Celebration of 10 years:
World IPv6 day/launch

CK
VP Technology

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IPv6 on Akamai: a brief history

- IPv6 client-to-edge HTTP support first launched in 2011

- Deep (and default-on!) IPv6 support across most CDN, Security, Compute (Linode), Media, Web Performance, Media, DNS, and other products…

- Customers are encouraged to dual-stack, however many remain IPv4-only for their own reasons

Stats:

- Peak IPv6: **41 Tbps** (vs. IPv4+IPv6 totals exceeding 250 Tbps)

- IPv6 on CDN servers in **120+ countries, 650+ cities**

Growth in IPv6 traffic on the Akamai CDN

	World IPv6 Launch (2012)	Ten Years Later (2022)
Peak IPv6 Traffic	~1 Gbps	41 Tbps
Daily IPv6 requests	3.9 billion per day *(and 8 million in 2011)*	> 4 trillion per day
IPv6 addresses observed per day	19 million	7.5 billion *(across 2.2 billion /64 prefixes)*

Growth in Global IPv6 Adoption

IPv6 adoption over 40% in:
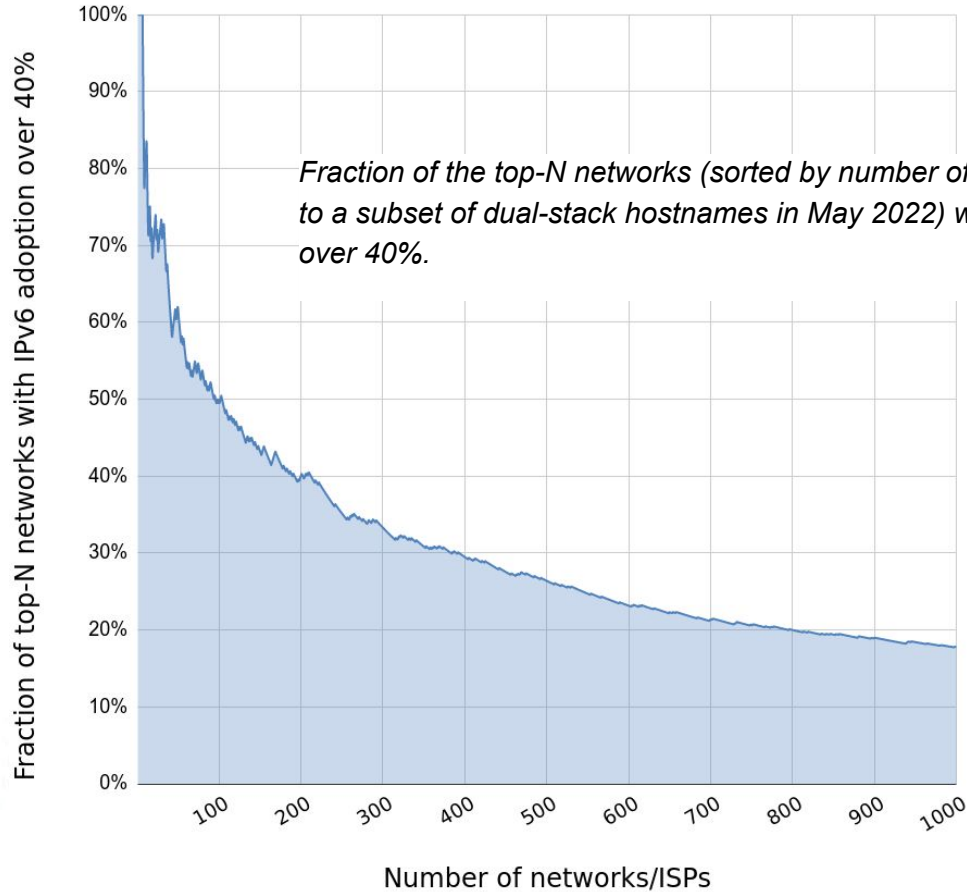
Belgium, Brazil, France, Germany, Greece, India, Japan, Malaysia, Mexico, Portugal, Saudi Arabia, Thailand, United Arab Emirates, United States, and Viet Nam

