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Daily Mapping of Anycast Infrastructure

Anycast: Allows for geographical distribution of Internet services, thereby improving QoS, including resilience against DDoS. Widely used by hypergiants for critical Internet services (e.g., DNS) including IoT backbone cloud services

Goal:
Mapping Internet resilience

Research Questions

Q1: What is the current deployment of Anycast on the Internet?

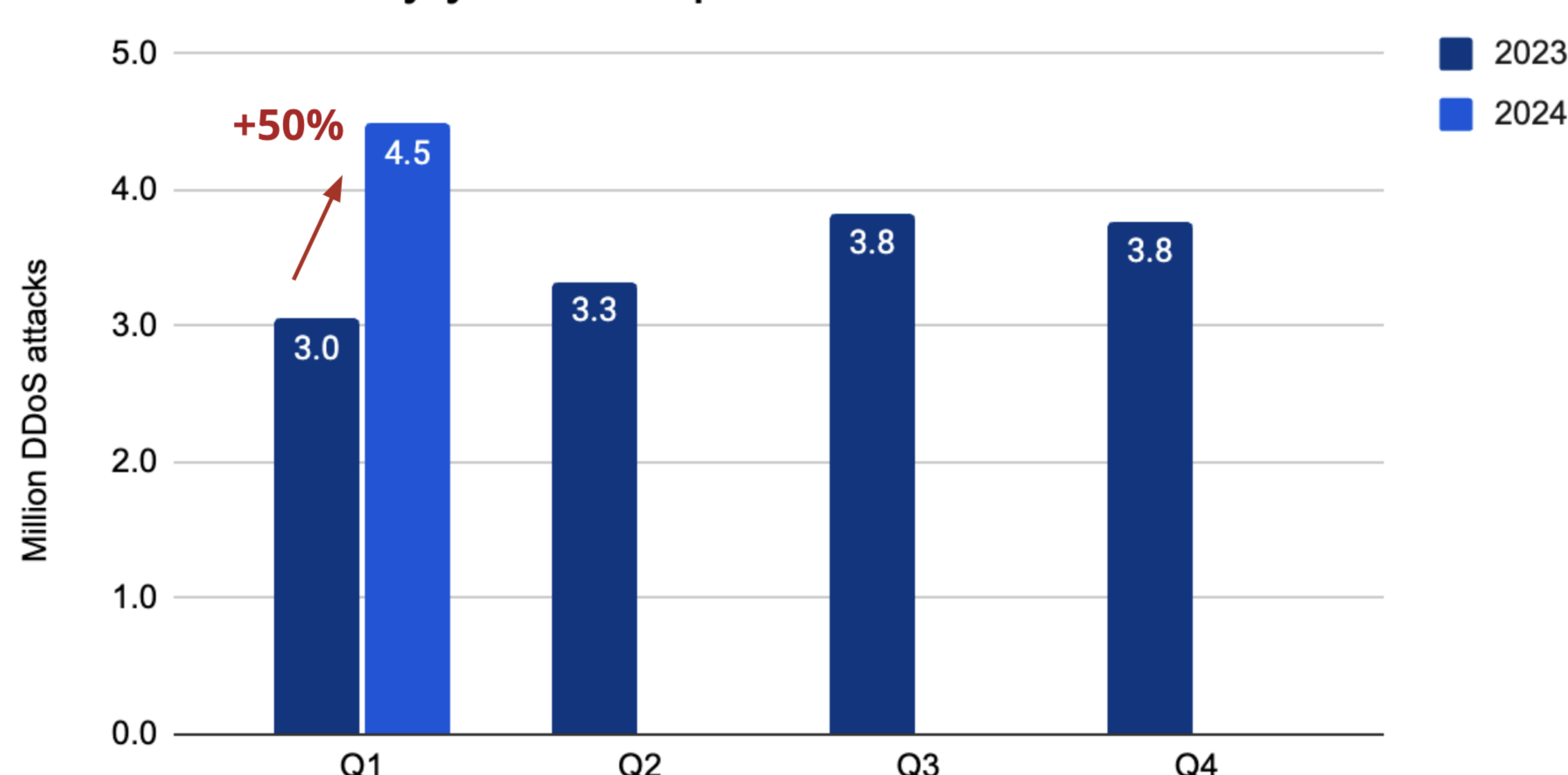
Q2: Is critical Internet infrastructure resilient against DDoS attacks (like those made possible with Botnets)?

