



ICN

RIPE 75 - Lightning Talk

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Brief Akamai Overview

- Akamai is a highly distributed platform across 130+ countries
- Server clusters on this platform are “islands”
 - built for a specific purpose such as on-net, IX, etc.
 - use the internet to fill the cache or talk to other clusters
- Over time our cluster-to-cluster traffic aka “midgress traffic” was growing
- ISP routing issues such tromboning, filtering, de-peering were affecting inbound cache fill
- Our cluster-to-cluster communication was constrained by the existing feature set of the internet i.e. latency, MTU, IPv6 deployment

What did we do?

We built a multiservice backbone

- ICN (Inter City Network) connects our Akamai deployments together
- Similar to FB, Microsoft, Google, it transports our own traffic between our own equipment
- It will transport as many Akamai services as technically and commercially viable

What are we not doing?

We are not going to be an ISP

- Akamai is not going to sell IP transit or L3VPN, L2VPN and related products
- Nor compete with our Partners and Peers
- Or become a Tier-1

...We won't sell you voice minutes or fractional STM1

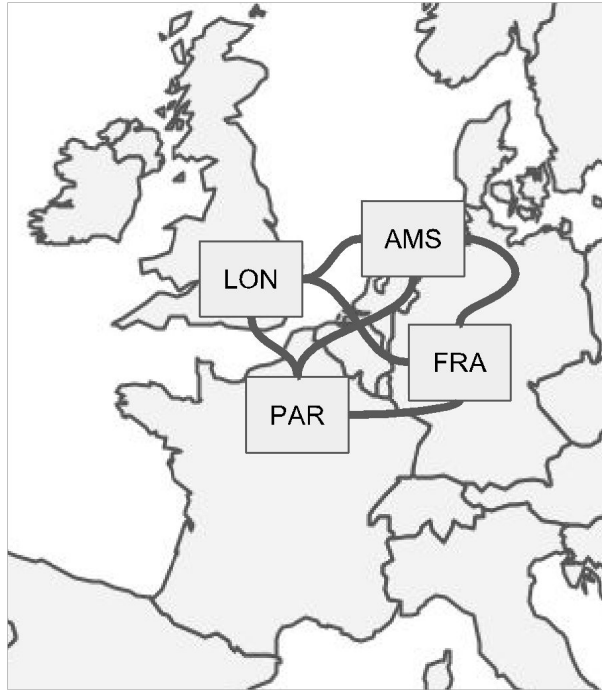
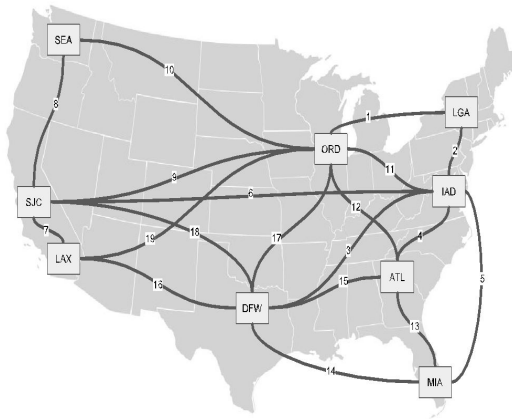
Why did we build a backbone?

- Business case made sense and saved \$, ¥, and £
 - cost optimization and performance gains justified investment
- Growing internal demands for traffic
- Further localized end-user traffic
- Optimize cache fill over network links we control

Benefit for you...

- Participants in our AANP (Akamai Accelerated Network Partner) program, Akamai's on-net cache platform, will see
 - optimized traffic delivery as the network is expanded
 - reduced cache fill traffic on transit links
- Akamai will peer closer to the source and will handle the transport of traffic to the destination

Network Topology in August 2017



What is the future plan?

Phase 1 (completed)

- Midgress traffic in US, EMEA & APJ
- Performance Gains



Phase 2 (2018 -)

- Origin Fetches
- Add Peering
- Connecting the three continents
- Bandwidth Updates
- Expand the city list

Questions?



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