… plus over half of 100 largest network providers around the world
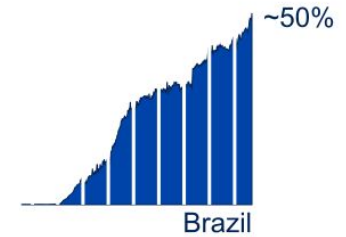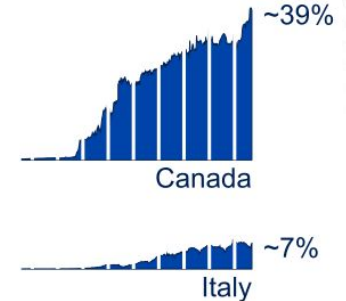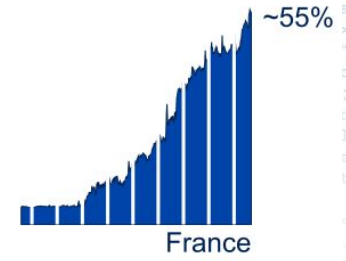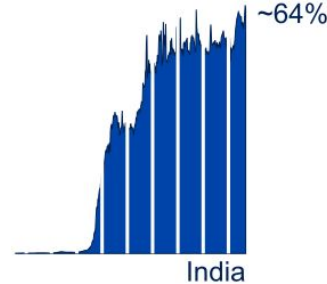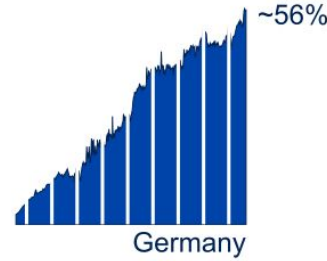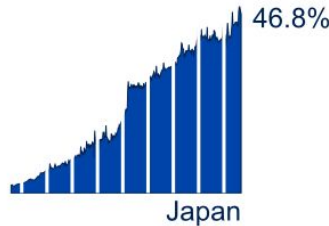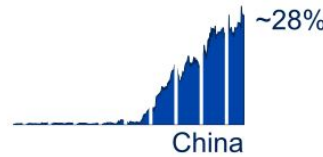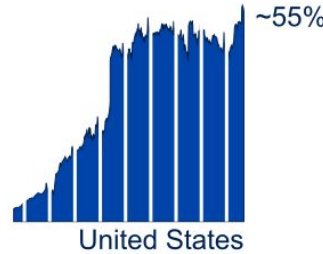
Percent of Requests over IPv6 to a subset of dual-stack sites on Akamai from July 2013 to Sept 2022 for top-10 global economies

(by GDP in 2022, per IMF)

IPv6 adoption more common in larger networks

Fraction of the top-N networks (sorted by number of requests observed to a subset of dual-stack hostnames in May 2022) with IPv6 adoption over 40%.

Fraction of top-N networks with IPv6 adoption over 40%
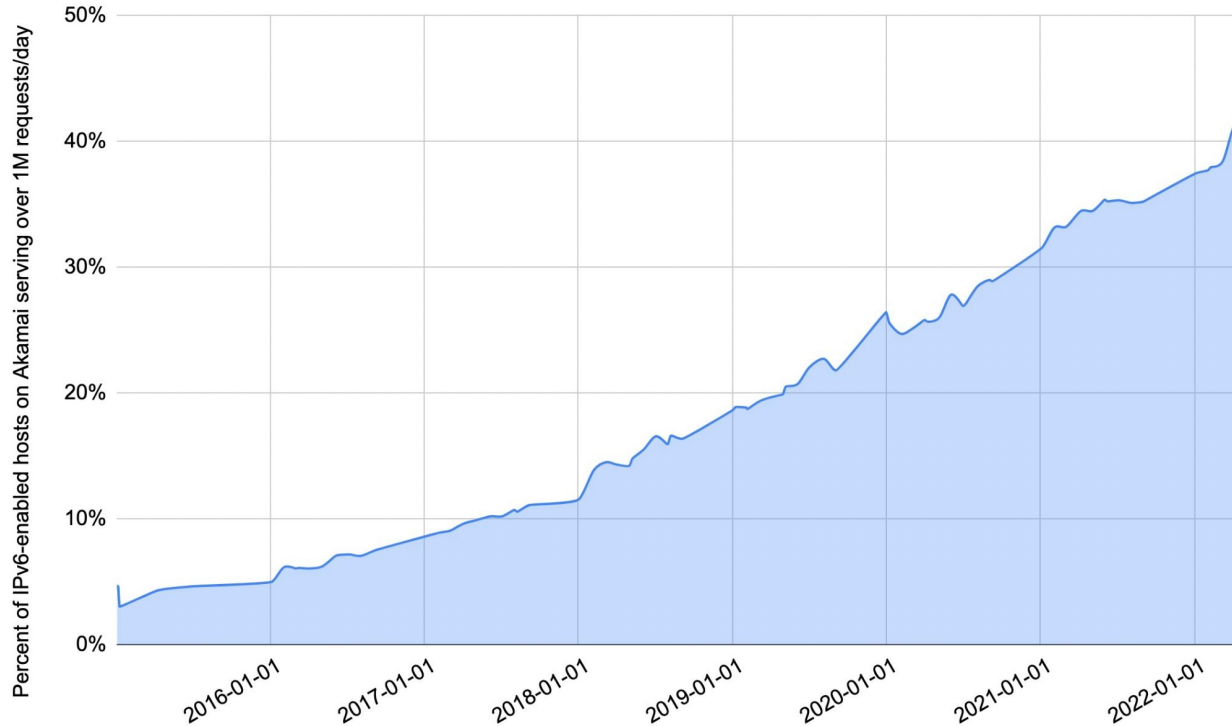
Number of networks/ISPs

Dual-stack content growth on Akamai

Figure: Growth of IP4+IPv6 dual-stacked hostnames on Akamai, serving over 1M requests/day

Learning more

- **IPv6:** https://akamai.com/ipv6

- https://www.akamai.com/blog?author=erik-nygren

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