

# Paper: The Akamai Network - 61,000 servers, 1,000 networks, 70 countries

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Todd Hoff in CDN, Example, Paper

**Update:** *as of the end of Q2 2011, Akamai had 95,811 servers deployed globally.*

Akamai is the CDN to the stars. It claims to deliver between 15 and 30 percent of all Web traffic, with major customers like Facebook, Twitter, Apple, and the US military. Traditionally quite secretive, we get a peek behind the curtain in this paper: [The Akamai Network: A Platform for High-Performance Internet Applications](#) by Erik Nygren, Ramesh Sitaraman, and Jennifer Sun.

Abstract:

*Comprising more than 61,000 servers located across nearly 1,000 networks in 70 countries worldwide, the Akamai platform delivers hundreds of billions of Internet interactions daily, helping thousands of enterprises boost the performance and reliability of their Internet applications. In this paper, we give an overview of the components and capabilities of this large-scale distributed computing platform, and offer some insight into its architecture, design principles, operation, and management.*

Delivering applications over the Internet is a bit like living in the Wild West, there are problems: Peering point congestion, Inefficient

communications protocols, Inefficient routing protocols, Unreliable networks, Scalability, Application limitations and a slow rate of change adoption. A CDN is the White Hat trying to remove these obstacles for enterprise customers. They do this by creating a delivery network that is a virtual network over the existing Internet. The paper goes on to explain how they make this happen using edge networks and a sophisticated software infrastructure. With such a powerful underlying platform, Akamai is clearly Google-like in their ability to deliver products few others can hope to match.

Detailed and clearly written, it's well worth a read.

## Related Articles

[Akamai Technical Publications](#)

[Scaling a Monitoring Infrastructure for the Akamai Network](#)

[When Akamai goes down, it takes the Internet with it](#) by Ryan Lawler

[Akamai Profile](#) on Technology Review

[Akamai's Algorithms](#)

For all things CDN checkout [StreamingMediaBlog](#) by Dan Rayburn

[Inside Akamai and the scary future of streaming video](#) by Stacey Higginbotham

[Microsoft Research Paper Measures Limelight and Akamai's Network Performance](#) by Dan Rayburn

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