

# ICN NANOG 71 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 even sell you voice minutes!

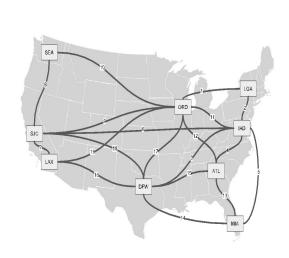
#### Why did we build a backbone?

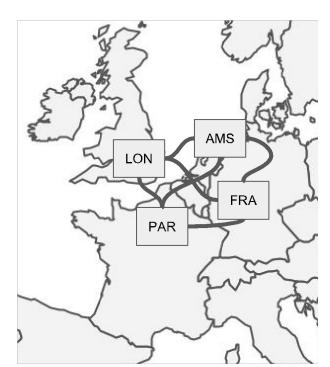
- Business case made sense and saved \$, ¥, and £
  - cost optimization and performance gains justified investment
- Growing internal demands for traffic
- Further localized end-user traffic
- Optimize cache fill over network links we control

## 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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