IoT perspective

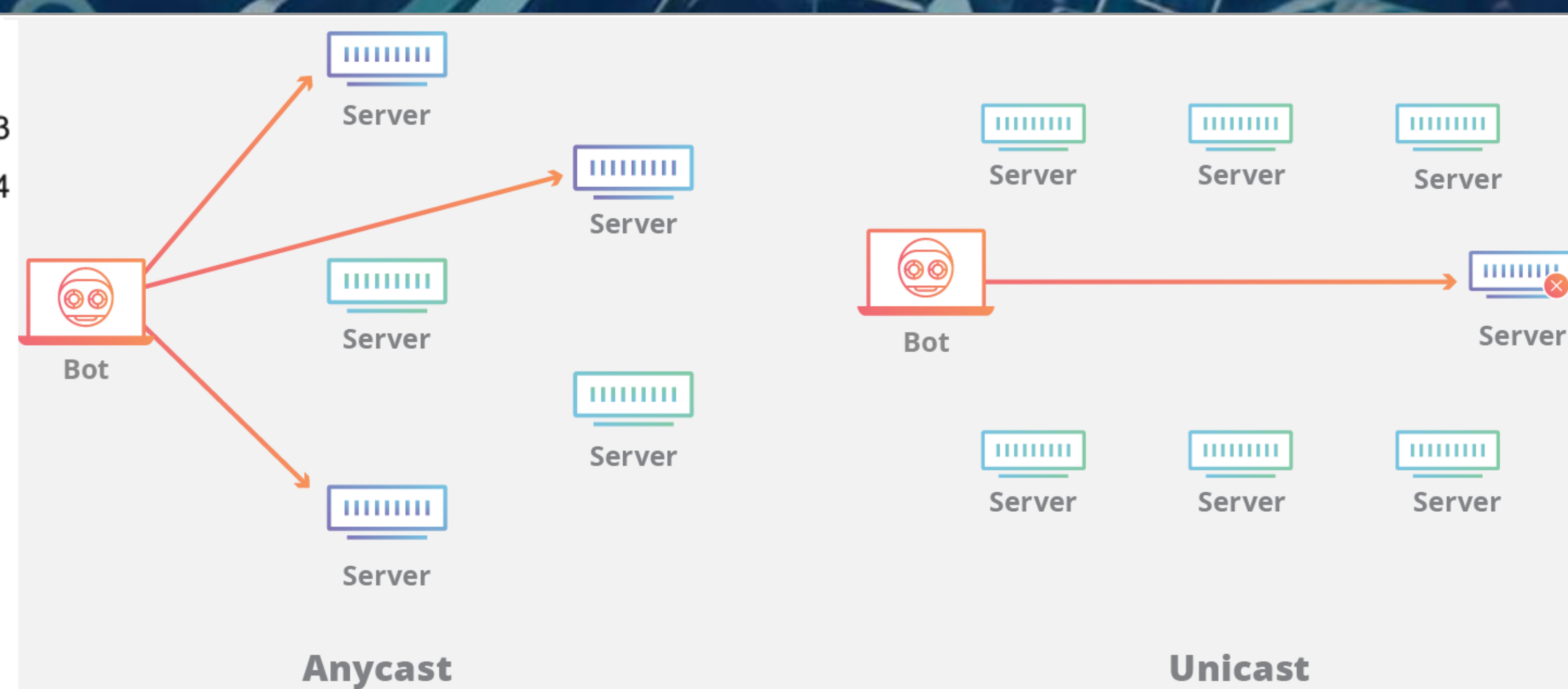
To what extent do IoT devices make use of Anycasted services?

How should Anycast be deployed to best protect against the increasing threat of DDoS attacks made possible by Botnets?

