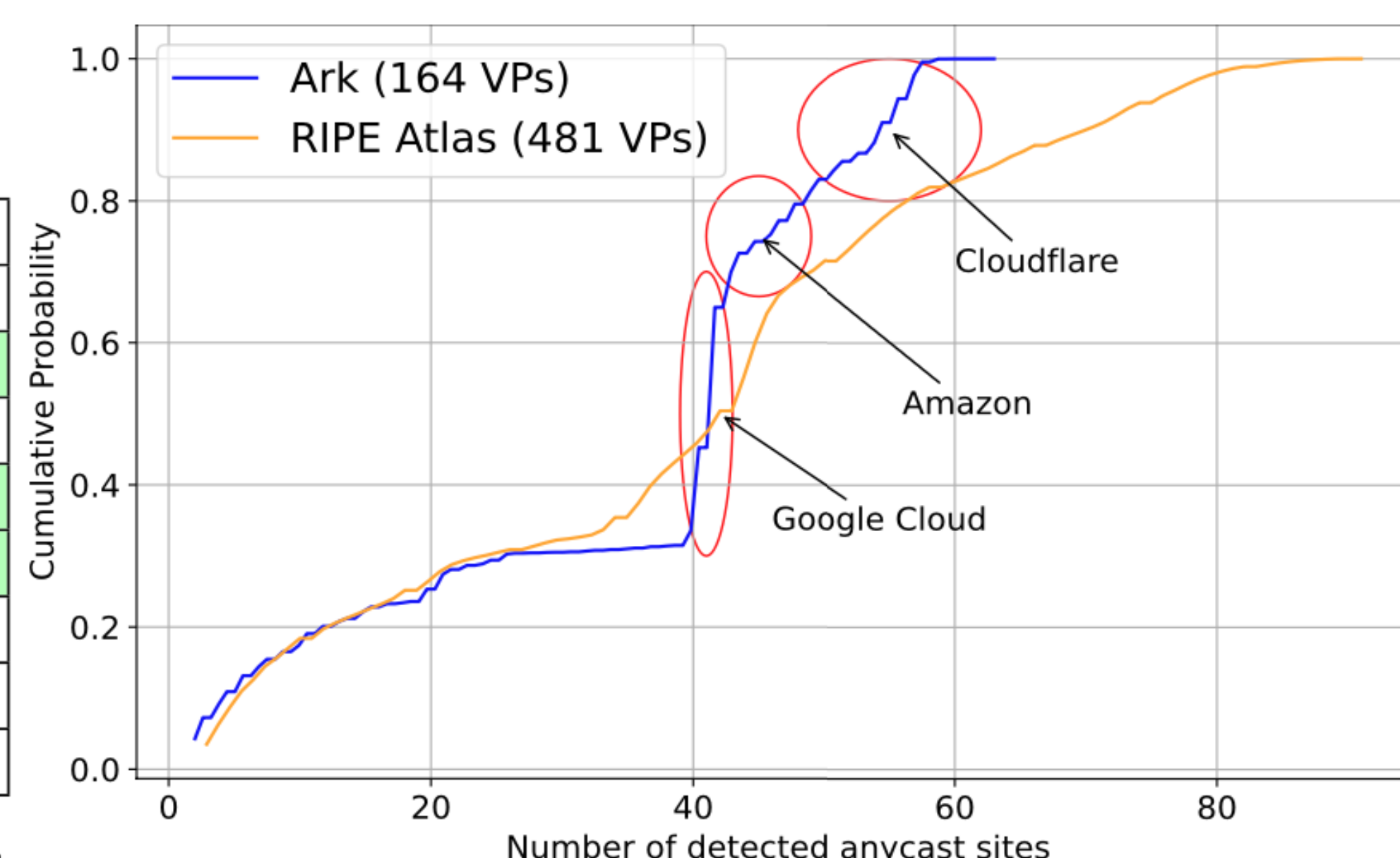
Measure using speed-of-light
violations based on latencies.

Results



AS	Organization	IPv4 (/24)	IPv6 (/48)
396982	Google Cloud	3,627 (1st)	5
13335	Cloudflare	3,133 (2nd)	284 (3rd)
16509	Amazon	1,286 (3rd)	120
54113	Fastly	435 (4th)	65
209242	Cloudflare Spectrum	289 (5th)	3,338 (1st)
19551	Incapsula (Imperva)	2	352 (2nd)
12041	Afilias	221	222 (4th)
44273	GoDaddy	32	122 (5th)

Table 6: Largest ASes originating anycast prefixes.



User-friendly dashboard
manycast.net