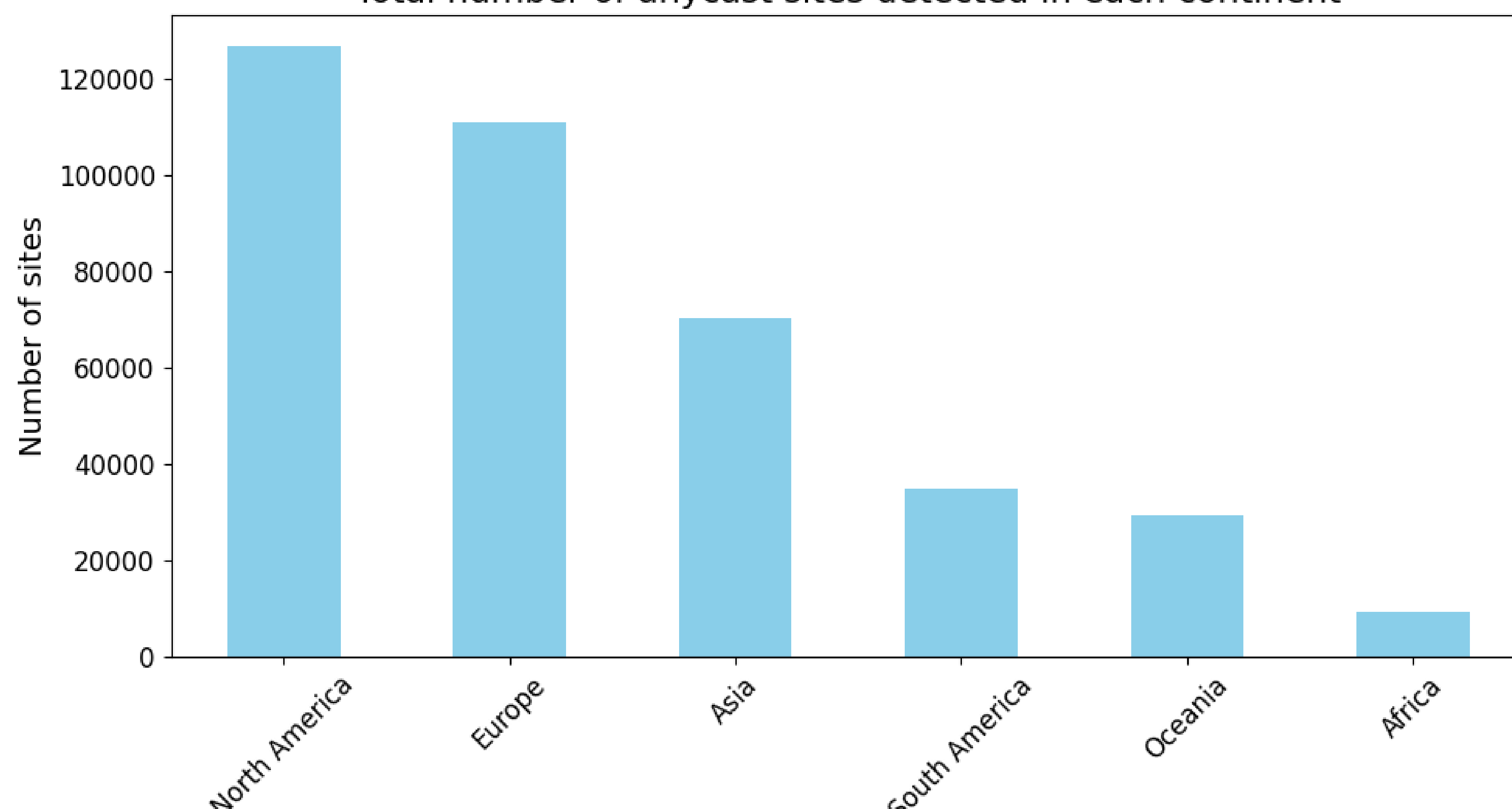
DDoS attacks by year and quarter



AS	Organization	IPv4	IPv6
396982	Google Cloud	3,345	3
13335	Cloudflare	3,131	162
16509	Amazon	1,235	86
54113	Fastly	438	56
15169	Google	282	6
209242	Cloudflare Spectrum	234	2,836
19551	Incapsula	2	292
12041	Afilias	222	207
44273	GoDaddy	31	122



Total number of anycast sites detected in each continent



Sep 30-Oct 4/ 2024, Paris | school.future-iot.org